Regulation of 17 December 2004 No. 1855 concerning life-saving appliances on cargo ships

Laid down by the Norwegian Maritime Directorate on 17 December 2004 pursuant to the Act of 9 June 1903 no. 7 relating to Public Control of the Seaworthiness of Ships, etc. Legal basis amended to Act of 16 February 2007 No. 9 relating to Ship Safety and Security (the Ship Safety and Security Act) sections 2, 9, 11, 13, 14, 15, 16, 43 and 45, cf. Formal Delegation of 16 February 2007 No. 171 and Formal Delegation of 31 May 2007 No. 590 by the Ministry of Trade and Industry and Act of 26 June 1998 No. 47 relating to Recreational and Small Craft section 23, cf. Formal Delegation of 27 November 1998 No. 1095, Formal Delegation of 1 December 1998 No. 4532 and Formal Delegation of 31 May 2007 No. 591 by the Ministry of Trade and Industry. Amended 4 February 2005 No. 111, 15 July 2005 No. 828 and 29 June 2007 No. 1006 (i.a. legal basis).

§ 1 *Scope of application*

- (1) This Regulation applies to Norwegian cargo ships, with the specifications referred to in the second to fourth paragraphs.
- (2) This Regulation applies to all cargo ships and manned lighters irrespective of their size, trade area and date of construction.
- (3) Cargo ships in great coasting or greater trade, as well as cargo ships of 500 gross tonnage and above irrespective of their trade area, shall in their entirety comply with the current requirements for life-saving appliances of SOLAS 1974, Chapter III, as subsequently amended. In addition, Section 2 to Section 7, Section 11, Section 17, Section 26 and Section 27 of this Regulation shall apply.

Amended by Regulation of 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 2 Definitions

For the purposes of this Regulation:

- a) Recognized classification society means classification societies with which the Ministry has entered into an agreement pursuant to Section 41 of the Ship Safety and Security Act:
 - 1. Det Norske Veritas (DNV);
 - 2. Lloyd's Register of Shipping (LRS);
 - 3. Bureau Veritas (BV);
 - 4. Germanischer Lloyd (GL);
 - 5. American Bureau of Shipping (ABS).
- b) Accepted means equipment accepted by the Norwegian Maritime Directorate on the basis of approval or typeapproval by a recognized classification society, another public or private institution, or the administration of a country which has ratified the SOLAS Convention.
- c) *Manned lighter* means a lighter for which the manning has been stipulated in accordance with the regulation currently in force concerning the manning of Norwegian ships.
- d) Gross tonnage means the number entered as gross tonnage in the Tonnage Certificate. If safety tonnage is entered in the remarks column of the Tonnage Certificate, this tonnage shall apply as gross tonnage.
- e) Built means:
 - 1. that the ship is at a stage of construction where the keel is laid; or
 - 2. that the construction of a specific ship can be established as having commenced; or
 - 3. that the parts of the ship that have been put together comprise at least 50 tons or constitute 1% of the calculated weight of the building material, whichever is less.
- f) Float-free launching means the method of launching survival craft, where the craft is automatically released from the sinking ship and is ready for use.
- g) Free-fall launching means the method of launching survival craft, where the craft with persons and equipment on board is released and allowed to fall into the sea without any form of device that can restrain its fall.
- h) *IMO* means the International Maritime Organisation.
- i) *Embarkation ladder* means a ladder mounted at embarkation stations for survival craft to facilitate safe access to the survival craft after launching.
- j) Length (L) means 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, whichever is the greater. In vessels designed with a rake of keel, the waterline on which this length is measured shall be parallel to the designed waterline.

- k) LSA Code means the International Life-Saving Appliance Code adopted by the IMO Maritime Safety Committee by resolution MSC.48(66), as subsequently amended by the IMO.
- l) Cargo ship means any ship that is not a passenger ship, fishing vessel, lighter or pleasure craft. For the purposes of this Regulation:
 - 1. *passenger ship* means a ship that can carry more than 12 passengers or which is required to have official permission to carry passengers.
 - 2. *Fishing vessel* means any vessel used commercially for catching fish, including whales, seals, seaweed and sea tangle or other living resources of the sea.
 - 3. *Pleasure craft* means any floating device intended for and capable of movement on water and not used for commercial purposes.
 - 4. *Lighter* means a hull or ship without propulsion machinery which is towed or pushed for all moves, and which is used for carrying cargo.
- m) Rescue boat means a boat that has been designed to save persons in distress and to assist survival craft.
- Immersion suit means a protective suit that reduces the loss of body heat for a person immersed in cold water. It shall be insulated.
- o) Survival craft means lifeboats and liferafts.
- p) SOLAS Convention means the International Convention of 1974 for the Safety of Life at Sea, as subsequently amended by the IMO.
- q) Tanker means a cargo ship built or outfitted for the carriage of flammable liquid cargo in bulk, including chemicals, oil and natural gas.
- r) Thermal protective equipment means a pouch or suit made of waterproof material with a low thermal conductivity.
- s) Launching device or launching arrangement means an appliance that can safely transfer a survival craft or rescue boat from its mounted position into the water.

