Regulations of 16 October 1991 No. 853 on standby vessels

Legal basis: Laid down by the Norwegian Maritime Authority on 16 October 1991 under 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 (Ship Safety and Security Act) sections 2, 6, 9, 11, 13, 14, 15, 16, 19, 27, 28a, 29, 43, 45 and 47, cf. Formal Delegation of 16 February 2007 No. 171, Formal Delegation of 31 May 2007 No. 590 and Formal Delegation of 19 August 2013 No. 1002.
EEA references: EEA Agreement Annex II Chapter XXXII point 1 and Annex XIII point 56d (Directive 96/98/EC).
Amendments: Amended by Regulations of 7 December 1993 No. 1303, 28 January 1997 No. 119, 22 December 1998 No. 1345, 29 December 1998 No. 1466, 2 March 1999 No. 411, 4 June 2002 No. 926, 1 June 2004 No. 812 and 29 June 2007 No. 1006 (i.a. legal basis), 19 August 2013 No. 1036, 22 December 2014 No. 1893, 20 December 2017 No. 2379, 26 June 2025 No. 1372.

Chapter I
General provisions

Section 1
Scope of application

(1) These Regulations apply to new and existing standby vessels which are or will be entered in a Norwegian ship register.

(2) For existing standby vessels, the provisions of section 11 first to fifth paragraphs do not apply.

(3) A standby vessel's trade area may be restricted according to section 9 or to a trade area laid down pursuant to the Regulations of 4 November 1981 No. 3793 on trade areas.

Section 2
Definitions

For the purpose of these Regulations, the following definitions shall apply:

a) "*Recognised standard"*: Standards set by NS/BS/ISO/CEN or equivalent national or international standards recognised by the Norwegian Maritime Authority by an individual decision.
   BS: British Standard.
   CEN: European Committee for Standardization.
   ISO: International Standards Organisation.
   NS: Norwegian Standard.

b) "*Standby vessel*": A vessel with duties associated with the management of dangerous situations and casualties in the petroleum sector and which is employed on unit guard duty.

c) "*Contingency equipment*": Shipboard equipment for use in rescue operations, dangerous situations and casualties in the petroleum sector.

d) "*Existing standby vessel*": A vessel which is not a new vessel.

e) "*Approved*": Approved by the Norwegian Maritime Authority.

f) "*Unit*": Fixed or mobile offshore unit, including drilling/production ship equipped for the drilling for and production of subsea petroleum deposits, and mobile platform for other use than drilling for and production of subsea petroleum deposits.

g) "*Load Line Convention*": The International Convention on Load Lines, signed in London on 5 April 1966, as amended, including amendments by the 1988 Protocol to the 1966 Load Line Convention.

h) "*New standby vessel*": A vessel the keel of which has been laid, or which is at a similar stage of construction, on or after the date on which these Regulations enter into force.
   Vessels purchased from abroad and vessels for which conversion for service as a standby vessel was begun on or after said date are considered new standby vessels.

i) "*Rescue zone*"*:* That part of the vessel designated for receiving persons rescued from the sea.

j) "*Type-approved*"*:*
   1. In respect of equipment covered by the Regulations of 30 August 2016 No. 1042 on marine equipment: Approved by a Notified Body and marked in accordance with said Regulations.
   2. In respect of other equipment: Type-approved by the Norwegian Maritime Authority.

k) "*One-year and ten-year storm condition*"*:* The most unfavourable combination of ocean currents, wave and wind forces that can be expected over a period of one and ten years respectively.

Amended by Regulations of 29 December 1998 No. 1466 (in force on 1 January 1999), 29 June 2007 No. 1006 (in force on 1 July 2007), 20 December 2017 No. 2379 (in force on 1 January 2018).

Section 3
Duties

(1) The company, employer, 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 these Regulations.

(2) The company shall make the necessary arrangements to ensure that the provisions of these Regulations are complied with. The company shall also ensure that any person working for the company, whether in a personal capacity, as an employee or as an independent contractor or subcontractor, complies with the provisions of these Regulations. This applies during the planning, construction and operation of a standby vessel.

