



STATUTORY INSTRUMENTS.

S.I. No. 438 of 2018



MERCHANT SHIPPING (LIFE-SAVING APPLIANCES) RULES 2018

S.I. No. 438 of 2018

MERCHANT SHIPPING (LIFE-SAVING APPLIANCES) RULES 2018

ARRANGEMENT OF RULES

Part 1

PRELIMINARY

1. Citation and Commencement
2. Interpretation
3. Application
4. Exemptions

Part 2

GENERAL

5. Evaluation, testing and approval of life-saving appliances and arrangements
6. Production tests

Part 3

PASSENGER SHIPS AND CARGO SHIPS

7. Communications
8. Personal life-saving appliances
9. Muster list and emergency instructions
10. Operating instructions
11. Manning of survival craft and supervision
12. Survival craft muster and embarkation arrangements
13. Launching stations
14. Stowage of survival craft
15. Stowage of rescue boats
16. Stowage of marine evacuation systems
17. Survival craft launching and recovery arrangements
18. Rescue boat embarkation, launching and recovery arrangements
19. Line-throwing appliances

20. Emergency training and drills
21. Operational readiness, maintenance and inspections

Part 4

PASSENGER SHIPS — ADDITIONAL REQUIREMENTS

22. Survival craft and rescue boats
23. Personal life-saving appliances
24. Survival craft and rescue boat embarkation arrangements
25. Stowage of survival craft
26. Muster stations
27. Additional requirements for ro-ro passenger ships
28. Information on passengers
29. Helicopter landing and pick-up areas
30. Decision support system for masters of passenger ships
31. Drills

Part 5

CARGO SHIPS

32. Survival craft and rescue boats
33. Personal life-saving appliances
34. Survival craft embarkation and launching arrangements

Part 6

LIFE-SAVING APPLIANCES AND ARRANGEMENTS REQUIREMENTS

35. Life-Saving Appliances and arrangements requirements

Part 7

MISCELLANEOUS

36. Training manual and on-board training aids
37. Instructions for on-board maintenance
38. Muster list and emergency instructions
39. Alternative design and arrangements

MERCHANT SHIPPING (LIFE-SAVING APPLIANCES) RULES 2018

I, SHANE ROSS, Minister for Transport, Tourism and Sport, in exercise of the powers conferred on me by section 82 of the Merchant Shipping Act, 2010, as adapted by the Transport (Alteration of Name of Department and Title of Minister) Order 2011 (S.I. No. 141 of 2011), and for the purpose of giving effect to the provisions of Chapter III of the International Convention for the Safety of Life at Sea, 1974, hereby make the following rules:-

PART 1

Preliminary

Citation and commencement

1. (1) These Rules may be cited as the Merchant Shipping (Life-Saving Appliances) Rules 2018.

Interpretation

2. (1) In these Rules—

“all ships” means ships constructed before, on or after 1 July 1998; the expression “all passenger ships” and “all cargo ships” shall be construed accordingly;

“anti-exposure suit” is a protective suit designed for use by rescue boat crews and marine evacuation system parties;

“cargo ship” is any ship that is not a passenger ship;

“certificated person” is a person who holds a certificate of proficiency in survival craft issued under the authority of, or recognized as valid by, the Minister in accordance with the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, in force; or a person who holds a certificate issued or recognized by a State not a Party to that Convention for the same purpose as the Convention certificate;

“detection” is the determination of the location of survivors or survival craft;

“existing ship” is a ship which is not a new ship;

“embarkation ladder” is the ladder provided at survival craft embarkation stations to permit safe access to survival craft after launching;

Notice of the making of this Statutory Instrument was published in “Iris Oifigiúil” of 23rd October, 2018.

- “fishing vessel” is a vessel used for catching fish, whales, seals, walrus or other living resources of the sea;
- “float-free launching” is that method of launching a survival craft whereby the craft is automatically released from a sinking ship and is ready for use;
- “free-fall launching” is that method of launching a survival craft whereby the craft with its complement of persons and equipment on board is released and allowed to fall into the sea without any restraining apparatus;
- “immersion suit” is a protective suit which reduces the body heat loss of a person wearing it in cold water;
- “inflatable appliance” is an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is normally kept uninflated until ready for use;
- “inflated appliance” is an appliance which depends upon non-rigid, gas-filled chambers for buoyancy and which is kept inflated and ready for use at all times;
- “IMO” means the “International Maritime Organisation”;
- “International Life-Saving Appliance (LSA) Code” (referred to as “the Code” in these Rules) means the International Life-Saving Appliance (LSA) Code adopted by the Maritime Safety Committee of the IMO by resolution MSC.48(66), as it may be amended by the IMO, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Safety Convention concerning the amendment procedures applicable to the annex other than chapter I;
- “international voyage” is a voyage from a country to which the present Safety Convention applies to a port outside such country, or conversely;
- “launching appliance or arrangement” is a means of transferring a survival craft or rescue boat from its stowed position safely to the water;
- “length” is 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or the length from the fore-side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this is measured shall be parallel to the designed waterline;
- “lightest seagoing condition” is the loading condition with the ship on even keel, without cargo, with 10% stores and fuel remaining and in the case of a passenger ship with the full number of passengers and crew and their luggage;
- “marine evacuation system” is an appliance for the rapid transfer of persons from the embarkation deck of a ship to a floating survival craft;
- “Minister” means the Minister for Transport, Tourism and Sport;

“moulded depth”—

- (a) is the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side. In wood and composite ships the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.
- (b) in ships having rounded gunwales, shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design.
- (c) where the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part;

“new ship” is a ship the keel of which is laid or which is at a similar stage of construction on or after 25 May 1980;

“novel life-saving appliance or arrangement” is a life-saving appliance or arrangement which embodies new features not fully covered by the provisions of these Rules or the Code but which provides an equal or higher standard of safety;

“passenger” is every person other than the master and the members of the crew or other person employed or engaged in any capacity on board a ship on the business of that ship; and a child under one year of age;

“passenger ship” is a ship which carries more than twelve passengers;

“positive stability” is the ability of a craft to return to its original position after the removal of a heeling moment;

“recovery time” for a rescue boat is the time required to raise the boat to a position where persons on board can disembark to the deck of the ship. Recovery time includes the time required to make preparations for recovery on board the rescue boat such as passing and securing a painter, connecting the rescue boat to the launching appliance, and the time to raise the rescue boat. Recovery time does not include the time needed to lower the launching appliance into position to recover the rescue boat;

“rescue boat” is a boat designed to rescue persons in distress and to marshal survival craft;

“retrieval” is the safe recovery of survivors;

“ro-ro passenger ship” means a passenger ship with ro-ro cargo spaces or special category spaces as defined in Safety Convention regulation II-2/3;

“Safety Convention” means the International Convention for the Safety of Life at Sea signed in London on behalf of the Government on 1 November 1974 together with the Protocol to the International Convention for the Safety of Life at Sea signed in London on behalf of the Government on 17 February 1978, and the Protocol to the International Convention for the Safety of Life at Sea signed in London on behalf of the Government on 11 November 1988 and any amendments made to it up to and including those adopted by the 90th session of the Maritime Safety Committee of the International Maritime Organisation held between 16 and 25 May 2012, and which have entered into force in respect of the State pursuant to Article VIII prior to the passing of the Merchant Shipping (Registration of Ships) Act 2014 (No. 29 of 2014);

“ships constructed” means ships the keels of which are laid or which are at a similar stage of construction;

“short international voyage” is an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the ship commences its return voyage to the country in which the voyage began;

“survival craft” is a craft capable of sustaining the lives of persons in distress from the time of abandoning the ship;

“tanker” is a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of an inflammable nature;

“thermal protective aid” is a bag or suit made of waterproof material with low thermal conductance;

Application

3. (1) Unless expressly provided otherwise, these Rules shall apply to ships engaged on international voyages.

(2) These Rules, unless expressly provided otherwise, do not apply to:

- (i) ships of war and troop ships;
- (ii) cargo ships of less than 500 tons gross tonnage;
- (iii) ships not propelled by mechanical means;
- (iv) wooden ships of primitive build;
- (v) pleasure yachts not engaged in trade;
- (vi) fishing vessels.

(3) Unless expressly provided otherwise, these Rules shall apply to ships the keels of which are laid or which are at a similar stage of construction on or after 1 July 1998.

