

# Regulations of 5 January 1998 No. 6 on the construction, equipment and operation of high-speed craft used as passenger craft or cargo craft

**Legal basis:** Laid down by the Norwegian Maritime Authority on 5 January 1998 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, 19, 20, 21, 22, 28a, 29, 30, 43 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 XIII point 56f (Directive 2009/45/EC as amended by Directive 2010/36/EC), point 56cb (Directive 2003/25/EC as amended by Directive 2005/12/EC), point 56ca (Directive 1999/35/EC as amended by Directive 2002/84/EC) and Annex II chapter XIX point 1 (Directive 98/34/EC).

**Amendments:** Amended by Regulations of 29 December 1998 No. 1465, 28 March 2000 No. 307, 22 December 2000 No. 1575, 20 March 2001 No. 375, 4 June 2002 No. 618, 30 June 2003 No. 936, 1 June 2004 No. 816, 2 December 2004 No. 1560, 18 October 2004 No. 1377, 2 January 2006 No. 1714, 10 March 2006 No. 336, 29 June 2007 No. 1006, 26 November 2008 No. 1260, 14 February 2012 No. 236, 19 August 2013 No. 1036, 20 December 2017 No. 2379, 19 December 2019 No. 2000 (in force on 1 January 2020), 15 September 2021 No. 3116 (in force on 19 September 2021), 24 January 2022 No. 118, 27 March 2023 No. 459, 19 December 2023 No. 2200 (in force on 1 January 2024).

## Chapter 1 General provisions

### Section 1 *Scope of application*

- (1) These Regulations apply to Norwegian ships as set out in this section.
- (2) The 1994 HSC Code as last amended by IMO resolution MSC.498(105) and the 2000 HSC Code as last amended by IMO Resolution MSC.499(105) shall apply as regulations for high-speed craft with the additions and limitations specified by these Regulations.
- (3) New passenger high-speed craft engaged on:
  - a. foreign voyages;
  - b. domestic voyages in Norway when the craft is of 24 metres in length (L) or above and is capable of a maximum speed of 20 knots or more;
  - c. domestic voyages in a host State;shall be constructed, equipped and operated in accordance with the 2000 HSC Code.
- (4) For existing passenger high-speed craft<sup>1</sup> of 24 metres in length (L) and above engaged on domestic voyages and capable of a maximum speed of 20 knots or more, the following shall apply:
  - a. Passenger high-speed craft constructed or subjected to repairs, alterations or modifications of a major character, on or after 1 January 1996, but not later than 14 February 2012, shall comply with the requirements of the 1994 HSC Code, unless:
    1. their keel was laid or they were at a similar stage of construction not later than 1 July 1998; and
    2. delivery and commissioning took place not later than 1 January 1999; and
    3. they fully comply with the requirements of IMO resolution A.373(X) of 14 November 1997, as amended by IMO resolution MSC.37(63) of 19 May 1994 (the DSC Code).
  - b. Passenger high-speed craft constructed before 1 January 1996 and complying with the requirements of the 1994 HSC Code shall continue to be operated as certified under that Code.
  - c. Passenger high-speed craft constructed before 1 January 1996 and not complying with the requirements of the 1994 HSC Code are not permitted for use in domestic trade unless it was engaged on domestic voyages in Norway on 1 July 1998. However, such craft may continue to be engaged on domestic voyages in Norway provided they comply with the requirements of IMO Res. A.373(X) of 14 November 1977, as amended by resolutions MSC.37(63), MSC.186(79), MSC.224(82) and MSC.360(92) (DSC Code).
  - d. For passenger high-speed craft which shall comply with the requirements of the DSC Code, the provisions contained in chapters 1, 2 (section 6 second paragraph, section 7 and section 8), 3, 4, 5 (sections 16, 17, and 18), 6 (section 21 first paragraph subparagraph b and second paragraph, section 22, section 32 and section 33), 7 and 8 of these Regulations shall apply.
- (5) These Regulations shall also apply to new cargo high-speed craft of 500 gross tonnage and upwards.
- (6) For existing high-speed craft, the Norwegian Maritime Authority, or whoever it authorises, may order that the craft shall wholly or partly satisfy the provisions of these Regulations. This may apply in the following cases, *inter alia*:
  - a. change in use;
  - b. replacement of equipment;

- c. repairs;
- d. conversions;
- e. increased draught;
- f. increased number of passengers; or
- g. craft purchased from abroad, and may only take place following a concrete safety assessment based on for instance the general structural and technical design, equipment, arrangement and condition of the craft.