(3) The company shall give the necessary instructions to the master and shipboard management, in the form of the operations manual and associated procedures, checklists and the like, in order to be able at all times to provide documentary evidence of compliance with the requirements of these Regulations.

(4) The company shall ensure that all operational and constructional restrictions laid down by authorities, survey institutions, repair yards and equipment manufacturers are complied with. The company shall also incorporate in the operations manual, etc. any additional requirements which the company deems to be necessary in order to provide a safe standby service and to ensure the safety of ship and crew.

(5) The master shall observe the requirements of these Regulations and the company's operations manual. The master is also under an obligation to notify any defect or deficiency in the operations manual with respect to the requirements of these Regulations or any other matter affecting operational safety. Until the matter is resolved, the master is under an obligation to take the necessary corrective action and to inform the company of such action.

(6) The master shall ensure that all nonconformities during operation are evaluated and the necessary corrective action taken according to a documented system. Any nonconformity of significance to safety shall be reported through the company to the Norwegian Maritime Authority.

(7) Through the company, the master shall notify the Norwegian Maritime Authority of any personal injury, near-accident or any other incident of significance to safety.

Amended by Regulations of 29 June 2007 No. 1006 (in force on 1 July 2007), 19 August 2013 No. 1036 (in force on 20 August 2013), 26 June 2025 No. 1372.

Section 4
Exemptions

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

Chapter II
Documentation, approval and certification

Section 5
Documentation

(1) At the latest eight weeks before the certificate for standby vessels may be issued, the company shall submit the necessary documentation in triplicate to the Norwegian Maritime Authority showing that the vessel satisfies the requirements of these Regulations in respect of:

a) special stability (cf. section 8);
b) operation in areas with a mean daily temperature below 0°C (cf. section 9);
c) special load line provisions (cf. section 10);
d) propulsion machinery (cf. section 11);
e) gas detection equipment (cf. section 12);
f) contingency equipment over and above the minimum requirements of these Regulations which shall be approved by the Norwegian Maritime Authority (cf. section 13, first paragraph, section 14, section 23 and section 24);
g) contingency equipment over and above the minimum requirements of these Regulations which need not be approved (cf. section 13 third paragraph, section 23 and section 24);
h) manoeuvring capabilities (cf. section 15);
i) rescue zone and freeboard with lighting (cf. section 16 and section 20);
j) rescue equipment with launching arrangement (cf. section 17);
k) command position, communications equipment and accommodation, furnishings and medical equipment for rescued persons, etc. (cf. section 18, section 19 and section 21);
l) helicopter winching zone (cf. section 22); and

m) manning released for contingency duties and plans and instructions for carrying out the contingency services provided by the standby vessel, including training and drills in connection with these services (cf. section 25, section 26 and section 27). (One copy only.)

(2) For existing standby vessels, the capacities and operational limitations of the vessel and of the shipboard contingency equipment may be based on declarations made by the company and the master and relevant documentation in accordance with the requirements of these Regulations in chapters I to VIII.

(3) In the event of alterations, modifications and installation of new equipment, the company shall forward the relevant documentation well in advance of commencing the work.

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

Section 6

(Repealed on 1 January 2015 by Regulations of 22 December 2014 No. 1893.)

Section 7

(Repealed on 1 January 2015 by Regulations of 22 December 2014 No. 1893.)

Chapter III
Special construction requirements

Section 8
Special stability requirements for standby vessels

(1) Intact stability and stability in damaged condition, including watertight bulkheads, shall satisfy the provisions in section 43 and section 44 of the Regulations currently in force on the construction of cargo ships.

(2) To calculate stability in damaged condition, the damage definitions applicable to supply ships are to be used (cf. section 43 fourth paragraph of the Regulations currently in force on the construction of cargo ships), with the following exceptions:

a) Vertical damage in the damage area shall be calculated from the bottom of the vessel to 2 metres above the summer load line (without trim).

b) Any decks within the damage area shall be assumed damaged.

Section 9
Documentation for operation in areas with a mean daily temperature of below 0°C

(1) The maximum environmental conditions (air and sea temperature, humidity, ice conditions, ice accretion, pack-ice, etc.) under which the standby vessel shall be capable of operating, shall be specified by the company.

