

RESOLUTION MSC.22(59)

(adopted on 23 May 1991)

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CONVENTION
FOR THE SAFETY OF LIFE AT SEA, 1974

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

NOTING article VIII(b) of the International Convention for the Safety of Life at Sea, 1974, hereinafter referred to as "the Convention" concerning the procedures for amending the Annex to the Convention, other than the provisions of chapter I,

HAVING CONSIDERED, at its fifty-ninth session, amendments to the Convention proposed and circulated in accordance with article VIII(b)(i) thereof,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, the amendments to the Convention, the texts of which are set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 July 1993 unless, prior to that date, more than one third of the Contracting Governments to the Convention, or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;
3. INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 1994 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the International Convention for the Safety of Life at Sea, 1974;
5. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX

AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE
SAFETY OF LIFE AT SEA, 1974, AS AMENDED

Chapter II-2

CONSTRUCTION - FIRE PROTECTION, FIRE DETECTION
AND FIRE EXTINCTION

Regulation 20

Fire control plans

The existing heading is replaced by the following:

"Fire control plans and fire drills".

The following text is inserted after the heading:

"(This regulation applies to all ships)".

The following new paragraph 3 is added after paragraph 2:

"3 Fire drills shall be conducted in accordance with the provisions
of regulation III/18".

Regulation 21

Ready availability of fire-extinguishing appliances

The following text is added after the heading:

"(This regulation applies to all ships)".

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

"Fire-extinguishing appliances shall be kept in good order and be
available for immediate use at all times".

Regulation 28

Means of escape

The following text is inserted after the heading:

"(Paragraph 1.8 of this regulation applies to ships constructed on or
after 1 January 1994)".

The following new subparagraph 1.8 is added after existing subparagraph 1.7:

"1.8 Where public spaces span three or more decks and contain combustibles such as furniture and enclosed spaces such as shops, offices and restaurants, each level within the space shall have two means of escape, one of which shall give direct access to an enclosed vertical means of escape meeting the requirements of paragraph 5".

Regulation 32

Ventilation systems

The following text is inserted after the heading:

"(Paragraph 1.7 of this regulation applies to ships constructed on or after 1 January 1994)".

The following new paragraph 1.7 is inserted between existing paragraphs 1.6 and 2:

"1.7 Where public spaces span three or more open decks and contain combustibles such as furniture and enclosed spaces such as shops, offices and restaurants, the space shall be equipped with a smoke extraction system. The smoke extraction system shall be activated by the required smoke detection system and be capable of manual control. The fans shall be sized such that the entire volume within the space can be exhausted in 10 min or less".

Regulation 36

Fixed fire detection and fire alarm systems Automatic sprinkler, fire detection and fire alarm systems

The following text is inserted after the heading:

"(Paragraph 2 applies to ships constructed on or after 1 January 1994)".

The existing paragraph is numbered as paragraph 1, and the following new paragraph 2 is added after new paragraph 1:

"2 Where public spaces span three or more open decks and contain combustibles such as furniture and enclosed spaces such as shops, offices and restaurants, the entire main vertical zone containing the space shall be protected throughout with an automatic sprinkler system in compliance with regulation 12".

Regulation 40

Fire patrols, detection, alarms and public address systems

The following text is inserted after the heading:

"(Paragraph 7 applies to ships constructed on or after 1 January 1994)".

The following new paragraph 7 is added after existing paragraph 6:

"7 Where public spaces span three or more open decks and contain combustibles such as furniture and enclosed spaces such as shops, offices and restaurants, the entire main vertical zone containing the space shall be protected throughout with a smoke detection system complying with regulation 13, with the exception of paragraph 1.9".

Chapter III

LIFE-SAVING APPLIANCES AND ARRANGEMENTS

Regulation 18

Abandon ship training and drills

The existing heading and text of this regulation are replaced by the following:

"Emergency training and drills

1 This regulation applies to all ships.

2 Manuals

A training manual complying with the requirements of regulation 51 shall be provided in each crew messroom and recreation room or in each crew cabin.

3 Practice musters and drills

3.1 Each member of the crew shall participate in at least one abandon ship drill and one fire drill every month. The drills of the crew shall take place within 24 h of the ship leaving a port if more than 25% of the crew have not participated in abandon ship and fire drills on board that particular ship in the previous month. The Administration may accept other arrangements that are at least equivalent for those classes of ship for which this is impracticable.