§ 3 Duties

The company, master and other persons working on board shall perform their duties in accordance with the Ship Safety and Security Act and the supplementary provisions laid down in this Regulation.

Amended by Regulation of 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 4 Exemptions

The Norwegian Maritime Directorate may, in individual cases and upon written application, grant exemption from the requirements of this Regulation. There must be special reasons that make the exemption necessary and it must be justifiable in terms of safety. Exemptions can only be granted where they do not contravene international agreements to which Norway has acceded.

§ 5 Documentation

Documentation shall be submitted to the Norwegian Maritime Directorate in accordance with the list of drawings currently in force prepared by the Norwegian Maritime Directorate.

§ 6

Requirements for the approval of equipment, etc.

- (1) Equipment that is required pursuant to this Regulation and that is covered by the Regulation of 29 December 1998 No. 1455 concerning marine equipment (the Marine Equipment Regulation), that is brought on board following the entry into force of this Regulation, shall be approved by a Notified Body pursuant to the same Regulation and shall be wheel-marked.
 - (2) Equipment that is not covered by the Marine Equipment Regulation shall be accepted.
- (3) Previously approved or accepted equipment that was brought on board prior to the entry into force of this Regulation, may still be used until the equipment is replaced or the arrangement is changed.
- (4) Equipment that is not required pursuant to this Regulation, but that is voluntarily installed on board, shall satisfy the provisions of this Section.
- (5) The Norwegian Maritime Directorate may decide that new equipment shall be installed on board in connection with major conversions or repairs of the ship that will affect life-saving appliances. The same applies to changes of the operational pattern and manning or extensions of the trade area.

(6) If the Norwegian Maritime Directorate following a demonstration of the arrangement of the life-saving appliances finds that it does not function appropriately, or may endanger the life and health of those on board in view of the ship's operation and manning, the Norwegian Maritime Directorate may demand that the equipment be replaced or the arrangement altered.

§ 7 *Life-saving appliances*

Any ship of less than 500 gross tonnage shall, depending on trade area and tonnage, carry at least the life-saving appliances as specified in the table below.

Trade area/tonnage Equipment	All ships in trade areas 1 and 2	All ships in trade area 3 and greater trade	Manned lighters	§
Survival craft	200%	200%	100%	§ 8
Rescue boat			_	§ 11
Less than 100 gr.t. More than 100 gr.t.	_ 1	_ 1		
Lifebuoys				§ 14
Less than 300 gr.t. More than 300 gr.t.	3 5	3 5	3 5	
Lifejackets	150%	150%	150%	§ 16
Lifejackets for children	For everyone on board	For everyone on board	_	§ 16
Immersion suits	100%	100%	100%	§ 17
Rocket parachute flares	3	6	_	§ 15
Hand flares	3	6	_	§ 15
Line-throwing appliance			_	§ 15
Less than 100 gr.t. More than 100 gr.t.	0 1	1 1		

§ 8

Survival craft

- (1) With the exception of tankers, all ships shall on each side of the ship carry at least one survival craft with sufficient capacity to carry at least the total number of persons on board. If only one liferaft is carried in trade areas 1 and 2, it must be possible to launch it from both sides of the ship. In stead of a survival craft as mentioned above, a free-fall lifeboat located at the stern may be carried.
- (2) A sufficient number of survival craft shall be carried to ensure that the remaining survival craft have the capacity to carry the total number of persons the ship is certified to carry, in the event that one survival craft breaks down or is rendered useless.
- (3) Tankers shall either carry an enclosed lifeboat on both sides of the ship or a free-fall lifeboat located at the stern, with sufficient capacity to carry at least the total number of persons on board.
- (4) Manned lighters in trade area 3 or greater trade shall be equipped with an inflatable liferaft with sufficient capacity to carry everyone on board. Manned lighters in trade areas 1 and 2 shall be equipped with a CE-labelled motor-powered workboat which at least satisfies the requirements for design category C, or a liferaft that can carry at least the total number of persons on board. For manned lighters carrying flammable liquid cargo, the Norwegian Maritime Directorate will lay down the requirements in each individual case, depending on the lighter's manning, trade area, structure and operational conditions.