(2) Standby vessels which will be operating in areas with a mean daily temperature of below 0°C shall show documentary evidence that the vessel, with its exterior fittings of equipment and systems, is able to operate and perform its standby services safely under the specified environmental conditions. Documentation shall include:

a) equipment for normal daily operation (e.g. cranes, nautical equipment, ventilation systems, etc.);

b) systems and equipment for operation in emergency situations (e.g. contingency equipment, alarm system, rescue equipment, exterior fire main);

c) calculations of weight and distribution of maximum ice formation (cf. section 12 of the Regulations currently in force concerning the construction of cargo ships);

d) calculations of all relevant loading conditions with maximum ice-loads in the context of the operation of the vessel (cf. section 15 fourth paragraph of the Regulations currently in force concerning the construction of cargo ships);

e) consequences for structural strength of any build-up of ice loads on components and equipment;

f) arrangements and equipment designed to keep areas of the vessel ice-free (e.g. deicing system for the rescue zone, rescue equipment, the helicopter winching zone, work areas, etc.);

g) selection of materials for exterior equipment and systems to withstand temperatures below 0°C; and

h) operational instructions for measures necessary to ensure safe operation in areas with a mean daily temperature of below 0°C. The instructions shall clearly state the criteria for the implementation of operative measures, e.g. in the event of continuing low temperatures, low temperatures in conjunction with high humidity (danger of ice formation); etc.

Amended by Regulation of 1 June 2004 No. 812.

Section 10

Special load line provisions

(1) The vessel shall hold an international load line certificate as for cargo ships.

(2) For sides and front bulkheads of superstructures and deckhouses located forward of midships, the requirements of the Load Line Convention concerning weathertight doors, height of door sills and blind covers for side scuttles shall apply one deck higher than required in regulation 13 of said Convention.

(3) Where the wheelhouse is located forward of midships, the size of the wheelhouse windows shall be restricted to the necessary minimum. Exterior or interior blind covers/shutters for the windows in the front of the wheelhouse shall be provided on board. At least two of these shall be fitted with peep-holes. Blind covers for windows in the wheelhouse may be removable provided they can be fitted quickly.

Section 11

Special requirements for propulsion machinery

(1) The standby vessel shall have at least two independent propulsion systems.

(2) Each propulsion system shall comprise the following subsystems:

a) power production system (diesel engine/generator with supporting systems such as fuel, lubricating oil, cooling water and air supply, etc.);

b) power distribution system (gears, shafts, distribution of electricity, switchboards, transformers, couplings, etc.);

c) propeller system (hydraulic units, electromotor, cooling system and thruster control unit for each group of propellers, etc.);

d) steering system (rudder control, control of propeller aperture and direction of thrust, etc.).

(3) Failure of any of the active and mobile components in any of the above subsystems shall be possible without the failure being transferred to or blocking the operation of the equivalent subsystem in the other independent propulsion system.

(4) The standby vessel shall be capable, when fully equipped, of a forward speed of at least four knots in good weather when the most powerful of the propulsion systems is out of operation.

(5) The standby vessel shall carry enough fuel, etc. for four days in excess of requirements for a normal period of operation in the field.

(6) Existing standby vessels shall be equipped with at least two independent means of propulsion. These shall be fitted in such a manner that failure of one means of propulsion does not prevent use of the other for manoeuvring purposes.

Chapter IV
Supplementary contingency equipment

Section 12

Gas detection

(1) Standby vessels operating in the vicinity of installations which produce hydrocarbons shall carry at least two approved portable or fixed gas detectors on board suitable for the detection of the relevant gases.

(2) The operations manual on board shall contain operational instructions for the safe operation of the vessel in the event of a gas blow-out or a gaseous oil spill which may involve a danger of explosive or poisonous vapours in the area.

(3) The maintenance system shall include routines for the calibration of the gas detection equipment.

Section 13

Contingency equipment

(1) Shipboard contingency equipment in excess of the minimum requirements of these Regulations which will be used directly for the rescue of human beings, or equipment which, if it malfunctions, may cause injury or loss of life, shall be approved pursuant to chapter VI.