(7) For existing high-speed craft that shall wholly or partly satisfy the requirements of these Regulations, the provisions of sections 1, 12, 13, 14, 15, and 16 concerning drawings and other documentation, survey during construction and request for survey shall apply to the extent deemed necessary.

Amended by Regulations of 28 March 2000 No. 307 (in force on 1 May 2000), 22 December 2000 No. 1575 (in force on 1 January 2001), 29 June 2007 No. 1006 (in force on 1 July 2007), 14 February 2012 No. 236, 20 December 2017 No. 2379 (in force on 1 January 2018), 19 December 2019 No. 2000 (in force on 1 January 2020).<sup>1</sup> Cf. section 2 subparagraph g) 3, 15 September 2021 No. 3116 (in force on 19 September 2021), 19 December 2023 No. 2200 (in force on 1 January 2024).

## Section 2

### *Definitions*

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

- a. “Administration”: The expression “Administration” in the High-Speed Craft Code means the Norwegian Maritime Authority, cf. paragraph 1.4.1 in Chapter 1 of the Code.
- b. “Recognised classification societies”: 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).

The above classification societies are also recognised by the Norwegian Directorate for Civil Protection in respect of the inspection of electrical systems.
- c. “Gross tonnage”: 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 be used as gross tonnage.
- d. “Existing craft”: A high-speed craft which is not a new craft.
- e. “Approved, type-approved or accepted”:
  - 1. In respect of equipment covered by the Regulations of 29 December 1998 No. 1455 on marine equipment: Type-approved by a Notified Body and marked in accordance with said Regulations.
  - 2. In respect of other equipment:
    - Approved: a single piece of equipment approved by the Norwegian Maritime Authority, with the exception of radio equipment approved by the Norwegian Post and Telecommunications Authority.
    - Type-approved: prototype approved by the Norwegian Maritime Authority with or without spot checks of mass production.
    - Accepted: equipment accepted by the Norwegian Maritime Authority on the basis of approval or type-approval by a recognised classification society, any other public or private institution, or the administration of a country which has ratified the SOLAS Convention.
- f. – – –
- g. “High-speed craft”: As defined in regulation X/1 of the SOLAS Convention, with subsequent amendments.
  - 1. Passenger high-speed craft: a high-speed craft which carries more than 12 passengers.
  - 2. Ro-ro passenger high-speed craft: a passenger high-speed craft with ro-ro cargo spaces or special category spaces as defined in regulation II-2/3 of the SOLAS Convention or passenger high-speed craft with facilities to enable road or rail vehicles to roll on or off the craft.
  - 3. A passenger craft engaged on domestic voyages where the craft is at no time more than 20 nautical miles from the line of coast, where shipwrecked persons can land, corresponding to the medium tide height, is not considered to be a passenger high-speed craft when:
    - its displacement corresponding to the design waterline is less than 500 m<sup>3</sup>; and
    - its maximum speed, as defined in regulation 1.4.30 of the 1994 HSC Code and regulation 1.4.38 of the 2000 HSC Code, is less than 20 knots.
- h. “Domestic voyage”: A voyage from a port of a State to the same or another port within that State.
- i. “Classed craft”: A high-speed craft which is classed by a recognised classification society.
- j. “2000 HSC Code”: The International Code of Safety for High-Speed Craft adopted by IMO resolution MSC.97(73) on 5 December 2000, as last amended by IMO resolution MSC.499(105).
- k. “1994 HSC Code”: The International Code of Safety for High-Speed Craft adopted by IMO resolution MSC.36(63) on 20 May 1994, as last amended by IMO resolution MSC.498(105).
- l. “New ship”: A high-speed craft the keel of which is laid or which is at a similar stage of construction on or after 14 February 2012. A similar stage of construction means the stage at which:

- construction identifiable with a specific vessel begins;
  - assembly of that vessel has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is less.
- m. “*Regular service*”: A series of passenger ship crossings operated so as to serve traffic between the same two or more ports, or a series of voyages from and to the same port without intermediate calls, either:
1. according to a published timetable; or
  2. with crossings so regular or frequent that they constitute a recognisable systematic series.
- n. “*Ship Safety and Security Act*”: The Act of 16 February 2007 No. 9 relating to ship safety and security.
- o. “*SOLAS Convention*”: The International Convention for the Safety of Life at Sea, 1974, with subsequent amendments (SOLAS 74).
- p. “*Unclassed craft*”: A high-speed craft that is not classed by a recognised classification society.
- q. “*Foreign voyage*”: A voyage from a port of a State to a port outside that State, or conversely.
- r. “*Host State*”: An EEA State to or from whose ports a high-speed craft, regardless of its flag, is engaged on domestic voyages, or a ro-ro passenger high-speed craft, regardless of its flag, is engaged on domestic or foreign voyages on a regular service.