§ 9

Hydrostatic release

All liferafts shall be fitted with a hydrostatic release and shall be located so as to be able to float freely, cf. Annex 1.

§ 10

Requirements for the stowage of survival craft

– the embarkation and launching arrangements

Survival craft shall be stowed pursuant to Annex 1.

§ 11

Rescue boats

- (1) Ships built on or after 1 January 2005 of 100 gross tonnage and more, shall carry a rescue boat.
- (2) Ships of less than 100 gross tonnage, irrespective of their date of construction, do not have to carry a rescue boat if:
 - a) the ship is equipped with a CE-labelled motor-powered workboat which at least satisfies design category C; or
 - b) the ship has the manoeuvrability under any conditions to get close to a person immersed in the sea, and to easily recover persons directly from the water.
- (3) Ships in small coasting or lesser trade area of more than 500 gross tonnage built between 1 July 1986 and 1 January 2005 shall have installed a rescue boat on board upon the first renewal survey at the latest or upon the intermediate survey after 1 January 2006, whichever comes first.
- (4) Ships of between 100 and 500 gross tonnage irrespective of their trade area shall have a rescue boat installed on board at the latest upon the initial survey or intermediate survey after 1 January 2006, whichever comes first.
- (5) Until the requirement of the third and fourth paragraphs has been met, ships that are equipped with rafts only shall in addition carry a rescue boat.
- (6) The requirement for a rescue boat may be met by carrying a lifeboat that complies with the requirements for a rescue boat.
- (7) The rescue boat may be included in the capacity of survival craft as mentioned in Section 8 in trade areas 1 and 2
- (8) The rescue boat and the CE-labelled workboat shall be operated by their own launching arrangements which are capable of both launching and embarkation while the ship is making headway.

Amended by Regulation of 4 February 2005 No. 111.

Rescue boat embarkation and launching arrangements

- (1) The embarkation and launching arrangement for rescue boats shall allow boarding and launching operations to take place in the shortest possible time. The maximum time spent shall not exceed five minutes.
- (2) It shall be possible to board and launch the rescue boat directly from its stowed position with the number of persons on board designated as rescue boat crew.
- (3) The launching arrangement shall comply with the requirements of Annex 1. It shall be possible to launch rescue boats while the ship is making headway, proceeding at not less than 5 knots.
- (4) It shall be possible to embark a rescue boat in no more than five minutes while loaded to capacity with persons and equipment.
 - (5) It shall be possible to observe the launching and embarkation operations from the bridge.

§ 13

Muster stations

Launching stations shall comply with the requirements of Annex 2.

§ 14

Lifebuoys

- (1) At least one of the lifebuoys on each side shall be fitted with a buoyant lifeline of at least 30 metres of length.
- (2) At least one of the lifebuoys on each side shall be fitted with a self-igniting smoke signal and a self-igniting light, but without a line. It shall be possible to release them quickly from the bridge.
 - (3) The other lifebuoys shall be fitted with self-igniting lights, but without lines.
- (4) For vessels that shall carry three lifebuoys only, one of the lifebuoys shall be fitted with a lifeline of at least 30 metres of length, and one lifebuoy shall be fitted with a self-igniting smoke signal and a self-igniting light.
- (5) In special cases the Norwegian Maritime Directorate may impose other requirements for lifebuoys than those mentioned in the first to fourth paragraphs, depending on the ship's manning, trade area, structure and operational conditions.

§ 15

Hand flares/rocket parachute flares/line-throwing appliance

Handflares, rocket parachute flares, line-throwing appliances and other portable safety equipment intended for use in an emergency or which shall be brought along to the life-saving appliances upon evacuation, shall be stowed in, or in the immediate vicinity of, the wheelhouse.