(2) The above equipment may, for instance, include:

a) water canons for fire fighting;

b) equipment used for the transfer of personnel between unit and standby vessel;

c) equipment used for the transfer of personnel between vessel and helicopter;

d) fixed gas detection and shut-down system;

e) equipment and arrangement for the collection, pumping and storage of oil on board in connection with oil protection;

f) helicopter deck;
g) equipment for helicopter refuelling on board or in the air;
h) fixed fog spray/sprinkler systems for protection of the standby vessel, rescue boat and rescue personnel against thermal radiation;
i) rescue equipment (extra rescue boats, etc.) in excess of the requirements in chapter VI for the rescue of personnel from the sea; and
j) equipment associated with hyperbaric evacuation/rescue.

(3) Contingency equipment in excess of the minimum requirements of these Regulations which is not covered by the first paragraph, but which nevertheless is important for the services rendered by the standby vessel, shall be assessed and approved through the company's internal control system pursuant to chapter VII.

(4) Examples of contingency equipment to be assessed and approved through the company's internal control system may include:

a) a radar with alarm limit and other equipment for guard duty around a unit;
b) portable lighting equipment which can be used as surface or underwater lighting in the rescue zone;
c) a system to enable the vessel to act as a temporary communications central and as command headquarters for the coordination of major rescue operations;
d) oil protection equipment;
e) special fire-fighting equipment for fires on the unit;
f) line-throwing apparatus in excess of the requirements for ships;
g) cannon for firing of, for example, grapnel and towline;
h) equipment such as lifebuoys with buoy lights and line, line with safety hooks, boat hooks with long shafts and large rings, extra lifevests, equipment for surface swimming, night binoculars, marker buoys, etc.; and
i) any movable/fixed ladders, if any, along the side of the vessel for surface swimmers and divers.

(5) A list shall be forwarded to the Norwegian Maritime Authority of all equipment which has been assessed and approved in this manner through the company's internal control system including, where applicable, any operational limitations and capacities stipulated.

(6) All contingency equipment carried on board the vessel pursuant to this section will be listed in an appendix to the standby vessel certificate (cf. section 7).

Amended by Regulations of 1 June 2004 No. 812, 29 June 2007 No. 1006 (in force on 1 July 2007).

Section 14

Towing and pushing

(1) Standby vessels offering emergency towing of drifting ships, lighters or other units or objects at sea as part of their standby service shall satisfy the following requirements:

a) For vessels which while towing are exposed to a transverse force producing a speed athwart through the water of five knots, the first intersection between the heeling arm curve and the righting arm curve (GZ curve) shall occur at a lesser angle than the angle of flooding.
b) For vessels which while towing are exposed to a transverse force equivalent to the vessel's maximum towing power multiplied by 0.65, the area between the righting arm curve (GZ curve) and the heeling arm curve calculated from the first intersection to 40 degrees, the angle for GZ_{max} or the angle of flooding, whichever occurs first, shall be greater or equivalent to 0.010 metre radians. The heeling moment's vertical arm shall be calculated from the centre of the propeller(s) to the towline's point of attachment.
c) The tow hook and its mounting shall be designed to withstand the vessel's maximum towing power, with a safety factor of at least 5 in relation to the tensile strength of the materials.
d) The tow hook shall be mounted in such a way that it can move freely within the appropriate horizontal and vertical sectors covered by the expected movements of the towline.
e) The tow hook shall have an operationally reliable and appropriate emergency release mechanism. It shall be possible to operate the tow hook emergency release from any position from which the vessel can be manoeuvred and from a safe place on deck in the immediate vicinity of the tow hook. If the vessel's wheelhouse is large, provision shall be made for emergency release from both the starboard and port sides of the wheelhouse.
f) Operation of the emergency release shall be possible irrespective of the vessel's heeling angle, the angle and direction of drag on the tow hook, etc.
g) The vessel shall be equipped with a hauling winch powerful enough to haul in a towing wire/hawser of the appropriate dimensions and length and hook it onto the tow hook.
h) For standby vessels where a towing winch is preferred instead of a hook, the winch shall satisfy the International Standard (ISO No. 7365) with regard to construction and testing. It shall be possible to release the winch from the bridge. The strength of the base of the winch shall be proportional to the holding power of the winch.
i) The towing wire for the towing winch with shackles, etc. shall have a breaking strength of at least three times the vessel's bollard pull.

j) All loose equipment included in the towing winch arrangement, such as shackles, rings, wires, hawsers, etc. shall be certified.

k) The standby vessel shall also carry the appropriate equipment for establishing a tow connection with another vessel.