(4) For ships built before 1 July 1998, the Minister shall:

- (a) ensure that, subject to the provisions of Rule 3(5)(a)(ii), the requirements which are applicable under chapter III of the Safety Convention, in force prior to July 1998, to new or existing ships, as prescribed by that chapter are complied with, and
- (b) ensure that when life-saving appliances or arrangements on such ships are replaced or such ships undergo repairs, alterations or modifications of a major character which involve replacement of, or any addition to, their existing life-saving appliances or arrangements, such life-saving appliances or arrangements, in so far as is reasonable and practicable, comply with the requirements of these Rules. However, if a survival craft other than an inflatable liferaft is replaced without replacing its launching appliance, or vice versa, the survival craft or launching appliance may be of the same type as that replaced.
- (c) Notwithstanding paragraph 4(b), for all ships, not later than the first scheduled dry-docking after 1 July 2014, but not later than 1 July 2019, lifeboat on-load release mechanisms not complying with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the Code shall be replaced with equipment that complies with the Code.

(5) In this Rule:

- (a) “a similar stage of construction” means the stage at which;
 - (i) construction identifiable with a specific ship begins, and;
 - (ii) assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is less;
- (b) a cargo ship, whenever built, which is converted to a passenger ship shall be treated as a passenger ship constructed on the date on which such a conversion commences.

Exemptions

4. (1) The Minister may, if he considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific requirements of these Rules unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships which, in the course of their voyage, do not proceed more than 20 miles from the nearest land.

(2) In the case of passenger ships which are employed in special trades for the carriage of large numbers of special trade passengers, such as the pilgrim trade, the Minister, if satisfied that it is impracticable to enforce compliance

with the requirements of these Rules, may exempt such ships from those requirements, provided that such ships comply fully with the provisions of:

- (a) the Rules annexed to the Special Trade Passenger Ships Agreement, 1971; and
- (b) the Rules annexed to the Protocol on Space Requirements for Special Trade Passenger Ships, 1973.

PART 2

General

Evaluation, testing and approval of life-saving appliances and arrangements

5. (1) Except as provided in paragraphs (5) and (6), life-saving appliances and arrangements required by these Rules shall be approved by the Minister.

(2) Before giving approval to life-saving appliances and arrangements, the Minister shall ensure that such life-saving appliances and arrangements:

- (a) are tested, to confirm that they comply with the requirements of these Rules and the Code, in accordance with the recommendations of the IMO, or
- (b) have successfully undergone, to the satisfaction of the Minister, tests which are substantially equivalent to those specified in those recommendations.

(3) Before giving approval to novel life-saving appliances or arrangements, the Minister shall ensure that such appliances or arrangements:

- (a) provide safety standards at least equivalent to the requirements of these Rules and the Code and have been evaluated and tested in accordance with the recommendations of the IMO, or
- (b) have successfully undergone, to the satisfaction of the Minister, evaluation and tests which are substantially equivalent to those recommendations.

(4) For ships built on or after 1 July 2010, before giving approval to novel life-saving appliances or arrangements, the Minister shall ensure that—

- (a) such appliances provide safety standards at least equivalent to the requirements of these Rules and the Code and have been evaluated and tested based on the guidelines developed by the IMO, or
- (b) such arrangements have successfully undergone an engineering analysis, evaluation and approval in accordance with Rule 39.

(5) The Minister may establish specific procedures for the granting of approval of life-saving appliances which may include conditions for the continuation or withdrawal of approvals.

(6) Before accepting life-saving appliances and arrangements that have not been previously approved by the Minister, the Minister shall be satisfied that life-saving appliances and arrangements comply with the requirements of these Rules and the Code.

(7) Life-saving appliances required by these Rules for which detailed specifications are not included in the Code shall be to the satisfaction of the Minister.

Production tests

6. The Minister shall require life-saving appliances to be subjected to such production tests as are necessary to ensure that the life-saving appliances are manufactured to the same standard as the approved prototype.

PART 3

Passenger Ships and Cargo Ships

Communications

7. (1) Rule 7(2) applies to all passenger ships and to all cargo ships of 300 gross tonnage and upwards.

Radio life-saving appliances

- (2) (a) At least 3 two-way VHF radiotelephone apparatus shall be provided on every passenger ship and on every cargo ship of 500 gross tonnage and upwards. At least 2 two-way VHF radiotelephone apparatus shall be provided on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such apparatus shall conform to performance standards not inferior to those adopted by the IMO. If a fixed two-way VHF radiotelephone apparatus is fitted in a survival craft it shall conform to performance standards not inferior to those adopted by the IMO.

Search and rescue locating devices

- (b) At least one search and rescue locating device shall be carried on each side of every passenger ship and of every cargo ship of 500 gross tonnage and upwards. At least one search and rescue locating device shall be carried on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such search and rescue locating devices shall conform to the applicable performance standards not inferior to those adopted by the IMO. The search and rescue locating devices shall be stowed in such location that they can be rapidly placed in any survival craft other than the liferaft or liferafts required by Rule 32(4). Alternatively one search and rescue locating device shall be stowed in each survival craft other than those required by Rule 32(4).

- (c) On ships carrying at least two search and rescue locating devices and equipped with free-fall lifeboats one of the search and rescue locating devices shall be stowed in a free-fall lifeboat and the other located in the immediate vicinity of the navigation bridge so that it can be utilised on board and ready for transfer to any of the other survival craft.

Distress flares

- (3) Not less than 12 rocket parachute flares, complying with the requirements of section 3.1 of the Code, shall be carried and be stowed on or near the navigation bridge.

On-board communications and alarm systems

- (4) (a) For ships built on or after 1 July 1997—
 - (i) An emergency means comprised of either fixed or portable equipment or both shall be provided for two-way communications between emergency control stations, muster and embarkation stations and strategic positions on board.
 - (ii) A general emergency alarm system complying with the requirements of paragraph 7.2.1 of the Code shall be provided and shall be used for summoning passengers and crew to muster stations and to initiate the actions included in the muster list. The system shall be supplemented by either a public address system complying with the requirements of paragraph 7.2.2 of the Code or other suitable means of communication. Entertainment sound systems shall automatically be turned off when the general emergency alarm system is activated.
- (b) On passenger ships, the general emergency alarm system shall be available on open decks.
- (c) On ships built on or after 1 July 2008, the general emergency alarm system shall be audible throughout all the accommodation and normal crew working spaces. On passenger ships, the system shall also be audible on all open decks.
- (d) On ships fitted with a marine evacuation system communication between the embarkation station and the platform or the survival craft shall be ensured.

Public address systems on passenger ships

- (5) (a) In addition to the requirements of Safety Convention regulation II-2/12.3 and of Rule 7(4)(b), all passenger ships shall be fitted with a public address system. With respect to passenger ships built before 1 July 1997 the requirements of Rules 7(5)(b) and 7(5)(d), subject to the provisions of Rule 7(5)(e), shall apply not later than the date of the first periodical survey after 1 July 1997.

- (b) The public address system shall be clearly audible above the ambient noise in all spaces, prescribed by paragraph 7.2.2.1 of the Code, and shall be provided with an override function controlled from one location on the navigation bridge and such other places on board as the Minister deems necessary, so that all emergency messages will be broadcast if any loudspeaker in the spaces concerned has been switched off, its volume has been turned down or the public address system is used for other purposes.
- (c) On passenger ships constructed on or after 1 July 1997:
 - (i) the public address system shall have at least two loops which shall be sufficiently separated throughout their length and have two separate and independent amplifiers; and
 - (ii) the public address system and its performance standards shall be approved by the Minister having regard to the recommendations adopted by the IMO.
- (d) The public address system shall be connected to the emergency source of electrical power required by Safety Convention regulation II-1/42.2.2.
- (e) Ships constructed before 1 July 1997 which are already fitted with the public address system approved by the Minister which complies substantially with those required by Rules 7(5)(b) and 7(5)(d) and paragraph 7.2.2.1 of the Code are not required to change their system.

Personal life-saving appliances

Lifebuoys

- 8. (1) (a) Lifebuoys complying with the requirements of paragraph 2.1.1 of the Code shall be:
 - (i) so distributed as to be readily available on both sides of the ship and as far as practicable on all open decks extending to the ship's side; at least one shall be placed in the vicinity of the stern; and
 - (ii) so stowed as to be capable of being rapidly cast loose, and not permanently secured in any way.
- (b) At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline complying with the requirements of paragraph 2.1.4 of the Code equal in length to not less than twice the height at which it is stowed above the waterline in the lightest seagoing condition, or 30 m, whichever is the greater.
- (c) Not less than one half of the total number of lifebuoys shall be provided with lifebuoy self-igniting lights complying with the requirements of paragraph 2.1.2 of the Code; not less than two of these shall also be provided with lifebuoy self-activating smoke signals complying

with the requirements of paragraph 2.1.3 of the Code and be capable of quick release from the navigation bridge; lifebuoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the ship and shall not be the lifebuoys provided with lifelines in compliance with the requirements of Rule 8(1)(b).