§ 16

Lifejackets

- (1) There shall be lifejackets for everyone on board. In addition, there shall be lifejackets for at least 50 % of the total number of persons on board.
- (2) Lifejackets shall be stowed in easily accessible locations on board. They shall be stowed in clearly marked and well ventilated cases or closets near the muster or embarkation stations and where watchkeeping personnel usually move about.
- (3) Lifejackets for all children on board shall in addition be carried. A child is defined as a person between 1 year of age and 35 kg. Lifejackets for children shall be stowed separate from lifejackets for adults, and they shall be easily accessible.

§ 17

Immersion suits

(1) There shall be immersion suits with thermal insulation for everyone¹ on board on all bulk carriers irrespective of their trade area, and on all cargo ships operating in trade areas outside 30 degrees North and 30 degrees South, upon the initial survey for equipment safety certificates that take place on or after 1 July 2006.

¹If immersion suits for children on board cannot be procured, there shall be thermal lifejackets in suitable sizes for children.

Amended by Regulation of 4 February 2005 No. 111.

Marking of stowage locations

Stowage locations for life-saving appliances shall be conspicuously marked by their content and quantity.

§ 19

Operating instructions

There shall be clearly visible notices or signs on, or in the vicinity of, survival craft and launching arrangements which in an unambiguous manner shall:

- a) illustrate and provide instructions for the operation of the launching arrangement and provide information on the elements of risk; and
- b) be legible in emergency lighting.

§ 20

General alarm system, etc.

- (1) Ships of 200 gross tonnage and above shall be equipped with a general alarm system.
- (2) The general alarm system shall comply with the requirements of Annex 3.
- (3) The general alarm system shall be capable of summoning everyone on board to the muster stations, as well as implementing the operations specified in the ship's muster list.
- (4) For ships of less than 200 gross tonnage an alarm signal given by the ship's whistle or siren may be accepted in stead of the general alarm system.
 - (5) The general alarm system shall be supplemented by:
 - a) a public address system in accordance with Annex 3; or
 - b) an approved rousing an calling-up installation; or
 - c) another suitable means of communication.
- (6) The communication as mentioned in the fifth paragraph shall be connected to all spaces where the crew normally moves about.

§ 21

Muster list

- (1) A muster list shall be prepared.
- (2) The muster list shall be posted in clearly visible locations on board, including on the bridge and in the crew accommodation.
 - (3) The muster list shall be in the ship's working language.
- (4) The muster list shall provide detailed information on the general alarm system and the communication systems as mentioned in Section 20, and it shall specify the action to be taken by those on board when the alarm is sounded. It shall furthermore specify the way in which the order to abandon ship will be given.
 - (5) The duties assigned to the various crew members shall be evident from the muster list, including:
 - a) closing of watertight doors, fire doors, valves, drainage openings, hatches, skylights, sidescuttles and other similar openings in the ship;
 - b) responsibility for bringing along portable life-saving equipment;
 - c) preparation and launching of survival craft;
 - d) general preparation of other life-saving appliances;
 - e) mustering;
 - f) use of communication equipment;
 - g) manning of fire parties assigned to fight fires; and
 - h) special duties when using fire-extinguishing appliances and installations.
- (6) The muster list shall specify which officers are responsible for ensuring that the life-saving and fire-extinguishing appliances are maintained in good condition and are ready for immediate use.
- (7) The muster list shall specify substitutes for key personnel, taking into account that different emergencies may call for different actions.

§ 22

Survival craft manning and operation

(1) There shall be a sufficient number of crew members on board to operate all of the ship's survival craft and launching arrangements.

- (2) Masters of rescue boats and high-speed rescue boats, shall have completed approved training and hold certificates pursuant to the regulation currently in force concerning qualification requirements and certificate rights for personnel on board Norwegian ships.
- (3) Persons designated as masters of survival craft that are launched by means of a launching arrangement, shall have completed training and hold certificates pursuant to the regulation currently in force concerning qualification requirements and certificate rights for personnel on board Norwegian ships.

§ 23 Training

- (1) All ships and manned lighters shall have a training manual easily accessible to the crew.
- (2) The training manual shall contain instructions and, if possible, illustrated information concerning the ship's life-saving appliances and fire-extinguishing appliances.
- (3) Any crew member assigned to perform duties in an emergency, shall have completed training in those duties prior to the ship's departure.
- (4) On-board training in the use of the ship's life-saving appliances and fire-extinguishing appliances shall be provided pursuant to Annex 4.
 - (5) Documentation of completed training for each crew member shall be provided if necessary.