3.2 On a ship engaged on an international voyage which is not a short international voyage, musters of the passengers shall take place within 24 h after their embarkation. Passengers shall be instructed in the use of the lifejackets and the action to take in an emergency. If only a small number of passengers embark at a port after the muster has been held it shall be sufficient, instead of holding another muster, to draw the attention of these passengers to the emergency instructions required by regulations 8.2 and 8.4.

3.3 On a ship engaged on a short international voyage, if a muster of the passengers is not held on departure, the attention of the passengers shall be drawn to the emergency instructions required by regulations 8.2 and 8.4.

3.4 Each abandon ship drill shall include:

- .1 summoning of passengers and crew to muster stations with the alarm required by regulation 6.4.2 and ensuring that they are made aware of the order to abandon ship specified in the muster list;
- .2 reporting to stations and preparing for the duties described in the muster list;
- .3 checking that passengers and crew are suitably dressed;
- .4 checking that lifejackets are correctly donned;
- .5 lowering of at least one lifeboat after any necessary preparation for launching;
- .6 starting and operating the lifeboat engine;
- .7 operation of davits used for launching liferafts.

3.5 Different lifeboats shall, as far as practicable, be lowered in compliance with the requirements of paragraph 3.4.5 at successive drills.

3.6 Each lifeboat shall be launched with its assigned operating crew aboard and manoeuvred in the water at least once every 3 months during an abandon ship drill. The Administration may allow ships operating on short international voyages not to launch the lifeboats on one side if their berthing arrangements in port and their trading patterns do not permit launching of lifeboats on that side. However, all such lifeboats shall be lowered at least once every 3 months and launched at least annually.

3.7 As far as is reasonable and practicable, rescue boats other than lifeboats which are also rescue boats, shall be launched each month with their assigned crew aboard and manoeuvred in the water. In all cases this requirement shall be complied with at least once every 3 months.

3.8 If lifeboat and rescue boat launching drills are carried out with the ship making headway, such drills shall, because of the dangers involved, be practised in sheltered waters only and under the supervision of an officer experienced in such drills.

3.9 Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.

3.10 Each fire drill shall include:

- .1 reporting to stations and preparing for the duties described in the muster list required by regulation 8.3;
- .2 starting a fire pump using at least the two required jets of water to show that the system is in proper working order;

- .3 checking fireman's outfits and other personal rescue equipment;
- .4 checking the relevant communication equipment;
- .5 checking the operation of watertight doors, fire doors, and fire dampers;
- .6 checking the necessary arrangements for subsequent abandonment of the ship.

3.11 Fire drills should be planned in such a way that due consideration is given to regular practice in the various emergencies that may occur depending on the type of ship and its cargo.

3.12 The equipment used during drills shall immediately be brought back to its fully operational condition, and any faults and defects discovered during the drills shall be remedied as soon as possible.

3.13 Drills shall, as far as practicable, be conducted as if there were an actual emergency.

4 On-board training and instructions

4.1 On-board training and instructions in the use of the ship's life-saving appliances, including survival craft equipment, and in the use of the ship's fire-extinguishing appliances shall be given as soon as possible but not later than 2 weeks after a crew member joins the ship. However, if the crew member is on a regularly scheduled rotating assignment to the ship, such training shall be given not later than 2 weeks after the time of first joining the ship. Individual instruction may cover different parts of the ship's life-saving and fire-extinguishing appliances, but all the ship's life-saving and fire-extinguishing appliances shall be covered within any period of 2 months.

4.2 Each member of the crew shall be given instructions which shall include but not necessarily be limited to:

- .1 operation and use of the ship's inflatable liferafts;
- .2 problems of hypothermia, first-aid treatment of hypothermia and other appropriate first-aid procedures;
- .3 special instructions necessary for use of the ship's life-saving appliances in severe weather and severe sea conditions;
- .4 operation and use of fire-extinguishing appliances.

4.3 On-board training in the use of davit-launched liferafts shall take place at intervals of not more than 4 months on every ship fitted with such appliances. Whenever practicable this shall include the inflation and lowering of a liferaft. This liferaft may be a special liferaft intended for training purposes only, which is not part of the ship's life-saving equipment: such a special liferaft shall be conspicuously marked.

The date when musters are held, details of abandon ship drills and fire drills, drills of other life-saving appliances and on-board training shall be recorded in such log-book as may be prescribed by the Administration. If a full muster, drill or training session is not held at the appointed time, an entry shall be made in the log-book stating the circumstances and the extent of the muster, drill or training session held."