(2) Special requirements as to collision strength, watertight integrity and damage stability apply to standby vessels engaged in emergency pushing of drifting ships, lighters or other units or objects at sea. These capabilities shall be documented and approved in the following manner:

a) Collision calculations indicating the expected maximum damage to the vessel when establishing pushing contact with the drifting unit/object under the appropriate maximum weather conditions as specified by the company.

b) Damage stability calculations for the expected maximum damage after collision. The calculations shall satisfy the requirements stated in section 8.

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

Chapter V
Special requirements for standby vessels with rescue duties

Section 15
Manoeuvring capabilities

(1) A fully equipped standby vessel shall be capable of reaching a speed in quiet weather of at least 12 knots with fully loaded bunkers and water tanks.

(2) Manoeuvring and positioning capabilities shall be adequate to perform the intended standby services taking into account the ocean currents, sea and wind conditions expected in the relevant waters.

(3) Without altering position, the standby vessel shall be capable of forcing the bow into the wind after the vessel has been thrown 15° off course under weather conditions equivalent to a one-year storm condition. The vessel shall also be able to hold its position with the wind driving directly in from ahead in conditions equivalent to a ten-year storm condition.

(4) The standby vessel shall be able to hold its position in crosswinds as far as required for the efficiency of contingency equipment.

(5) Documentary evidence of the above requirements shall be provided in the form of calculations, model experiments or tests to the extent the Norwegian Maritime Authority deems necessary. Limitations and capacities will be documented in the appendix to the standby vessel certificate.

Section 16
Rescue zone and freeboard

(1) The freeboard is assessed separately for each individual vessel. The assessment is made on the basis of the vessel's type and characteristics and on the rescue equipment to be found on board. The freeboard should be as small as possible. For new standby vessels, however, it should not be less than one metre.

(2) There shall be a rescue zone on each side of the standby vessel.

(3) The rescue zones shall be located midships and at a safe distance from the propellers. The rescue zone shall be no less than ten metres in length.

(4) The rescue zones shall be arranged and equipped in such a way that the crew can work efficiently and safely even in bad weather. There shall be two gates in the rescue zone, of approximately 1,200 mm each. It shall be possible to lock these gates in the open or shut position. Alternatively, some other equivalent arrangement may be used.

(5) The forward and aft edges of the rescue zones shall be clearly marked by stripes running from the top of the bulwark down to the waterline. The zones shall also be marked "Rescue Zone". Contrasting colours shall be used for all marking.

(6) Normally, there shall be no fenders or other protrusions from the hull in the rescue zones. If fenders are necessary for other reasons, plates shall be welded on below and above the fenders with a width at least three times the overhang or the depth of the fender.

(7) If drainage, for example from the cooling system, cannot be discharged via outlets aft of the rescue zone, such drainage must be discharged at a depth of at least two metres below the waterline.

(8) The deck in the rescue zones shall allow sufficient space to conduct rescue operations on each side of the vessel and include a protected gangway with non-slip flooring and railings and giving unhindered passage up to the outside hosing-down shower and reception.

(9) One of the rescue zones may be equipped as stated in section 17 fourth paragraph.

Amended by Regulation of 2 March 1999 No. 411 (in force on 1 September 1999).

Section 17

Rescue equipment

(1) The standby vessel shall be provided with a type-approved fast rescue boat in addition to the life-saving appliances required for cargo ships. The fast rescue boat shall comply with the Regulations currently in force on life-saving appliances and evacuation on mobile offshore units.

(2) Arrangements shall be such as to ensure, even in poor weather conditions, the speedy and safe launch and recovery of rescue boats. Rescue boats shall have an arrangement to ensure the careful recovery of persons from the sea into the boat.