- (d) Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.

Lifejackets

- (2) (a) A lifejacket complying with the requirements of paragraph 2.2.1 or 2.2.2 of the Code shall be provided for every person on board the ship and, in addition:
- (i) a number of lifejackets suitable for children equal to at least 10% of the number of passengers on board shall be provided or such greater number as may be required to provide a lifejacket for each child; and
 - (ii) a sufficient number of lifejackets shall be carried for persons on watch and for use at remotely located survival craft stations. The lifejackets carried for persons on watch should be stowed on the bridge, in the engine control room and at any other manned watch station.
 - (iii) for passenger ships built on or after 1 July 2010, on voyages of less than 24 hours, a number of infant lifejackets equal to at least 2.5% of the number of passengers on board shall be provided.
 - (iv) for passenger ships built on or after 1 July 2010, on voyages of 24 hours or greater, infant jackets shall be provided for each infant on board.
 - (v) for ships built on or after 1 July 2010, if the adult lifejackets provided are not designed to fit persons weighing up to 140kg and with a chest girth of up to 1,750mm, a sufficient number of suitable accessories shall be available on board to allow them to be secured to such persons.
- (b) Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated. Where, due to the particular arrangements of the ship, the lifejackets provided in compliance with the requirements of Rule 8(2)(a) may become inaccessible, alternative provisions shall be made to the satisfaction of the Minister which may include an increase in the number of lifejackets to be carried.
- (c) The lifejackets used in totally enclosed lifeboats, except free-fall lifeboats, shall not impede entry into the lifeboat or seating, including operation of the seat belts in the lifeboat.

- (d) Lifejackets selected for free-fall lifeboats, and the manner in which they are carried or worn, shall not interfere with entry into the lifeboat, occupant safety or operation of the lifeboat.

Immersion suits and anti-exposure suits

(3) An immersion suit, complying with the requirements of section 2.3 of the Code or an anti-exposure suit complying with section 2.4 of the Code, of an appropriate size, shall be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party. If the ship is constantly engaged in warm climates where, in the opinion of the Minister, thermal protection is unnecessary, this protective clothing need not be carried.

Muster list and emergency instructions

9. (1) This Rule applies to all ships.

(2) Clear instructions to be followed in the event of an emergency shall be provided for every person on board. In the case of passenger ships these instructions shall be drawn up in the English language or languages required by the Minister.

(3) Muster lists and emergency instructions complying with the requirements of Rule 38 shall be exhibited in conspicuous places throughout the ship including the navigation bridge, engine-room and crew accommodation spaces.

(4) Illustrations and instructions in appropriate languages shall be posted in passenger cabins and be conspicuously displayed at muster stations and other passenger spaces to inform passengers of:

- (a) their muster station;
- (b) the essential actions they must take in an emergency; and
- (c) the method of donning lifejackets.

Operating instructions

10. (1) This Rule applies to all ships.

(2) Posters or signs shall be provided on or in the vicinity of survival craft and their launching controls and shall:

- (a) illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;
- (b) be easily seen under emergency lighting conditions; and
- (c) use symbols in accordance with the recommendations of the IMO.

Manning of survival craft and supervision

11. (1) This Rule applies to all ships.

- (2) There shall be a sufficient number of trained persons on board for mustering and assisting untrained persons.
 - (3) There shall be a sufficient number of crew members, who may be deck officers or certificated persons, on board for operating the survival craft and launching arrangements required for abandonment by the total number of persons on board.
 - (4) A deck officer or certificated person shall be placed in charge of each survival craft to be used. However, the Minister, having due regard to the nature of the voyage, the number of persons on board and the characteristics of the ship, may permit persons practised in the handling and operation of liferafts to be placed in charge of liferafts in lieu of persons qualified as above. A second-in-command shall also be nominated in the case of lifeboats.
 - (5) The person in charge of the survival craft shall have a list of the survival craft crew and shall see that the crew under his command are acquainted with their duties. In lifeboats the second-in-command shall also have a list of the lifeboat crew.
 - (6) Every motorized survival craft shall have a person assigned who is capable of operating the engine and carrying out minor adjustments.
 - (7) The master shall ensure the equitable distribution of persons referred to in Rule 11(2), (3) and (4) among the ship's survival craft.
- Survival craft muster and embarkation arrangements*
12. (1) Lifeboats and liferafts for which approved launching appliances are required shall be stowed as close to accommodation and service spaces as possible.
 - (2) Muster stations shall be provided close to the embarkation stations. Each muster station shall have sufficient clear deck space to accommodate all persons assigned to muster at that station, but at least 0.35 m² per person.
 - (3) Muster and embarkation stations shall be readily accessible from accommodation and work areas.
 - (4) Muster and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by Safety Convention regulation II-1/42 or II-1/43, as appropriate.
 - (5) Alleyways, stairways and exits giving access to the muster and embarkation stations shall be lighted. Such lighting shall be capable of being supplied by the emergency source of electrical power required by Safety Convention regulation II-1/42 or II-1/43, as appropriate. In addition to and as part of the markings required under Safety Convention regulation II-2/13.3.2.5.1, routes to muster stations shall be indicated with the muster station symbol, intended for that purpose, in accordance with the recommendations of the IMO.

(6) Davit-launched and free-fall launched survival craft muster and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.

(7) An embarkation ladder complying with the requirements of paragraph 6.1.6 of the Code extending, in a single length, from the deck to the waterline in the lightest seagoing condition under unfavourable conditions of trim of up to 10°; and a list of up to 20°; either way shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship. However, the Minister may permit such ladders to be replaced by approved devices to afford access to the survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship.

(8) For ships built on or after 1 July 2008, an embarkation ladder complying with the requirements of paragraph 6.1.6 of the Code extending, in a single length, from the deck to the waterline in the lightest seagoing condition under all conditions of trim of up to 10°; and a list of up to 20°; either way shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship. However, the Minister may permit such ladders to be replaced by approved devices to afford access to the survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship. Other means of embarkation enabling descent to the water in a controlled manner may be permitted for the liferafts required by Rule 32(4).

(9) Where necessary, means shall be provided for bringing the davit-launched survival craft against the ship's side and holding them alongside so that persons can be safely embarked.

Launching stations

13. Launching stations shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as possible, survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship. If positioned forward, they shall be located abaft the collision bulkhead in a sheltered position and, in this respect, the Minister shall give special consideration to the strength of the launching appliance.

Stowage of survival craft

14. (1) Each survival craft shall be stowed:

- (a) so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;
- (b) as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw over board launching, in such a position that the survival craft in the embarkation position is not less than 2 m above the waterline with the ship in the

fully loaded condition under unfavourable conditions of trim of up to 10°; and listed up to 20°; either way, or to the angle at which the ship's weather deck edge becomes submerged, whichever is less;

- (c) in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 minutes;
- (c) fully equipped as required by these Rules and the Code; and
- (e) as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. In particular, survival craft on tankers, other than the liferafts required by Rule 32(4), shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.

(2) Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On cargo ships of 80 m in length and upwards but less than 120 m in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On cargo ships of 120 m in length and upwards and passenger ships of 80 m in length and upwards, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.

(3) Lifeboats shall be stowed attached to launching appliances.

(4) (a) Every liferaft shall be stowed with its painter permanently attached to the ship.

(b) Each liferaft or group of liferafts shall be stowed with a float-free arrangement complying with the requirements of paragraph 4.1.6 of the Code so that each floats free and, if inflatable, inflates automatically when the ship sinks.

(c) Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.

(d) Rules 14(4)(a) and 14(4)(b) do not apply to liferafts required by Rule 32(4).

(5) Davit-launched liferafts shall be stowed within reach of the lifting hooks, unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in Rule 14(1)(b) or by ship motion or power failure.

(6) Liferafts intended for throw-overboard launching shall be so stowed as to be readily transferable for launching on either side of the ship unless liferafts, of the aggregate capacity required by Rule 32(1) to be capable of being launched on either side, are stowed on each side of the ship.

Stowage of rescue boats

15. Rescue boats shall be stowed:

- (a) in a state of continuous readiness for launching in not more than 5 minutes, for ships built on or after 1 July 2008, in a state of continuous readiness for launching in not more than 5 minutes, and if the inflated type, in a fully inflated condition at all times;
- (b) in a position suitable for launching and recovery;
- (c) so that neither the rescue boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and
- (d) if it is also a lifeboat, in compliance with the requirements of Rule 14.

Stowage of marine evacuation systems

16. (1) The ship's side shall not have any openings between the embarkation station of the marine evacuation system and the waterline in the lightest seagoing condition and means shall be provided to protect the system from any projections.