CHAPTER V

SAFETY OF NAVIGATION

Regulation 17

Pilot ladders and mechanical pilot hoists

The existing heading and text of this regulation are replaced by the following:

"Pilot transfer arrangements

(a) Application

- (i) Ships engaged on voyages in the course of which pilots are likely to be employed shall be provided with pilot transfer arrangements.
- (ii) Equipment and arrangements for pilot transfer which are installed on or after 1 January 1994 shall comply with the requirements of this regulation and due regard shall be paid to the standards adopted by the Organization.
- (iii) Equipment and arrangements for pilot transfer which are provided on ships before 1 January 1994 shall at least comply with the requirements of regulation 17 in force prior to that date and due regard shall be paid to the standards adopted by the Organization prior to that date.
- (iv) Equipment and arrangements which are replaced after 1 January 1994 shall, in so far as is reasonable and practicable, comply with the requirements of this regulation.

(b) General

- (i) All arrangements used for pilot transfer shall efficiently fulfil their purpose of enabling pilots to embark and disembark safely. The appliances shall be kept clean, properly maintained and stowed and shall be regularly inspected to ensure that they are safe to use. They shall be used solely for the embarkation and disembarkation of personnel.
- (ii) The rigging of the pilot transfer arrangements and the embarkation and disembarkation of a pilot shall be supervised by a responsible officer having means of communication with the navigating bridge who shall also arrange for the escort of the pilot by a safe route to and from the navigating bridge. Personnel engaged in rigging and operating any mechanical equipment shall be instructed in the safe procedures to be adopted and the equipment shall be tested prior to use.

(c) Transfer arrangements

- (i) Arrangements shall be provided to enable the pilot to embark and disembark safely on either side of the ship.
- (ii) In all ships where the distance from sea level to the point of access to, or egress from, the ship exceeds 9 m, and when it is intended to embark and disembark pilots by means of the accommodation ladder, or by means of mechanical pilot hoists or other equally safe and convenient means in conjunction with a pilot ladder, the ship shall carry such equipment on each side, unless the equipment is capable of being transferred for use on either side.
- (iii) Safe and convenient access to, and egress from, the ship shall be provided by either:
 - (1) a pilot ladder requiring a climb of not less than 1.5 m and not more than 9 m above the surface of the water so positioned and secured that:
 - (aa) it is clear of any possible discharges from the ship;
 - (bb) it is within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length of the ship;
 - (cc) each step rests firmly against the ship's side; where constructional features, such as rubbing bands, would prevent the implementation of this provision, special arrangements shall, to the satisfaction of the Administration, be made to ensure that persons are able to embark and disembark safely;

(dd) the single length of pilot ladder is capable of reaching the water from the point of access to, or egress from, the ship and due allowance is made for all conditions of loading and trim of the ship, and for an adverse list of 15°; the securing strongpoints, shackles and securing ropes shall be at least as strong as the side ropes;

(2) an accommodation ladder in conjunction with the pilot ladder, or other equally safe and convenient means, whenever the distance from the surface of the water to the point of access to the ship is more than 9 m. The accommodation ladder shall be sited leading aft. When in use, the lower end of the accommodation ladder shall rest firmly against the ship's side within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length and clear of all discharges; or

(3) a mechanical pilot hoist so located that it is within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length of the ship and clear of all discharges.

(d) Access to the ship's deck

Means shall be provided to ensure safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the head of the pilot ladder, or of any accommodation ladder or other appliance, and the ship's deck. Where such passage is by means of:

(i) a gateway in the rails or bulwark, adequate handholds shall be provided;

(ii) a bulwark ladder, two handhold stanchions rigidly secured to the ship's structure at or near their bases and at higher points shall be fitted. The bulwark ladder shall be securely attached to the ship to prevent overturning.

(e) Shipside doors

Shipside doors used for pilot transfer shall not open outwards.

(f) Mechanical pilot hoists

(i) The mechanical pilot hoist and its ancillary equipment shall be of a type approved by the Administration. The pilot hoist shall be designed to operate as a moving ladder to lift and lower one person on the side of the ship, or as a platform to lift and lower one or more persons on the side of the ship. It shall be of such design and construction as to ensure that the pilot can be embarked and disembarked in a safe manner, including a safe access from the hoist to the deck and vice versa. Such access shall be gained directly by a platform securely guarded by handrails.