(3) The launching arrangement shall satisfy the following requirements:

a) The regulations laid down by the Norwegian Maritime Authority on life-saving appliances and evacuation on mobile offshore units.

b) Crane/davit arrangements shall be such as to exclude the danger, in bad weather with the standby vessel rolling at 20°, of the davit/crane arm striking the rescue boat when it is waterborne.

c) The launching arrangement shall be located approximately midships.

d) It shall be possible to control the rescue boat to prevent oscillation or impact against the side of the ship during lowering and hoisting in heavy seas.

e) It shall be possible to launch the rescue boat from a "dead ship" as required for lifeboats on cargo ships if it is to be included in the ship's rescue equipment.

(4) The standby vessel shall also have an arrangement which ensures the careful recovery of persons from the sea directly onto the vessel. This arrangement shall be capable of being operated from the vessel and be suitable for use in difficult weather conditions. The rescue zone shall have an arrangement which enables persons who are conscious to climb aboard unassisted. The arrangement shall also be capable of rescuing persons in the sea who are unconscious.

Amended by Regulations of 28 January 1997 No. 119 (in force on 1 July 1997), 29 December 1998 No. 1466 (in force on 1 January 1999), 26 June 2025 No. 1372.

Section 18

Command position

The command position shall be located so as to enable the master of the standby vessel to have a full view at all times of the rescue zone and the helicopter winching zone while at the same time manoeuvring the vessel and conducting necessary communication.

Section 19

Accommodation requirements, furnishings and medical equipment for rescued persons, etc.

(1) The standby vessel shall provide a reception area, treatment room for casualties, day room and a sanitary room with the necessary number of hand-basins, showers and toilets for rescued persons, a room for the deceased and bunks for 10% of the number of persons that can be accommodated on board. Fixed seating shall be provided in the day room. All the rooms and adjoining corridors shall have non-slip flooring.

(2) The company shall calculate 0.75 m² per person when calculating area for the number of rescued persons that can be accommodated on board. Accommodation for the crew, except sanitary rooms, treatment rooms, galley, wheelhouse and, if applicable, the radio room, may be included. Floor area taken up by bunks, tables, cupboards or other regular fittings shall not be included.

(3) The reception area shall be in the immediate vicinity of the deck near the rescue zone. The reception shall be equipped to deal with both the registration and assessment for treatment of rescued persons/casualties.

(4) The location, furnishings, equipment and size of the treatment room shall be such as to ensure that medical first aid for casualties can be properly carried out. The treatment room shall be in the immediate vicinity of the reception. The floor area shall measure not less than 15 m². The room shall be used for the treatment of casualties only. As a minimum, the room shall be equipped with:

a) a washbasin with mixing battery;

b) a treatment bench;

c) a fixed rack for two stretchers;

d) a mobile instrument table with waste bin;

e) a medicine cupboard, cupboard for toxic substances and other necessary cupboards;

f) an adjustable table lamp (e.g. angle-poise);

g) an office desk with filing drawer; and

h) a telephone which can be used while treating a patient (cf. section 21 subparagraph f).

(5) The Norwegian Maritime Authority may stipulate specific guidelines for technical medical equipment and furnishings for the rooms referred to in the first paragraph.

(6) Safe transport by stretcher between the rescue zone and the treatment room and between the treatment room and the helicopter winching zone shall be catered for in respect of both dimensions and arrangement. Doors from the treatment room out to the rescue and helicopter winching zones shall be at least 730 mm wide. Similarly reasonable passage shall be catered for between the rescue and helicopter winching zones.

(7) The room designated for the deceased shall be large enough to cater for a number of persons equivalent to 10% of the number of persons who can be accommodated on board and be furnished so that the deceased may be accommodated in an aesthetically proper and fitting manner. The floor area shall be sufficient, when fixed beds or bunks of some kind are in place, to allow a stretcher to be brought into the room. Access to the room shall be of a size and arrangement suitable for the use of stretchers. Separate mechanical ventilation for the room is required.

(8) All rooms for survivors shall be equipped with emergency exits. The emergency exit shall measure at least 800 m x 800 mm.

(9) Wherever the sick or injured are to be treated, the general lighting shall be minimum 300 lux. Sockets shall be fitted in the treatment room and in all day rooms for portable electrical appliances and lamps. Soft lighting shall be available in the day rooms.