(2) Marine evacuation systems shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging positions of the hull and so that, as far as practicable, the system can be launched down the straight side of the ship.

(3) Each marine evacuation system shall be stowed so that neither the passage nor platform nor its stowage or operational arrangements will interfere with the operation of any other life-saving appliance at any other launching station.

(4) Where appropriate, the ship shall be so arranged that the marine evacuation systems in their stowed positions are protected from damage by heavy seas.

Survival craft launching and recovery arrangements

17. (1) Unless expressly provided otherwise, launching and embarkation appliances complying with the requirements of section 6.1 of the Code shall be provided for all survival craft except those which are:

- (a) boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which have a mass of not more than 185 kg; or
- (b) boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10°; and list of up to 20°; either way; or

- (c) carried in excess of the survival craft for 200% of the total number of persons on board the ship and which have a mass of not more than 185 kg; or
- (d) carried in excess of the survival craft for 200% of the total number of persons on board the ship, are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10°; and list of up to 20°; either way; or
- (e) provided for use in conjunction with a marine evacuation system, complying with the requirements of section 6.2 of the Code and stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10°; and list of up to 20°; either way.

(2) Each lifeboat shall be provided with an appliance which is capable of launching and recovering the lifeboat. In addition there shall be provision for hanging-off the lifeboat to free the release gear for maintenance.

(3) Launching and recovery arrangements shall be such that the appliance operator on the ship is able to observe the survival craft at all times during launching, and for lifeboats, during recovery.

(4) Only one type of release mechanism shall be used for similar survival craft carried on board the ship.

(5) Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.

(6) Falls, where used, shall be long enough for the survival craft to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of trim of up to 10°; and list of up to 20°; either way.

(7) During preparation and launching, the survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by Safety Convention regulation II-1/42 or II-1/43, as appropriate.

(8) Means shall be available to prevent any discharge of water onto survival craft during abandonment.

(9) If there is a danger of the survival craft being damaged by the ship's stabilizer wings, means shall be available, powered by an emergency source of energy, to bring the stabilizer wings inboard; indicators operated by an emergency source of energy shall be available on the navigating bridge to show the position of the stabilizer wings.

(10) If partially enclosed lifeboats complying with the requirements of section 4.5 of the Code are carried, a davit span shall be provided, fitted with not less than two lifelines of sufficient length to reach the water with the ship in its

lightest seagoing condition, under unfavourable conditions of trim of up to 10°; and list of up to 20°; either way.

Rescue boat embarkation, launching and recovery arrangements

18. (1) The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time.

(2) If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of Rules 12 and 13.

(3) Launching arrangements shall comply with the requirements of Rule 17. However, all rescue boats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.

(4) Recovery time of the rescue boat shall be not more than 5 minutes in moderate sea conditions when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, this recovery time shall be possible when loaded with its lifeboat equipment and the approved rescue boat complement of at least six persons.

(5) Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.

Line-throwing appliances

19. A line-throwing appliance complying with the requirements of section 7.1 of the Code shall be provided.

Emergency training and drills

20. (1) This Rule applies to all ships.

(2) (a) Every crew member with assigned emergency duties shall be familiar with these duties before the voyage begins.

(b) On a ship engaged on a voyage where passengers are scheduled to be on board for more than 24 hours, musters of the passengers shall take place within 24 hours after their embarkation. Passengers shall be instructed in the use of the lifejackets and the action to take in an emergency.

(c) Whenever new passengers embark, a passenger safety briefing shall be given immediately before sailing, or immediately after sailing. The briefing shall include the instructions required by Rules 9(2) and 9(4), and shall be made by means of an announcement, in one or more languages likely to be understood by the passengers. The announcement shall be made on the ship's public address system, or by other equivalent means likely to be heard at least by the passengers who have not yet heard it during the voyage. The briefing may be included

in the muster required by Rule 20(2)(b) if the muster is held immediately upon departure. Information cards or posters or video programmes displayed on ships video displays may be used to supplement the briefing, but may not be used to replace the announcement.

- (3) (a) Drills shall, as far as practicable, be conducted as if there were an actual emergency.
- (b) Every crew member 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 hours 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. When a ship enters service for the first time, after modification of a major character or when a new crew is engaged, these drills shall be held before sailing. The Minister may accept other arrangements that are at least equivalent for those classes of ships for which this is impracticable.
- (c) Each abandon ship drill shall include:
- (i) summoning of passengers and crew to muster stations with the alarm required by Rule 7(4)(b) followed by drill announcement on the public address or other communication system and ensuring that they are made aware of the order to abandon ship;
 - (ii) reporting to stations and preparing for the duties described in the muster list;
 - (iii) checking that passengers and crew are suitably dressed;
 - (iv) checking that lifejackets are correctly donned;
 - (v) lowering of at least one lifeboat after any necessary preparation for launching;
 - (vi) starting and operating the lifeboat engine;
 - (vii) operation of davits used for launching liferafts;
 - (viii) a mock search and rescue of passengers trapped in their state-rooms; and
 - (ix) instruction in the use of radio life-saving appliances.
- (d) Different lifeboats shall, as far as practicable, be lowered in compliance with the requirements of Rule 20(3)(c)(v) at successive drills.
- (e) Except as provided in Rules 20(3)(f) and 20(3)(g), each lifeboat shall be launched and manoeuvred in the water by its assigned operating crew, at least once every three months during an abandon ship drill.

- (f) In the case of a lifeboat arranged for a free-fall launching, at least once every three months during an abandon ship drill, the crew shall board the lifeboat, properly secure themselves in their seats and commence launch procedures up to but not including the actual release of the lifeboat (i.e. the release hook shall not be released). The lifeboat shall then either be free-fall launched with only the required operating crew on board, or lowered into the water by means of the secondary means of launching with or without the operating crew on board. In both cases, the lifeboat shall, thereafter, be manoeuvred in the water by the operating crew. At intervals of not more than six months, the lifeboat shall either be launched by free-fall with only the operating crew on board or simulated launching shall be carried out in accordance with the guidelines developed by the IMO.
- (g) The Minister 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 three months and launched at least annually.
- (h) 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 three months.
 - (i) 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.
- (j) If a ship is fitted with marine evacuation systems, drills shall include exercising of the procedures required for the deployment of such a system up to the point immediately preceding actual deployment of the system. This aspect of drills should be augmented by regular instruction using the on-board training aids required by Rule 36(4). Additionally every system party member shall, as far as practicable, be further trained by participation in a full deployment of a similar system into water, either on board a ship or ashore, at intervals of not longer than two years, but in no case longer than three years. This training can be associated with the deployments required by Rule 21(8)(b).
- (k) Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.

Fire drills

- (4) (a) 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 ships and the cargo.

- (b) Each fire drill shall include:
- (i) reporting to stations and preparing for the duties described in the muster list required by Rule 9;
 - (ii) starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;
 - (iii) checking of fireman's outfit and other personal rescue equipment;
 - (iv) checking of relevant communication equipment;
 - (v) checking the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
 - (vi) checking the necessary arrangements for subsequent abandoning of the ship.
- (c) 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.

On-board training and instructions

- (5) (a) On-board training 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 two 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 two weeks after the time of first joining the ship. Instructions in the use of the ship's fire-extinguishing appliances, life-saving appliances, and in survival at sea shall be given at the same interval as the drills. 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 two months.
- (b) Every crew member shall be given instructions which shall include but not necessarily be limited to:
- (i) operation and use of the ship's inflatable liferafts;
 - (ii) problems of hypothermia, first-aid treatment for hypothermia and other appropriate first-aid procedures;
 - (iii) special instructions necessary for use of the ship's life-saving appliances in severe weather and severe sea conditions; and
 - (iv) operation and use of fire-extinguishing appliances.

- (c) On-board training in the use of davit-launched liferafts shall take place at intervals of not more than four 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.

Records

(6) 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 Minister. 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.

Operational readiness, maintenance and inspections

21. (1) This Rule applies to all ships. The requirements of Rules 21(3)(b), 21(3)(c) and 21(6)(b) shall be complied with, as far as is practicable, on ships constructed before 1 July 1986.

(2) Before the ship leaves port and at all times during the voyage, all life-saving appliances shall be in working order and ready for immediate use.

(3) (a) Maintenance, testing and inspections of life-saving appliances shall be carried out based on the guidelines developed by the IMO and in a manner having due regard to ensuring reliability of such appliances.

(b) Instructions for on-board maintenance of life-saving appliances complying with Rule 37 shall be provided and maintenance shall be carried out accordingly.

(c) The Minister may accept, in compliance with the requirements of Rule 21(3)(b), a shipboard planned maintenance programme which includes the requirements of Rule 37.