- (ii) Efficient hand gear shall be provided to lower or recover the person or persons carried, and kept ready for use in the event of power failure.
- (iii) The hoist shall be securely attached to the structure of the ship. Attachment shall not be solely by means of the ship's side rails. Proper and strong attachment points shall be provided for hoists of the portable type on each side of the ship.
- (iv) If belting is fitted in the way of the hoist position, such belting shall be cut back sufficiently to allow the hoist to operate against the ship's side.
- (v) A pilot ladder shall be rigged adjacent to the hoist and available for immediate use so that access to it is available from the hoist at any point of its travel. The pilot ladder shall be capable of reaching the sea level from its own point of access to the ship.
- (vi) The position on the ship's side where the hoist will be lowered shall be indicated.
- (vii) An adequate protected stowage position shall be provided for the portable hoist. In very cold weather, to avoid the danger of ice formation, the portable hoist shall not be rigged until its use is imminent.

(g) Associated equipment

- (i) The following associated equipment shall be kept at hand ready for immediate use when persons are being transferred:
 - (1) two man-ropes of not less than 28 mm in diameter properly secured to the ship if required by the pilot;
 - (2) a lifebuoy equipped with a self-igniting light;
 - (3) a heaving line.
- (ii) When required by paragraph (d), stanchions and bulwark ladders shall be provided.

(h) Lighting

Adequate lighting shall be provided to illuminate the transfer arrangements overside, the position on deck where a person embarks or disembarks and the controls of the mechanical pilot hoist."

CHAPTER VI

The title and text of chapter VI are replaced by the following:

"CARRIAGE OF CARGOES

PART A

GENERAL PROVISIONS

Regulation 1

Application

1 This chapter applies to the carriage of cargoes (except liquids in bulk, gases in bulk and those aspects of carriage covered by other chapters) which, owing to their particular hazards to ships or persons on board, may require special precautions in all ships to which the present regulations apply and in cargo ships of less than 500 tons gross tonnage. However, for cargo ships of less than 500 tons gross tonnage, the Administration, if it considers that the sheltered nature and conditions of voyage are such as to render the application of any specific requirements of part A or B of this chapter unreasonable or unnecessary, may take other effective measures to ensure the required safety for these ships.

2 To supplement the provisions of parts A and B of this chapter, each Contracting Government shall ensure that appropriate information on cargo and its stowage and securing is provided, specifying, in particular, precautions necessary for the safe carriage of such cargoes.

Regulation 2

Cargo information

1 The shipper shall provide the master or his representative with appropriate information on the cargo sufficiently in advance of loading to enable the precautions which may be necessary for proper stowage and safe carriage of the cargo to be put into effect. Such information shall be confirmed in writing and by appropriate shipping documents prior to loading the cargo on the ship.

2 The cargo information shall include:

- .1 in the case of general cargo, and of cargo carried in cargo units, a general description of the cargo, the gross mass of the cargo or of the cargo units, and any relevant special properties of the cargo;
- .2 in the case of a bulk cargo, information on the stowage factor of the cargo, the trimming procedures and, in the case of a concentrate or other cargo which may liquefy, additional information in the form of a certificate on the moisture content of the cargo and its transportable moisture limit;
- .3 in the case of a bulk cargo not classified in accordance with the provisions of regulation VII/2, but which has chemical properties that may create a potential hazard, in addition to the information required by the preceding subparagraphs, information on its chemical properties.

3 Prior to loading cargo units on board ships, the shipper shall ensure that the gross mass of such units is in accordance with the gross mass declared on the shipping documents.

Regulation 3

Oxygen analysis and gas detection equipment

1 When transporting a bulk cargo which is liable to emit a toxic or flammable gas, or cause oxygen depletion in the cargo space, an appropriate instrument for measuring the concentration of gas or oxygen in the air shall be provided together with detailed instructions for its use. Such an instrument shall be to the satisfaction of the Administration.

2 The Administration shall take steps to ensure that crews of ships are trained in the use of such instruments.

Regulation 4

The use of pesticides in ships

Appropriate precautions shall be taken in the use of pesticides in ships, in particular for the purposes of fumigation.

Regulation 5

Stowage and securing

- 1 Cargo and cargo units carried on or under deck shall be so loaded, stowed and secured as to prevent as far as is practicable, throughout the voyage, damage or hazard to the ship and the persons on board, and loss of cargo overboard.
- 2 Cargo carried in a cargo unit shall be so packed and secured within the unit as to prevent, throughout the voyage, damage or hazard to the ship and the persons on board.
- 3 Appropriate precautions shall be taken during loading and transport of heavy cargoes or cargoes with abnormal physical dimensions to ensure that no structural damage to the ship occurs and to maintain adequate stability throughout the voyage.
- 4 Appropriate precautions shall be taken during loading and transport of cargo units on board ro-ro ships, especially with regard to the securing arrangements on board such ships and on the cargo units and with regard to the strength of the securing points and lashings.
- 5 Containers shall not be loaded to more than the maximum gross weight indicated on the Safety Approval Plate under the International Convention for Safe Containers (CSC).