In addition to the above, the definitions contained in Chapter X of the SOLAS Convention and the High-Speed Craft Code shall apply.

Amended by Regulations of 29 December 1998 No. 1465 (in force on 1 January 1999), 28 March 2000 No. 307 (in force on 1 May 2000), 20 March 2001 No. 375, 1 June 2004 No. 816, 2 December 2004 No. 1560, 29 June 2007 No. 1006 (in force on 1 July 2007), 14 February 2012 No. 236, 19 December 2019 No. 2000 (in force on 1 January 2020), 15 September 2021 No. 3116 (in force on 19 September 2021), 19 December 2023 No. 2200 (in force on 1 January 2024).

### Section 3 *(Repealed)*

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), repealed by Regulation of 15 September 2021 No. 3116 (in force on 19 September 2021).

### 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 can only be granted where they do not contravene international agreements to which Norway has acceded.

## Chapter 2 International requirements

### Section 5 *Conventions*

The High-Speed Craft Code, cf. Chapter X of the SOLAS Convention, shall apply with the exceptions, additions and special requirements set out in Chapter 6 of these Regulations.

### Section 6 *Resolutions*

(1) The requirements contained in IMO Assembly resolutions shall be complied with as set out in the High-Speed Craft Code and in the individual sections of these Regulations.

(2) Existing high-speed passenger craft shall comply with the requirements of the DSC Code, unless the HSC Code shall be complied with, cf. section 1 fourth paragraph.

Amended by Regulations of 28 March 2000 No. 307 (in force on 1 May 2000), 15 September 2021 No. 3116 (in force on 19 September 2021).

### Section 7 *EEA Agreement*

Annex XIII of the EEA Agreement (Directive 94/57/EC and Directive 97/58/EC) on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations shall apply as

regulation with the amendments and additions that follow from Protocol 1 to the Agreement and the Agreement in general.

## Section 7A

### *Significant wave heights*

The significant wave heights ( $h_s$ ) shall be used for determining the height of water on the car deck when applying the specific stability requirements set out in section 8. The figures of significant wave heights shall be those which are not exceeded by a probability of more than 10% on a yearly basis.

Added by Regulation of 2 December 2004 No. 1560.

## Section 8

### *Specific stability requirements for ro-ro passenger high-speed craft operating on a regular service on foreign voyages or domestic voyages in Class A sea areas<sup>1</sup>*

(1) In addition to the requirements of regulation II-1/B/8 of the SOLAS Convention relating to watertight divisional bulkheads and stability in damaged condition, all ro-ro passenger high-speed passenger craft shall comply with the requirements of this section.

(2) Ro-ro passenger high-speed crafts approved in accordance with the model tests method which applied before 10 March 2006, are not required to carry out this test in accordance with the provisions of the sixth paragraph of this section.

(3) The provisions of regulation II-1/B/8.2.3 shall be complied with when taking into account the effect of a hypothetical amount of seawater which is assumed to have accumulated on the first deck above the design waterline of the ro-ro cargo space or the special cargo space as defined in regulation II-2/3 assumed to be damaged (referred to as "the damaged ro-ro deck" hereinafter). The other requirements of regulation II-1/8 need not be complied with in the application of the stability standard in this section. The amount of assumed accumulated seawater shall be calculated on the basis of a water surface having a fixed height above:

- a. the lowest point of the deck edge of the damaged compartment of the ro-ro deck; or
- b. when the deck edge of the damaged compartment is submerged then the calculation is based on a fixed height above the still water surface at all heel and trim angles; as follows:
  - 0.5 m if the residual freeboard ( $f_r$ ) is 0.3 m or less,
  - 0.0 m if the residual freeboard ( $f_r$ ) is 2.0 m or more, intermediate values to be determined by linear interpolation, if the residual freeboard ( $f_r$ ) is 0.3 m or more but less than 2.0 m;

where the residual freeboard ( $f_r$ ) is the minimum distance between the damaged ro-ro deck and the final waterline at the location of the damage in the damage case being considered without taking into account the effect of the volume of assumed accumulated water on the damaged ro-ro deck.

(4) Where a high-efficiency drainage system is installed, the Norwegian Maritime Authority may allow a reduction in the height of the water surface.