(4) Falls used in launching shall be inspected periodically with special regard for areas passing through sheaves, and renewed when necessary due to deterioration of the falls or at intervals of not more than 5 years, whichever is the earlier.

(5) Spares and repair equipment shall be provided for life-saving appliances and their components which are subject to excessive wear or consumption and need to be replaced regularly.

(6) The following tests and inspections shall be carried out weekly and a report of the inspection shall be entered in the log-book:

- (a) all survival craft, rescue boats and launching appliances shall be visually inspected to ensure that they are ready for use. The inspection shall include, but is not limited to, the condition of hooks, their attachment to the lifeboat and the on-load release gear being properly and completely re-set;
- (b) all engines in lifeboats and rescue boats shall be run for a total period of not less than 3 minutes provided the ambient temperature is above the minimum temperature required for starting and running the engine. During this period of time, it should be demonstrated that the gear box and gear box train are engaging satisfactorily. If the special characteristics of an outboard motor fitted to a rescue boat would not allow it to be run other than with its propeller submerged for a period of 3 minutes, a suitable water supply may be provided. In special cases the Minister may waive this requirement for ships constructed before 1 July 1986;
- (c) lifeboats, except free-fall lifeboats on cargo ships, shall be moved from their stowed position, without any persons on board, to the extent necessary to demonstrate satisfactory operation of launching appliances, if weather and sea conditions so allow; and
- (d) the general emergency alarm system shall be tested.

Monthly Inspections

- (7) (a) All lifeboats, except free-fall lifeboats, shall be turned out from their stowed position, without any persons on board, if weather and sea conditions so allow.
- (b) Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using the checklist required by Rule 37(1)(a) to ensure that they are complete and in good order. A report of the inspection shall be entered in the log-book.

Servicing of inflatable liferafts, inflatable lifejackets, marine evacuation systems, and maintenance and repair of inflated rescue boats

- (8) (a) Every inflatable liferaft, inflatable lifejacket, and marine evacuation system shall be serviced:
 - (i) at intervals not exceeding 12 months, provided where in any case this is impracticable, the Minister may extend this period to 17 months; and
 - (ii) at an approved servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.
- (b) In addition to or in conjunction with the servicing intervals of marine evacuation systems required by Rule 21(8)(a), each marine evacuation system should be deployed from the ship on a rotational basis

at intervals to be agreed by the Minister provided that each system is to be deployed at least once every six years.

- (c) The Minister, if he approves new and novel inflatable liferaft arrangements pursuant to Rule 5, may allow for extended service intervals on the following conditions:
 - (i) The new and novel liferaft arrangement has proved to maintain the same standard, as required by testing procedure, during extended service intervals,
 - (ii) The liferaft system shall be checked on board by certified personnel according to Rule 21(8)(a)(i),
 - (iii) Service at intervals not exceeding five years shall be carried out in accordance with the recommendations of the IMO.
 - (d) All repairs and maintenance of inflated rescue boats shall be carried out in accordance with the manufacturer's instructions. Emergency repairs may be carried out on board the ship; however, permanent repairs shall be effected at an approved servicing station.
 - (e) The Minister, if he permits extension of liferaft service intervals in accordance with Rule 21(8)(c) shall notify the IMO of such action in accordance with Safety Convention regulation I/5(b).
- (9) Hydrostatic release units, other than disposable hydrostatic release units, shall be serviced:
- (a) at intervals not exceeding 12 months, provided where in any case this is impracticable, the Minister may extend this period to 17 months; and
 - (b) at a servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.
- (10) Containers, brackets, racks, and other similar stowage locations for life-saving equipment shall be marked with symbols in accordance with the recommendations of the IMO, indicating the devices stowed in that location for that purpose. If more than one device is stowed in that location, the number of devices shall also be indicated.
- (11) Periodic servicing of launching appliances and on-load release gear:
- (a) Launching appliances shall be:
 - (i) maintained in accordance with instructions for on-board maintenance as required by Rule 37;

- (ii) subject to a thorough examination at the annual surveys required by Safety Convention regulations 1/7 or 1/8, as applicable; and
 - (iii) upon completion of the examination in Rule 21(11)(a)(ii) be subjected to a dynamic test of the winch brake at maximum lowering speed. The load to be applied shall be the mass of the survival craft or rescue boat without persons on board, except that, at intervals not exceeding five years, the test shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment.
- (b) Lifeboat or rescue boat on-load release gear, including free-fall lifeboat release systems, shall be:
- (i) maintained in accordance with instructions for on board maintenance as required by Rule 37;
 - (ii) subjected to a thorough examination and test during the surveys required by Safety Convention regulation I/7 and I/8 by properly trained personnel familiar with the system; and
 - (iii) operationally tested under a load of 1.1 times the total mass of the boat when loaded with its full complement of persons and equipment whenever the release gear is overhauled. Such overhauling and test shall be carried out at least once every five years.
 - (iv) notwithstanding subparagraph (iii) above, the operational testing of free-fall lifeboat release systems shall be performed either by free-fall launch with only the operating crew on board or by a simulated launching carried out based on guidelines developed by the Organisation.
- (c) Davit-launched liferaft automatic release hooks shall be:
- (i) maintained in accordance with instructions for on-board maintenance as required by Rule 37;
 - (ii) subject to a thorough examination and test during the surveys required by Safety Convention regulation I/7 and I/8 by properly trained personnel familiar with the system;
- and
- (iii) operationally tested under a load of 1.1 times the total mass of the liferaft when loaded with its full complement of persons and equipment whenever the automatic release hook is overhauled. Such overhauling and test shall be carried out at least once every five years.

PART 4

Passenger Ships — (Additional requirements)

Survival craft and rescue boats

Survival Craft

22. (1) (a) Passenger ships engaged on international voyages which are not short international voyages shall carry:
- (i) partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code on each side of such aggregate capacity as will accommodate not less than 50% of the total number of persons on board. The Minister may permit the substitution of lifeboats by liferafts of equivalent total capacity provided that there shall never be less than sufficient lifeboats on each side of the ship to accommodate 37.5% of the total number of persons on board. The inflatable or rigid liferafts shall comply with the requirements of section 4.2 or 4.3 of the Code and shall be served by launching appliances equally distributed on each side of the ship; and
 - (ii) in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of Rule 22(1)(a)(i) or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of Rule 14(5).
- (2) Passenger ships built on or after 1 July 2008, and passenger ships built before 1 July 2008 which are complying with the special standards of subdivision prescribed by Safety Convention regulation II-I/6.5, and engaged on short international voyages, shall carry:
- (a) partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code of such aggregate capacity as will accommodate at least 30% of the total number of persons on board. The lifeboats shall, as far as practicable, be equally distributed on each side of the ship. In addition inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code shall be carried of such aggregate capacity that, together with the lifeboat capacity, the survival craft will accommodate the total number of persons on board. The liferafts shall be served by launching appliances equally distributed on each side of the ship; and
 - (b) in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as

will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of Rule 22(2)(a) or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of Rule 14(5).

(3) Passenger ships built before 1 July 2008 and engaged on short international voyages and not complying with the special standards of subdivision prescribed by Safety Convention regulation II-I/6.5, shall carry survival craft complying with the requirements of Rule 22(I)(a)(i).

(4) All survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full compliment of persons and equipment within a period of 30 minutes from the time the abandon ship signal is given.

For ships built on or after 1 July 2008, all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full compliment of persons and equipment within a period of 30 minutes from the time the abandon ship signal is given, after all persons have been assembled, with lifejackets donned.

(5) In lieu of meeting the requirements of Rule 22(1), 22(2) or 22(3) and for ships built on or after 1 July 2008, in lieu of meeting the requirements of Rule 22(1) or Rule 22(2), passenger ships of less than 500 gross tonnage where the total number of persons on board is less than 200, may comply with the following:

- (a) they shall carry on each side of the ship, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;
- (b) unless the liferafts required by Rule 22(4)(a) are stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;
- (c) if the rescue boat required by Rule 22(2)(b) is also a partially or totally enclosed lifeboat complying with the requirements of section 4.5 or 4.6 of the Code, it may be included in the aggregate capacity required by Rule 22 (5)(a), provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board; and
- (d) in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including those which are stowed in a position providing for easy

side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.

(6) A marine evacuation system or systems complying with section 6.2 of the Code may be substituted for the equivalent capacity of liferafts and launching appliances required by Rules 22(I)(a)(i) or 22(2)(a).

Rescue Boats

(7) Passenger ships of 500 gross tonnage and over shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code on each side of the ship.

(8) Passenger ships of less than 500 gross tonnage shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code.