(10) The standby vessel shall be fitted with a satisfactory heating and ventilation system pursuant to the provisions currently in force on accommodation in cargo ships.

(11) A fixed external arrangement shall be installed to provide rescued persons with hot and cold water for the removal of oil, etc. Grating made of expanded metal shall be fitted under the arrangement and a handle fitted to the bulkhead, and non-slip flooring shall be fitted up to the rescue zone and the reception area.

(12) Blankets or similar shall be carried on board equivalent in number to the number of rescued persons the vessel is designed to accommodate.

(13) Emergency food supplies and throw-away cups shall be available on board sufficient in number for the rescued persons carried on board for at least two days.

(14) Shipboard water supplies shall provide at least 100 litres of water for each person the standby vessel is designed to carry in addition to the vessel's own needs.

Amended by Regulation of 22 December 1998 No. 1345 (in force on 1 January 1999).

Section 20

Illumination of rescue zone and area surrounding standby vessel

(1) Luminous intensity in the rescue zone and in the area surrounding the vessel shall be:

a) in the rescue zone, minimum 150 lux;
b) at water level, from the rescue zone to a distance of at least ten metres from the vessel, 100 lux; or
c) in all other areas to a distance of at least 20 m from the vessel, not less than 50 lux.

(2) The standby vessel shall be equipped with at least two 360° floodlights suitable for search, at least one of which is remote controlled.

(3) Lighting shall be so arranged that any glare from the lights interferes as little as possible with the view from the command position or with visibility for the helicopter pilots.

Section 21

Communications equipment

The standby vessel shall carry the following communications equipment in excess of the requirements applicable to cargo ships:

a) aeromobile VHF radiotelephone equipment with frequencies for communication with helicopters;
b) portable maritime VHF radiotelephony equipment suitable for use in noisy surroundings;
c) an aeromobile radio beacon;
d) approved intercommunications equipment between the command position, reception, treatment room, day-room for rescued persons, all other accommodation areas and the rescue and helicopter winching zones. Where a fixed system is not suitable, appropriate mobile communications systems may be used;
e) radio equipment for homing on maritime and aeromobile VHF radiotelephone distress frequencies; and
f) telephone with headphones for VHF and MW which can be connected to the radio installation for direct contact between treatment room and doctor on shore.

Section 22

Helicopter winching zone

(1) The standby vessel shall be provided with a helicopter winching zone.

(2) The winching zone shall be located well clear of the vessel's superstructure and other large obstacles which might cause turbulence or affect the safe manoeuvring of the helicopter.

(3) The upper sections of any approved obstacles such as masts, cranes, davits, etc. shall be marked in contrasting colours.

(4) It shall be possible to illuminate the winching zone and the marked obstacles without interfering with the helicopter pilot's ability to manoeuvre the helicopter or reducing visibility during approach.

(5) The diameter of the winching zone shall measure at least 5.0 metres and there shall be no obstacles higher than 0.1 metre. Any obstacles shall be properly screened to prevent entanglement with the winching wire and hook. The circle shall be painted yellow to contrast with the surrounding deck. The winching zone shall have a non-skid surface. To prevent the winching zone being mistaken for a landing area, the zone shall be marked WINCH ONLY in large white letters. The words shall be marked out on the outside of the zone ring so that they are easy to see and read from the most favourable direction of approach.

(6) In the area outside the winching zone, no obstacle shall be higher than three metres within a circle the diameter of which is 1.5 times the maximum overall length of the helicopter including rotor. In the area 1.5 to 2 times the length of the helicopter as defined above, no obstacles shall be higher than six metres. The largest helicopter which may use the winching zone under normal circumstances will be indicated in the appendix to the standby vessel certificate.

Chapter VI
Conditions for the approval of equipment and for the efficiency of contingency equipment

Section 23
Conditions for the approval of contingency equipment

(1) The standby vessel shall not be assigned duties or fitted with equipment which is incompatible with the safety of the vessel itself or which may expose the crew to unnecessary danger.