§ 24 Drills

- (1) Each crew member shall participate in at least one abandon ship drill and one fire drill every month.
- (2) If more than 25 % of the crew has been replaced in less than one month, abandon ship drills and fire drills shall take place no later than 24 hours following the ship's departure from port.
- (3) When a ship enters service for the first time, following major conversions or when a new crew has been engaged, drills shall be carried out prior to departure.
 - (4) Each lifeboat shall be launched and manoeuvred on the water at least once every three months.
- (5) Rescue boats and hig-speed rescue boats shall be launched and manoeuvred on the water at least once every month.
 - (6) All drills shall be documented if necessary.
 - (7) Drills shall, as far as practicable, be carried out as if it were a real emergency.
 - (8) The master shall decide how a survival craft shall be manned upon launching and embarkation.
 - (9) Drills shall comply with Annex 5 and the ship's muster list.

§ 25

Operational readiness, maintenance and inspections

- (1) As long as the vessel is operational, all life-saving appliances shall comply with rules and regulations and be ready for immediate use.
 - (2) The provisions of Annex 6 concerning maintenance of life-saving appliances shall be complied with.
 - (3) Maintenance shall be documented if necessary.

§ 26

Entry into force

- (1) This Regulation enters into force on 1 January 2005.
- (2) As of the same date the Regulations of 15 September 1992 No. 700 concerning Life-Saving Appliances, etc. on Passenger Ships and Cargo Ships (Life-Saving Appliances) are repealed.
- (3) The Regulations of 15 September 1992 No. 700 concerning Life-Saving Appliances, etc. on Passenger Ships and Cargo Ships will continue to apply during the period specified in Section 11, third and fourth paragraphs of this Regulation.

Annex 1. (cf. Section 10)

Requirements for the stowage of survival craft - embarkation and launching arrangements

1. Each survival craft shall be stowed:

- 1.1 in such a way that neither the survival craft nor the arrangement will interfere with the operation of any other survival craft or rescue boat at any other launching station;
- 1.2 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;
- 1.3 in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than five minutes;
- 1.4 fully equipped;
- 1.5 as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. Survival craft on tankers shall not be stowed on or above a cargo tank, slop tank or other tank containing explosive or other hazardous cargoes.
- 2. Lifeboats and liferafts with associated launching arrangements, shall be stowed as closely as possible to accommodation and work spaces.
- 3. Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.
- 4. Lifeboats shall be stowed attached to launching arrangements.
- 5. Each liferaft shall be stowed with its painter permanently attached to the ship.
- 6. Each liferaft shall be stowed with a float-free arrangement so that each floats free and, if inflatable, inflates automatically when the ship sinks.
- 7. Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.
- 8. 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 subparagraph 1.2 or by ship motion or power failure.
- 9. It shall be possible to board and launch davit-launched liferafts from the immediate vicinity of their stowage location, or from a location to which the liferaft has been transferred prior to launching, in compliance with the requirements of paragraph 7.
- 10. Embarkation arrangements for survival craft shall be designed in such a way as to permit boarding and launching of the lifeboats directly from their stowage location.

Annex 2. (cf. Section 13)

Muster stations

- 1. Muster stations shall be provided close to the embarkation stations. Each muster station shall have sufficient space to accommodate all persons assigned to muster at that station, but at least 0.35 m² per person.
- 2. Muster and embarkation stations shall be readily accessible from accommodation and work areas.
- 3. Muster and embarkation stations and the sides of the ship shall be adequately illuminated by lighting supplied from the emergency source of electrical power, cf. the regulation currently in force concerning the construction of passenger ships and cargo ships.
- 4. Alleyways, stairways and exits giving access to the muster and embarkation stations shall be lighted. Such lighting shall be capable of being supplied by an emergency source of electrical power.
- 5. 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 the survival craft.
- 6. An embarkation ladder 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 up to a list of 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.
- 7. 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.