(9) A lifeboat may be accepted as a rescue boat provided it also complies with the requirements for a rescue boat.

(10) For ships built on or after 1 July 2008, a lifeboat may be accepted as a rescue boat provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.

Marshalling of liferafts

(11) The number of lifeboats and rescue boats that are carried on passenger ships shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than six liferafts need be marshalled by each lifeboat or rescue boat.

(12) For ships built before 1 July 2008, the number of lifeboats and rescue boats that are carried on passenger ships engaged on short international voyages shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than nine liferafts need be marshalled by each lifeboat or rescue boat and complying with the special standards of subdivision prescribed by Safety Convention regulation II-I/6.5.

(13) For ships built on or after 1 July 2008, the number of lifeboats and rescue boats that are carried on passenger ships engaged on short international voyages shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than nine liferafts need be marshalled by each lifeboat or rescue boat.

Personal life-saving appliances

Lifebuoys

23. (1) (a) A passenger ship shall carry not less than the number of lifebuoys complying with the requirements of Rule 8(1) and section 2.1 of the Code prescribed in the following table:

Length of ship in metres	Minimum number of lifebuoys
Under 60	8

Length of ship in metres	Minimum number of lifebuoys
60 and under 120	12
120 and under 180	18
180 and under 240	24
240 and over	30

- (b) Notwithstanding Rule 8(1)(c), passenger ships of under 60 m in length shall carry not less than six lifebuoys provided with self-igniting lights.
- (2) (a) In addition to the lifejackets required by Rule 8(2), every passenger ship shall carry lifejackets for not less than 5% of the total number of persons on board. These lifejackets shall be stowed in conspicuous places on deck or at muster stations.
- (b) Where lifejackets for passengers are stowed in staterooms which are located remotely from direct routes between public spaces and muster stations, the additional lifejackets for these passengers required under Rule 8(2)(b) shall be stowed either in the public spaces, the muster stations, or on direct routes between them. The lifejackets shall be stowed so that their distribution and donning does not impede orderly movement to muster stations and survival craft embarkation stations.
- (3) On all passenger ships each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.
- (4) (a) All passenger ships shall carry for each lifeboat on the ship at least three immersion suits complying with the requirements of section 2.3 of the Code and, in addition, a thermal protective aid complying with the requirements of section 2.5 of the Code for every person to be accommodated in the lifeboat and not provided with an immersion suit.
- (b) These immersion suits and thermal protective aids need not be carried:
- (i) for persons to be accommodated in totally or partially enclosed lifeboats; or
- (ii) if the ship is constantly engaged on voyages in warm climates where, in the opinion of the Minister, they are unnecessary.
- (c) The provisions of Rule 23(4)(b)(i) also apply to partially or totally enclosed lifeboats not complying with the requirements of section 4.5 or 4.6 of the Code, provided they are carried on ships constructed before 1 July 1986.

Survival craft and rescue boat embarkation arrangements

24. (1) On passenger ships, survival craft embarkation arrangements shall be designed for:

- (a) all lifeboats to be boarded and launched either directly from the stowed position or from an embarkation deck but not both; and
- (b) davit-launched liferafts to be boarded and launched from a position immediately adjacent to the stowed position or from a position to which, in compliance with the requirements of Rule 14(5), the liferaft is transferred prior to launching.

(2) Rescue boat arrangements shall be such that the rescue boat can be boarded and launched directly from the stowed position with the number of persons assigned to crew the rescue boat on board. Notwithstanding the requirements of Rule 24(1)(a), if the rescue boat is also a lifeboat and the other lifeboats are boarded and launched from an embarkation deck, the arrangements shall be such that the rescue boat can also be boarded and launched from the embarkation deck.

Stowage of survival craft

25. The stowage height of a survival craft on a passenger ship shall take into account the requirements of Rule 14(1)(b), the escape provisions of Safety Convention regulation II-2/13, the size of the ship, and the weather conditions likely to be encountered in its intended area of operation. For a davit-launched survival craft, the height of the davit head with the survival craft in embarkation position, shall, as far as practicable, not exceed 15 m to the waterline when the ship is in its lightest seagoing condition.

Muster stations

26. Every passenger ship shall, in addition to complying with the requirements of Rule 12, have passenger muster stations which shall:

- (a) be in the vicinity of, and permit ready access for the passengers to, the embarkation stations unless in the same location; and
- (b) have ample room for marshalling and instruction of the passengers, but at least 0.35m² per passenger.

Additional requirements for ro-ro passenger ships

27. (1) This Rule applies to all ro-ro passenger ships.

(2) Ro-ro passenger ships constructed:

- (a) on or after 1 July 1998 shall comply with the requirements of paragraphs (3)(c) and (d), (4)(a), (b) and (c), (5) and (6).
- (b) on or after 1 July 1986 and before 1 July 1998 shall comply with the requirements of paragraph (6) not later than the first periodical survey after 1 July 1998 and with the requirements of paragraphs (3)(c) and (d), (4) and (5) not later than the first periodical survey after 1 July 2000;
- (c) before 1 July 1986 shall comply with the requirements of paragraph (6) not later than the first periodical survey after 1 July 1998 and with

the requirements of paragraphs (3)(a) to (d), (4) and (5) not later than the first periodical survey after 1 July 2000;

- (d) before 1 July 2004 shall comply with the requirements of paragraph (3)(e) not later than the first survey on or after that date.
- (3) (a) The ro-ro passenger ship's liferafts shall be served by marine evacuation systems complying with the requirements of section 6.2 of the Code or launching appliances complying with the requirements of paragraph 6.1.5 of the Code, equally distributed on each side of the ship.
- (b) Every liferaft on ro-ro passenger ships shall be provided with float-free stowage arrangements complying with the requirements of Rule 14(4).
 - (c) Every liferaft on ro-ro passenger ships shall be of a type fitted with a boarding ramp complying with the requirements of paragraph 4.2.4.1 or 4.3.4.1 of the Code, as appropriate.
 - (d) Every liferaft on ro-ro passenger ships shall either be automatically self-righting or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, the ship shall carry automatically self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50% of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats. Every such liferaft shall be approved by the Minister having regard to the recommendations adopted by the IMO.
 - (e) Liferafts carried on ro-ro passenger ships shall be fitted with a search and rescue device in the ratio of one search and rescue device for every four liferafts. The search and rescue device shall be mounted inside the liferaft so its antenna is more than one metre above sea level when the liferaft is deployed, except that for canopied reversible liferafts, the search and rescue device shall be so arranged as to be readily accessed and erected by survivors. Each search and rescue device shall be arranged to be manually erected when the liferaft is deployed. Containers of liferafts fitted with search and rescue devices shall be clearly marked.
- (4) (a) At least one of the rescue boats on a ro-ro passenger ship shall be a fast rescue boat approved by the Minister having regard to the recommendations adopted by the IMO. For ships built on or after 1 July 2008, at least one of the rescue boats on a ro-ro passenger ship shall be a fast rescue boat complying with section 5.1.4 of the Code.

- (b) Each fast rescue boat shall be served by a suitable launching appliance approved by the Minister. When approving such launching appliances, the Minister shall take into account that the fast rescue boat is intended to be launched and retrieved even under severe adverse weather conditions, and also shall have regard to the recommendations adopted by the IMO. For ships built on or after 1 July 2008, each fast rescue boat shall be served by a suitable launching appliance complying with section 6.1.7 of the Code.
- (c) At least two crews of each fast rescue boat shall be trained and drilled regularly having regard to the Seafarers Training, Certification and Watchkeeping (STCW) Code and recommendations adopted by the IMO, including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsize.
- (d) In the case where the arrangement or size of a ro-ro passenger ship, constructed before 1 July 1997, is such as to prevent the installation of the fast rescue boat required by Rule 27(4)(a), the fast rescue boat may be installed in place of an existing lifeboat which is accepted as a rescue boat or, in the case of ships constructed prior to 1 July 1986, boats for use in an emergency, provided that all of the following conditions are met:
 - (i) the fast rescue boat installed is served by a launching appliance complying with the provisions of Rule 27(4)(b);
 - (ii) the capacity of the survival craft lost by the above substitution is compensated by the installation of liferafts capable of carrying at least an equal number of persons served by the lifeboat replaced; and
 - (iii) such liferafts are served by the existing launching appliances or marine evacuation systems.

Means of rescue

- (5) (a) Each ro-ro passenger ship shall be equipped with efficient means for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship.
 - (b) The means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes.
 - (c) If the slide of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the slide shall be equipped with handlines or ladders to aid in climbing up the slide.
- (6) (a) Notwithstanding the requirements of Rules 8(2) and 23(2), a sufficient number of lifejackets shall be stowed in the vicinity of the muster

stations so that passengers do not have to return to their cabins to collect their lifejackets.