SPECIAL PROVISIONS FOR BULK CARGOES OTHER THAN GRAIN

Regulation 6

Acceptability for shipment

1 Prior to loading a bulk cargo, the master shall be in possession of comprehensive information on the ship's stability and on the distribution of cargo for the standard loading conditions. The method of providing such information shall be to the satisfaction of the Administration .

2 Concentrates or other cargoes which may liquefy shall only be accepted for loading when the actual moisture content of the cargo is less than its transportable moisture limit. However, such concentrates and other cargoes may be accepted for loading even when their moisture content exceeds the above limit, provided that safety arrangements to the satisfaction of the Administration are made to ensure adequate stability in the case of cargo shifting and further provided that the ship has adequate structural integrity.

3 Prior to loading a bulk cargo which is not a cargo classified in accordance with the provisions of regulation VII/2 but which has chemical properties that may create a potential hazard, special precautions for its safe carriage shall be taken.

Regulation 7

Stowage of bulk cargo

1 Bulk cargoes shall be loaded and trimmed reasonably level, as necessary, to the boundaries of the cargo space so as to minimize the risk of shifting and to ensure that adequate stability will be maintained throughout the voyage.

2 When bulk cargoes are carried in 'tween-decks, the hatchways of such 'tween-decks shall be closed in those cases where the loading information indicates an unacceptable level of stress of the bottom structure if the hatchways are left open. The cargo shall be trimmed reasonably level and shall either extend from side to side or be secured by additional longitudinal divisions of sufficient strength. The safe load-carrying capacity of the 'tween-decks shall be observed to ensure that the deck-structure is not overloaded.

PART C

CARRIAGE OF GRAIN

Regulation 8

Definitions

For the purposes of this part, unless expressly provided otherwise:

1 "International Grain Code" means the International Code for the Safe Carriage of Grain in Bulk adopted by the Maritime Safety Committee of the Organization by resolution MSC.23(59) as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the Annex other than chapter I.

2 The term "grain" includes wheat, maize (corn), oats, rye, barley, rice, pulses, seeds and processed forms thereof whose behaviour is similar to that of grain in its natural state.

Regulation 9

Requirements for cargo ships carrying grain

1 In addition to any other applicable requirements of the present regulations, a cargo ship carrying grain shall comply with the requirements of the International Grain Code, and hold a document of authorization as required by that Code. For the purpose of this regulation, the requirements of the Code shall be treated as mandatory.

2 A ship without such a document shall not load grain until the master satisfies the Administration, or the Contracting Government of the port of loading on behalf of the Administration, that the ship will comply with the requirements of the International Grain Code in its proposed loaded condition."

CHAPTER VII

CARRIAGE OF DANGEROUS GOODS

Regulation 5

Documents

The existing text of of paragraph 3 of this regulation is replaced by the following paragraphs 3, 4, and 5:

"3 The persons responsible for the packing of dangerous goods in a freight container or road vehicle shall provide a signed container packing certificate or vehicle packing declaration stating that the cargo in the unit has been properly packed and secured and that all applicable transport requirements have been met. Such a certificate or declaration may be combined with the document referred to in paragraph 2.

4 Where there is due cause to suspect that a freight container or road vehicle in which dangerous goods are packed is not in compliance with the requirements of paragraph 2 or 3, or where a container packing certificate or vehicle packing declaration is not available, the freight container or vehicle shall not be accepted for shipment.

5 Each ship carrying dangerous goods shall have a special list or manifest setting forth, in accordance with the classification set out in regulation 2, the dangerous goods on board and the location thereof. A detailed stowage plan, which identifies by class and sets out the location of all dangerous goods on board, may be used in place of such a special list or manifest. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority".

The following new regulation 7-1 is inserted after regulation 7:

"Regulation 7-1

Reporting of incidents involving dangerous goods

1 When an incident takes place involving the loss or likely loss overboard of packaged dangerous goods into the sea, the master, or other person having charge of the ship, shall report the particulars of such an incident without delay and to the fullest extent possible to the nearest coastal State. The report shall be based on the guidelines and general principles adopted by the Organization .

2 In the event of the ship referred to in paragraph 1 being abandoned, or in the event of a report from such a ship being incomplete or unobtainable, the owner, charterer, manager or operator of the ship, or their agents shall, to the fullest extent possible, assume the obligations placed upon the master by this regulation.