Annex 3. (cf. Section 20)

General alarm and public address system

1. The general alarm system.

- 1.1 The general emergency alarm system shall be capable of sounding the general alarm signal consisting of seven or more short blasts followed by one long blast on the ship's whistle or siren and additionally on an electrically operated bell or klaxon or other equivalent warning system, which shall be powered from the ship's main source of electrical power and the emergency source of electrical power. The system shall be capable of operation from the navigating bridge. The system shall be audible throughout all the accommodation and normal crew working spaces. The alarm shall continue to sound after it has been triggered until it is turned off manually.
- 1.2 The minimum sound pressure levels for the general emergency alarm tone in interior and exterior spaces shall be 80 dB(A) and at least 10 dB(A) above ambient noise levels existing during normal equipment operation with the ship underway in moderate weather. In cabins without a loudspeaker installation, an electronic alarm transducer, e.g. an acoustic alarm (a buzzer) or similar suitable means of communication, shall be installed, cf. Section 20, fifth paragraph.
- 1.3 The sound pressure level at the sleeping position in cabins and in cabin bathrooms shall be at least 75 dB (A) and at least 10 dB (A) above ambient noise levels.
- 2. The public address system.
 - 2.1 The public address system shall be a loudspeaker installation that makes it possible to broadcast messages to all spaces where crew members or passengers are normally found and to muster stations. The system shall make it possible to broadcast messages from the navigating bridge. The public address system shall be installed with regard to acoustically marginal conditions and shall not require any action from the addressee. It shall be protected against unauthorized usage.
 - 2.2 With the ship underway in normal conditions, the minimum sound pressure level for broadcasting emergency announcements shall be:
 - 2.2.1 in interior spaces: 75 dB (A) and at least 20 dB (A) above the speech interference level; and
 - 2.2.2 in exterior spaces: 80 dB (A) and at least 15 dB (A) above the speech interference level.

Annex 4. (cf. Section 23)

On-board training and instructions

- 1. 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.
- 2. Every crew member shall be given instructions which shall include but not necessarily be limited to:
 - 2.1 operation and use of the ship's inflatable liferafts;
 - 2.2 problems of hypothermia, first-aid treatment for hypothermia and other appropriate first-aid procedures;
 - 2.3 special instructions necessary for use of the ship's life-saving appliances in severe weather and severe sea conditions; and
 - 2.4 operation and use of fire-extinguishing appliances.
- 3. On-board training in the use of liferafts launched by their own launching arrangement 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.

Annex 5. (cf. Section 24)

Drills

- 1. Each abandon ship drill shall include:
 - 1.1 summoning those on board to muster stations with the general alarm;
 - 1.2 reporting to stations and preparing for the duties described in the muster list;
 - 1.3 checking that everyone is suitably dressed;
 - 1.4 checking that lifejackets are correctly donned;
 - 1.5 lowering of at least one lifeboat after any necessary preparation for launching;
 - 1.6 starting and operating the lifeboat engine;
 - 1.7 operating of davits used for launching liferafts;

- 1.8 a mock search and rescue of passengers trapped in their cabins; and
- 1.9 instruction in the use of radio life-saving appliances.
- 2. Different lifeboats shall, as far as practicable, be lowered pursuant to the requirements of subparagraph 1.5 at successive drills.
- 3. Lowering into the water, rather than launching of a lifeboat arranged for free-fall launching, is acceptable where free-fall launching is impracticable provided the lifeboat is free-fall launched with its assigned operating crew aboard and maneouvred in the water at least once every six months. In cases where it is impracticable, the Norwegian Maritime Directorate may extend this period to 12 months provided that arrangements are made for simulated launching which will take place at intervals of not more than six months.
- 4. If lifeboat and rescue boat launching drills are carried out with the ship making headway, such drills shall, because of the dangers involved, be practiced in sheltered waters only and under the supervision of an officer experienced in such drills.
- 5. Emergency lighting for mustering and abandonment shall be tested at each abandon ship drill.
- 6. 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.
- 7. Each fire drill shall include:
 - 7.1. reporting to stations and preparing for the duties described in the muster list;
 - 7.2 starting of a fire pump, using at least the two required jets of water to show that the system is in proper working order;
 - 7.3 checking of fireman's outfit and other personal rescue equipment;
 - 7.4 checking of relevant communication equipment;
 - 7.5 checking of the operation of watertight doors, fire doors, fire dampers and main inlets and outlets of ventilation systems in the drill area; and
 - 7.6 checking the necessary arrangements for subsequent abandoning of the ship.
- 8. The equipment used during drills shall immediately be brought back to its full operational condition. Any faults and defects discovered during the drills shall be remedied as soon as possible and the problem documented in the ship's log book.

Annex 6. (cf. Section 25)

Operational readiness, maintenance and inspections

1. Operational readiness

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.