- (b) In ro-ro passenger ships, each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.

Information on passengers

28. (1) All persons on board all passenger ships shall be counted prior to departure.

(2) Details of persons who have declared a need for special care or assistance in emergency situations shall be recorded and communicated to the master prior to departure.

(3) In addition, the names and gender of all persons on board, distinguishing between adults, children and infants shall be recorded for search and rescue purposes.

(4) The information required by paragraphs (1) to (3) shall be kept ashore and made readily available to search and rescue services when needed.

(5) The Minister may exempt passenger ships from the requirements of paragraph (3) if the scheduled voyages of such ships render it impracticable for them to prepare such records.

Helicopter landing and pick-up areas

29. (1) All ro-ro passenger ships shall be provided with a helicopter pick-up area approved by the Minister having regard to the recommendations adopted by the IMO.

(2) Ro-ro passenger ships of 130 m in length and upwards, constructed on or after 1 July 1999, shall be fitted with a helicopter landing area approved by the Minister having regard to the recommendations adopted by the IMO.

Decision support system for masters of passenger ships

30. (1) This Rule applies to all passenger ships. Passenger ships constructed before 1 July 1997 shall comply with the requirements of this Rule not later than the date of the first periodical survey after 1 July 1999.

(2) In all passenger ships, a decision support system for emergency management shall be provided on the navigation bridge.

(3) The system shall, as a minimum, consist of a printed emergency plan or plans. All foreseeable emergency situations shall be identified in the emergency plan or plans, including, but not limited to, the following main groups of emergencies:

- (a) fire;

- (b) damage to ship;

- (c) pollution;
- (d) unlawful acts threatening the safety of the ship and the security of its passengers and crew;
- (e) personnel accidents;
- (f) cargo-related accidents; and
- (g) emergency assistance to other ships.

(4) The emergency procedures established in the emergency plan or plans shall provide decision support to masters for handling any combination of emergency situations.

(5) The emergency plan or plans shall have a uniform structure and be easy to use. Where applicable, the actual loading condition as calculated for the passenger ship's voyage stability shall be used for damage control purposes.

(6) In addition to the printed emergency plan or plans, the Minister may also accept the use of a computer-based decision support system on the navigation bridge which provides all the information contained in the emergency plan or plans, procedures, checklists, etc., which is able to present a list of recommended actions to be carried out in foreseeable emergencies.

Drills

31. (1) This Rule applies to all passenger ships.

(2) On passenger ships, an abandon ship drill and fire drill shall take place weekly. The entire crew need not be involved in every drill, but each crew member must participate in an abandon ship drill and a fire drill each month as required in Rule 20(3)(b). Passengers shall be strongly encouraged to attend these drills.

PART 5

Cargo Ships — (Additional requirements)

Survival craft and rescue boats

Survival craft

32. (1) Cargo ships shall carry:

- (a) one or more totally enclosed lifeboats complying with the requirements of section 4.6 of the Code of such aggregate capacity on each side of the ship as will accommodate the total number of persons on board; and
- (b) In addition, one or more inflatable or rigid liferafts, complying with the requirements of section 4.2 or 4.3 of the Code, stowed in a position providing for easy side-to-side transfer at a single open deck

level, and of such aggregate capacity as will accommodate the total number of persons on board. If the liferaft or liferafts are not stowed in a position providing for easy side-to-side transfer at a single open deck level, the total capacity available on each side shall be sufficient to accommodate the total number of persons on board.

- (c) For ships built on or after 1 July 2008, in addition, one or more inflatable or rigid liferafts, complying with the requirements of section 4.2 or 4.3 of the Code, of a mass of less than 185kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, and of such aggregate capacity as will accommodate the total number of persons on board. If the liferaft or liferafts are not of a mass of less than 185kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, the total capacity available on each side, shall be sufficient to accommodate the total number of persons on board.

(2) In lieu of meeting the requirements of paragraph (1), cargo ships may carry:

- (a) one or more free-fall lifeboats, complying with the requirements of section 4.7 of the Code, capable of being free-fall launched over the stern of the ship of such aggregate capacity as will accommodate the total number of persons on board; and
- (b) in addition, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code, on each side of the ship, of such aggregate capacity as will accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances.

(3) In lieu of meeting the requirements of paragraphs (1) or (2), cargo ships of less than 85 m in length other than oil tankers, chemical tankers and gas carriers, may comply with the following:

- (a) they shall carry on each side of the ship, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code and of such aggregate capacity as will accommodate the total number of persons on board;
- (b) unless the liferafts required by paragraph(3)(a) are stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity available on each side will accommodate 150% of the total number of persons on board;
- (c) for ships built on or after 1 July 2008, unless the liferafts required by paragraph (3)(a) are of a mass of less than 185kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, additional liferafts shall be provided so that the total capacity

available on each side will accommodate 150% of the total number of persons on board;

- (d) if the rescue boat required by paragraph (2) is also a totally enclosed lifeboat complying with the requirements of section 4.6 of the Code, it may be included in the aggregate capacity required by paragraph (3)(a), provided that the total capacity available on either side of the ship is at least 150% of the total number of persons on board;
- (e) in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including any which are stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board;
- (f) for ships built on or after 1 July 2008, in the event of any one survival craft being lost or rendered unserviceable, there shall be sufficient survival craft available for use on each side, including any which are of a mass of less than 185kg and stowed in a position providing for easy side-to-side transfer at a single open deck level, to accommodate the total number of persons on board.

(4) Cargo ships where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m shall carry, in addition to the liferafts required by paragraphs (1)(b) and (2)(b), a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable. Such liferaft or liferafts may be securely fastened so as to permit manual release and need not be of the type which can be launched from an approved launching device.

(5) With the exception of the survival craft referred to in Rule 17(1)(a), all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 10 minutes from the time the abandon ship signal is given.

(6) Chemical tankers and gas carriers carrying cargoes emitting toxic vapours or gases shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, lifeboats with a self-contained air support system complying with the requirements of section 4.8 of the Code.

(7) Oil tankers, chemical tankers and gas carriers carrying cargoes having a flashpoint not exceeding 60°; C (closed-cup test) shall carry, in lieu of totally enclosed lifeboats complying with the requirements of section 4.6 of the Code, fire-protected lifeboats complying with the requirements of section 4.9 of the Code.

(8) Notwithstanding the requirements of paragraph (1), bulk carriers as defined in Safety Convention regulation IX/1.6 constructed on or after 1 July 2006 shall comply with the requirements of paragraph (2).

Rescue boats

- (9) (a) Cargo ships shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code. A lifeboat may be accepted as a rescue boat, provided that it also complies with the requirements for a rescue boat.
- (b) Cargo ships built on or after 1 July 2008 shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code. A lifeboat may be accepted as a rescue boat, provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.
- (10) In addition to their lifeboats, all cargo ships constructed before 1 July 1986 shall carry:
- (a) one or more liferafts capable of being launched on either side of the ship and of such aggregate capacity as will accommodate the total number of persons on board. The liferaft or liferafts shall be equipped with a lashing or an equivalent means of securing the liferaft which will automatically release it from a sinking ship; and
- (b) where the horizontal distance from the extreme end of the stem or stern of the ship to the nearest end of the closest survival craft is more than 100 m, in addition to the liferafts required by Rule 32(3)(i), a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable and practicable. Notwithstanding the requirements of Rule 32(3)(i), such liferaft or liferafts may be securely fastened so as to permit manual release.

Personal life-saving appliances

Lifebuoys

33. (1) (a) Cargo ships shall carry not less than the number of lifebuoys complying with the requirements of Rule 8(1) and section 2.1 of the Code prescribed in the following table:

Length of ship in metres	Minimum number of lifebuoys
Under 100	8
100 and under 150	10
150 and under 200	12
200 and over	14

- (b) Self-igniting lights for lifebuoys on tankers required by Rule 8(1)(c) shall be of an electric battery type.

Lifejacket lights

- (2) (a) This Rule applies to all cargo ships.

- (b) On cargo ships, each lifejacket shall be fitted with a lifejacket light complying with the requirements of paragraph 2.2.3 of the Code.