(2) The contingency equipment shall be designed and constructed in compliance with a recognised standard. Where this is not available, the equipment shall be assessed by the Norwegian Maritime Authority in each individual case. Where equipment faults may have major consequences for the contingency service provided, a risk analysis for the contingency equipment shall be carried out.

(3) Operational limitations and capacities for the use of the equipment shall as far as possible be stipulated, e.g. maximum wave height or wind speed, minimum temperature, maximum permitted working load as a function of sea conditions, equipment approved for use in explosive atmospheres, where applicable, etc.

(4) Operational limitations and capacities shall be based on load and capacity calculations according to a recognised standard, giving due consideration to the safety of crew and vessel and the proper treatment of rescued persons. The location of equipment on board the standby vessel shall be taken into account.

(5) Function tests and/or computer simulation/model tests shall if necessary be used to determine the operational limitations.

(6) All operational conditions or any other conditions for the use of contingency equipment shall be indicated. This includes necessary manning for the operation of the equipment, special conditions with regard to the manoeuvring of the vessel, protective equipment, training, drills, etc. so that this is taken into account during operation of the equipment. (Cf. sections 25 and 26.)

Section 24
Efficiency of contingency equipment

(1) The efficiency of each piece of equipment shall be calculated and as far as practicable expressed in figures. By efficiency is meant for instance time spent and probability of success when recovering persons from the sea under various visibility and weather conditions.

(2) The vessel shall have a system for the registration and cataloguing of practical experience gained, including experience of the efficiency of the contingency equipment. These records will be useful in judging the performance of the equipment and for revising its operational limitations, modifying training and drills plans and improving the equipment. The records shall be made available to the operator and public authorities.

Chapter VII
Manning, operation and contingency plans, etc.

Section 25
Manning

(1) Minimum safe manning will be stipulated by the Norwegian Maritime Authority pursuant to the manning regulations currently in force. Working hours, relief arrangements, etc. for the crew will be regulated by the Act regulating hours of work on board ships.

(2) Based on the application submitted by the company, the Norwegian Maritime Authority will determine the minimum manning required to operate the ship in the event that dangerous situations or accidents should arise and, consequently, what proportion of the vessel's minimum safe manning can be released at such a time to operate the emergency equipment.

(3) Necessary contingency manning in excess of the above for the operation of contingency equipment, etc. will be determined by the company with regard to the other services which shall also be provided for the operator at the same time.

(4) The company shall state which languages the crew are familiar with in the context of emergencies. This information will be included in the appendix to the standby vessel certificate. As a minimum, personnel employed for contingency duties shall speak Norwegian and English.

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

Section 26
Training

(1) The company shall specify which emergency duties each crew member on board has been trained to carry out.

(2) The company shall also specify the actual training and drills onshore and on board necessary for each individual crew member to be able to carry out his or her emergency duties.

(3) Before the company undertakes to provide an emergency service, documentary evidence shall show that the crews have received the training and completed the drills required in the second paragraph.

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

Section 27
Plans and instructions

(1) The company shall draw up a primary plan in the operations manual for operation on board and for the various contingency services provided by the vessel, its equipment and crew. The plan shall show how crew, equipment and vessel are intended to be employed in combination with the various services which may be provided at the same time. Limitations applicable to the contingency service and associated contingency equipment shall be indicated.

(2) The company shall also draw up:

a) work instructions including the allocation of all contingency duties for each contingency service;
b) plans, instructions and check-lists for the contingency services provided;
c) a training and drills program for the contingency services provided;
d) weekly drills plans appropriate to the contingency services provided;
e) training programs in conjunction with the fixed installation;
f) a system for recording the efficiency of the contingency equipment and experience gained from its use;
g) a system for the documentation of training and drills programs; and
h) a maintenance program for the contingency equipment.

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

Chapter VIII
Concluding provisions

Section 28
Entry into force

(1) For new standby vessels, these Regulations enter into force on 1 April 1992. Chapter VI of the Regulations of 15 June 1987 No. 504 on the construction of passenger ships, cargo ships and lighters is repealed as from the same date.

(2) For existing standby vessels, these Regulations enter into force at the first periodical survey, cf. chapter III of the Regulations of 15 June 1987 No. 506 on surveys for the issue of certificates to cargo ships, etc.

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