- 2. *Instructions for maintenance, etc.*
 - 2.1 Instructions for on-board maintenance of life-saving appliances shall be provided. Maintenance shall be carried out accordingly.
 - 2.2 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:
 - 2.2.1 a checklist for use when carrying out the inspections required by paragraph 7;
 - 2.2.2 maintenance and repair instructions;
 - 2.2.3 schedule of periodic maintenance;
 - 2.2.4 diagram of lubrication points with recommended lubricants;
 - 2.2.5 list of replaceable parts;
 - 2.2.6 list of sources of spare parts; and
 - 2.2.7 log for records of inspections and maintenance (deck log book or other logs).
 - 2.3 In lieu of the instructions required by subparagraphs 2.2.1-2.2.7, a shipboard planned maintenance programme which includes the equivalent requirements may be used.
- 3. Maintenance of falls
 - 3.1 Falls used in launching shall be turned end for end at intervals of not more than 30 months and be renewed when necessary due to deterioration of the falls or at intervals of not more than five years, whichever is the earlier.
 - 3.2 The Norwegian Maritime Directorate may accept in lieu of the "end for ending" required in subparagraph 3.1, periodic inspection of the falls and their renewal whenever necessary due to deterioration or at intervals of not more than four years, whichever one is earlier.
- 4. Spares and repair equipment

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.

5. Weekly inspection

The following tests and inspections shall be carried out weekly:

- 5.1 all survival craft, rescue boats and launching arrangements shall be visually inspected to ensure that they are ready for use;
- 5.2 all engines in lifeboats and rescue boats shall be run for a total period of not less than three 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 three minutes, it should be run for such period as prescribed in the manufacturer's handbook; and
- 5.3 the general alarm system shall be tested.
- 6. Inspection of the life-saving appliances, including lifeboat equipment, shall be carried out monthly using the checklist required by subparagraph 2.2 to ensure that they are complete and in good order. A report of the inspection shall be entered in the log book.
- 7. Servicing of inflatable liferafts, inflatable lifejackets, and inflated rescue boats.
 - 7.1 Every inflatable liferaft, inflatable lifejacket, and marine evacuation system shall be serviced:
 - 7.1.1 at intervals not exceeding 12 months, provided where in any case this is impracticable, the Norwegian Maritime Directorate may extend this period to 17 months; and
 - 7.1.2 at an approved servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.
 - 7.2 If the Norwegian Maritime Directorate approves new and novel inflatable liferaft arrangements, the Directorate may allow for extended service intervals on the following conditions:
 - 7.2.1 the arrangement shall maintain the same standard, as required by testing procedure, during extended service intervals.
 - 7.2.2 The liferaft system shall be checked on board by certified personnel in accordance with subparagraph 7.1.1.
 - 7.2.3 Service at intervals not exceeding five years.
 - 7.3 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.
- 8. Periodic servicing of hydrostatic release units

Hydrostatic release units, other than disposable hydrostatic release units, shall be serviced:

- 8.1 at intervals not exceeding 12 months, provided where in any case this is impracticable, the Norwegian Maritime Directorate may extend this period to 17 months; and
- 8.2 at a servicing station which is competent to service them, maintains proper servicing facilities and uses only properly trained personnel.
- 9. Marking of stowage locations

Containers, brackets, racks, and other similar stowage locations for life-saving equipment shall be marked with symbols indicating the life-saving appliances stowed in that location. If more than one life-saving appliance is stowed in that location, the number of appliances shall also be indicated.

- 10. Periodic servicing of launching arrangements and on-load release gear
 - 10.1 Launching arrangements:
 - 10.1.1 shall be serviced at recommended intervals in accordance with instructions for on-board maintenance as required by subparagraph 2.2;
 - 10.1.2 shall be subjected to a thorough examination at intervals not exceeding five years; and
 - 10.1.3 shall upon completion of the examination in subparagraph 10.1.2 be subjected to a dynamic test of the winch brake with a proof load of not less than 1.1 times the maximum working load at maximum lowering speed.
 - 10.2 Lifeboat on-load release gear shall be:
 - 10.2.1 serviced at recommended intervals in accordance with instructions for on-board maintenance as required by subparagraph 2.2;
 - 10.2.2 subjected to a thorough examination and test during the surveys required by the regulation currently in force concerning surveys of passenger ships and cargo ships by properly trained personnel familiar with the system;
 - 10.2.3 operationally tested under a load of 1.1 times the total mass of the lifeboat 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.