Immersion suits

- (3) (a) This Rule applies to all cargo ships. However, with respect to cargo ships constructed before 1 July 2006, subparagraphs (b) to (e) shall be complied with no later than the first safety equipment survey on or after 1 July 2006.
- (b) An immersion suit of an appropriate size complying with the requirements of section 2.3 of the Code shall be provided for every person on board the ship. However, for ships other than bulk carriers, as defined in Safety Convention regulation IX/1, these immersion suits need not be required if the ship is constantly engaged on voyages in warm climates, where, in the opinion of the Minister, immersion suits are unnecessary.
- (c) If a ship has any watch or work stations which are located remotely from the place or places where immersion suits are normally stowed, including remotely located survival craft carried in accordance with Rule 32(4), additional immersion suits of an appropriate size shall be provided at these locations for the number of persons normally on watch or working at those locations at any time.
- (d) Immersion suits shall be so placed as to be readily accessible and their position shall be plainly indicated.
- (e) The immersion suits required by this Safety Convention regulation may be used to comply with the requirements of Rule 8(3).

Survival craft embarkation and launching arrangements

34. (1) Cargo ship survival craft embarkation arrangements shall be so designed that lifeboats can be boarded and launched directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of Rule 14(5).

(2) On cargo ships of 20,000 gross tonnage and upwards, lifeboats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.

PART VI

Life-Saving Appliances and Arrangements Requirements

Life-Saving Appliances and Arrangements Requirements

35. (1) All life-saving appliances and arrangements shall comply with the applicable requirements of the Code.

(2) For the purpose of these Rules, the testing of life-saving appliances must be carried out in accordance with the requirements of the Code as amended by the Maritime Safety Committee of the IMO by Resolution MSC 226(82) and in compliance with the European Communities (Marine Equipment) Regulations 2009 (S.I. 259 of 2009).

PART VII

Miscellaneous

Training manual and on-board training aids

36. (1) This Rule applies to all ships.

(2) A training manual complying with the requirements of paragraph (3) shall be provided in each crew mess room and recreation room or in each crew cabin.

(3) The training manual, which may comprise several volumes, shall contain instructions and information, in easily understood terms illustrated wherever possible, on the life-saving appliances provided in the ship and on the best methods of survival. Any part of such information may be provided in the form of audio-visual aids in lieu of the manual. The following shall be explained in detail:

- (a) donning of lifejackets, immersion suits and anti-exposure suits, as appropriate;
- (b) muster at the assigned stations;
- (c) boarding, launching, and clearing the survival craft and rescue boats, including, where applicable, use of marine evacuation systems;
- (d) method of launching from within the survival craft;
- (e) release from launching appliances;
- (f) methods and use of devices for protection in launching areas, where appropriate;
- (g) illumination in launching areas;
- (h) use of all survival equipment;
- (i) use of all detection equipment;
- (j) with the assistance of illustrations, the use of radio life-saving appliances;
- (k) use of drogues;
- (l) use of engine and accessories;

- (m) recovery of survival craft and rescue boats including stowage and securing;
 - (n) hazards of exposure and the need for warm clothing;
 - (o) best use of the survival craft facilities in order to survive;
 - (p) methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), breeches-buoy and shore life-saving apparatus and ship's line-throwing apparatus;
 - (q) all other functions contained in the muster list and emergency instructions; and
 - (r) instructions for emergency repair of the life-saving appliances.
- (4) Every ship fitted with a marine evacuation system shall be provided with on-board training aids in the use of the system.
- (5) The training manual shall be written in the working language of the ship.

Instructions for on-board maintenance

37. (1) Instructions for on-board maintenance of life-saving appliances shall be easily understood, illustrated wherever possible, and, as appropriate, shall include the following for each appliance:

- (a) a checklist for use when carrying out the inspections required by Rule 21(7);
- (b) maintenance and repair instructions;
- (c) schedule of periodic maintenance;
- (d) diagram of lubrication points with the recommended lubricants;
- (e) list of replaceable parts;
- (f) list of sources of spare parts; and
- (g) log for records of inspections and maintenance.

Muster list and emergency instructions

38. (1) The muster list shall specify details of the general emergency alarm and public address system prescribed by section 7.2 of the Code and also action to be taken by crew and passengers when this alarm is sounded. The muster list shall also specify how the order to abandon ship will be given.

- (2) Each passenger ship shall have procedures in place for locating and rescuing passengers trapped in their staterooms.
- (3) The muster list shall show the duties assigned to the different members of the crew including:

- (a) closing of the watertight doors, fire doors, valves, scuppers, sidescuttles, skylights, portholes and other similar openings in the ship;
- (b) equipping of the survival craft and other life-saving appliances;
- (c) preparation and launching of survival craft;
- (d) general preparations of other life-saving appliances;
- (e) muster of passengers;
- (f) use of communication equipment;
- (g) manning of fire parties assigned to deal with fires; and
- (h) special duties assigned in respect to the use of fire-fighting equipment and installations.

(4) The muster list shall specify which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use.

(5) The muster list shall specify substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions.

(6) The muster list shall show the duties assigned to members of the crew in relation to passengers in case of emergency. These duties shall include:

- (a) warning the passengers;
- (b) seeing that they are suitably clad and have donned their lifejackets correctly;
- (c) assembling passengers at muster stations;
- (d) keeping order in the passageways and on the stairways and generally controlling the movements of the passengers; and
- (e) ensuring that a supply of blankets is taken to the survival craft.

(7) The muster list shall be prepared before the ship proceeds to sea. After the muster list has been prepared, if any change takes place in the crew which necessitates an alteration in the muster list, the master shall either revise the list or prepare a new list.

(8) The format of the muster list used on passenger ships shall be approved.

Alternative design and arrangements

The purpose of this Rule is to provide a methodology for alternative design and arrangements for life-saving appliances and arrangements

39. (1) This Rule applies to ships built on or after 1 July 2010.
- (2) (a) Life-saving appliances and arrangements may deviate from the requirements set out in part B, provided that the alternative design and arrangements meet the intent of the requirements concerned and provide an equivalent level of safety to this Rule.
- (b) When alternative design or arrangements deviate from the prescriptive requirements of part B, an engineering analysis, evaluation and approval of the design and arrangements shall be carried out in accordance with this Rule.
- (3) The engineering analysis shall be prepared and submitted to the Minister, based on the guidelines developed by the IMO and shall include, as a minimum, the following elements:
- (a) determination of the ship type and the life-saving appliance and arrangements concerned;
 - (b) identification of the prescriptive requirement(s) with which the life-saving appliance and arrangements will not comply;
 - (c) identification of the reason the proposed design will not meet the prescriptive requirements supported by compliance with other recognised engineering or industry standards;
 - (d) determination of the performance criteria for the ship and the life-saving appliance and arrangements concerned addressed by the relevant prescriptive requirement(s):
 - (i) performance criteria shall provide a level of safety not inferior to the relevant prescriptive requirements contained in Part 3; and
 - (ii) performance criteria shall be quantifiable and measurable;
 - (e) detailed description of the alternative design and arrangements, including a list of the assumptions used in the design and any proposed operational restrictions or conditions;
 - (f) technical justification demonstrating that the alternative design and arrangements meet the safety performance criteria;
 - (g) risk assessment based on identification of the potential faults and hazards associated with the proposal.

(4) (a) The engineering analysis required in Rule 39(3) shall be evaluated and approved by the Minister, taking into account the guidelines adopted by the IMO.

(b) A copy of the documentation, as approved by the Minister, indicating that the alternative design and arrangements comply with this Rule, shall be carried on board the ship.

(5) If the assumptions and operational restrictions that were stipulated in the alternative design and arrangements are changed, the engineering analysis shall be carried out under the changed condition and shall be approved by the Minister.



GIVEN under my Official Seal,
18 October 2018.

SHANE ROSS,
Minister for Transport, Tourism and Sport.

EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation)

These Rules give effect to the provisions of Chapter III of the Annex to the 1974 Convention on the Safety of Life at Sea (SOLAS).

The Rules:

- contain requirements for life-saving appliances and arrangements, including requirements for life boats, rescue boats and life jackets according to type of ship;
- give effect in rule 35, to the International Life-Saving Appliance (LSA) Code which entered into force on 1 July 1998.

The Rules are applicable to ships on international voyages.

BAILE ÁTHA CLIATH
ARNA FHOILSIÚ AG OIFIG AN tSOLÁTHAIR
Le ceannach díreach ó
FOILSEACHÁIN RIALTAIS,
52 FAICHE STIABHNA, BAILE ÁTHA CLIATH 2
(Teil: 01 - 6476834 nó 1890 213434; Fax: 01 - 6476843)
nó trí aon díoltóir leabhar.

DUBLIN
PUBLISHED BY THE STATIONERY OFFICE
To be purchased from
GOVERNMENT PUBLICATIONS,
52 ST. STEPHEN'S GREEN, DUBLIN 2.
(Tel: 01 - 6476834 or 1890 213434; Fax: 01 - 6476843)
or through any bookseller.

€8.89