(5) For craft in geographically defined restricted areas of operation, the Norwegian Maritime Authority may reduce the height of the water surface prescribed in accordance with the third paragraph by substituting such height of the water surface by the following:

- a. 0.0 m if the significant wave height ( $h_s$ ) defining the area concerned is 1.5 m or less;
- b. the value determined in accordance with the second paragraph if the significant wave height ( $h_s$ ) defining the area concerned is 4.0 m or above;
- c. intermediate values to be determined by linear interpolation if the significant wave height ( $h_s$ ) defining the area concerned is 1.5 m or more but less than 4.0 m, provided that the following conditions are fulfilled:
- d. the Norwegian Maritime Authority is satisfied that the defined area is represented by the significant wave height ( $h_s$ ) which is not exceeded with a probability of more than 10%; and
- e. the area of operation and, if applicable, the part of the year for which a certain value of the significant wave height ( $h_s$ ) has been established are entered on the certificates.

(6) As an alternative to the requirements of the third or fifth paragraph, the Norwegian Maritime Authority may exempt application of the requirements of the third or fifth paragraphs and accept verification by model tests carried out for an individual craft in accordance with the model test method<sup>2</sup> that the craft will not capsize with the assumed extent of damage as provided in regulation II-1/B/8.4 in the worst location being considered under the second paragraph, in an irregular seaway.

(7) Reference to acceptance of the results of the model test as an equivalence to compliance with the third or fifth paragraphs; the value of the significant wave height ( $h_s$ ) used in the model tests shall be entered into the ship's certificates.

(8) The information supplied to the master in accordance with regulations II-1/B/8.7.1 and II-1/B/8.7.2, as developed for compliance with regulations II-1/B/8.2.3 to II-1/B/8.2.3.4, shall apply unchanged for ro-ro passenger ships approved according to these requirements.

(9) For assessing the effect of the volume of the assumed accumulated seawater on the damaged ro-ro deck referred to in paragraphs three to eight, the following provisions shall apply:

- a. A transverse or longitudinal bulkhead shall be considered intact if all parts of it lie inboard of vertical surfaces on both sides of the ship, which are situated at a distance from the shell plating equal to one-fifth of the breadth of the ship, as defined in regulation II-1/2, and measured at right angles to the centreline at the level of the deepest subdivision load line.
- b. In cases where the ship's hull is structurally partly widened for compliance with the provisions of this section, the resulting increase of the value of one-fifth of the breadth of it is to be used throughout, but shall not govern the location of existing bulkhead penetrations, piping systems, etc., which were acceptable prior to the widening.
- c. The tightness of transverse or longitudinal bulkheads which are taken into account as effective to confine the assumed accumulated seawater in the compartment concerned in the damaged ro-ro deck shall be commensurate with the drainage system, and shall withstand hydrostatic pressure in accordance with the results of the damage calculation. Such bulkheads shall be at least 4 m in height unless the height of water is less than 0.5 m. In such cases the height of the bulkhead may be calculated in accordance with the following:  
$$B_h = 8h_w$$
where:  
 $B_h$  is the bulkhead height;  
and  $h_w$  is the height of water.  
In any event, the minimum height of the bulkhead should be not less than 2.2 m. However, in case of a ship with hanging car decks, the minimum height of the bulkhead shall be not less than the height to the underside of the hanging deck when in its lowered position.
- d. For special arrangements such as, e.g., full width hanging decks and wide side casings, other bulkhead heights may be accepted based on detailed model tests.
- e. The effect of the volume of the assumed accumulated seawater need not be taken into account for any compartment of the damaged ro-ro deck, provided that such a compartment has on each side of the deck freeing ports evenly distributed along the sides of the compartment complying with the following:
  - $A \geq 0.3 l$  where A is the total area of freeing ports on each side of the deck in m<sup>2</sup>; and l is the length of the compartment in m;
  - The ship shall maintain a residual freeboard of at least 1.0 m in the worst damage condition without taking into account the effect of the assumed volume of water on the damaged ro-ro deck.
  - Such freeing ports shall be located within the height of 0.6 m above the damaged ro-ro deck, and the lower edge of the ports shall be within 2 cm above the damaged ro-ro deck.
  - Such freeing ports shall be fitted with closing devices or flaps to prevent water entering the ro-ro deck whilst allowing water which may accumulate on the ro-ro deck to drain.
- f. When a bulkhead above the ro-ro deck is assumed damaged, both compartments bordering the bulkhead shall be assumed flooded to the same height of water surface as calculated in the third or fifth paragraph.

(10) When determining significant wave height, the wave heights given on the maps in Appendix 1 to these Regulations shall be used.

(11) For ro-ro passenger high-speed craft exclusively engaged on voyages in sea areas where the significant wave height is 1.5 m or less, the requirements in regulation II-1/B/8 of the SOLAS Convention, as mentioned in the first paragraph, shall be considered equivalent to the specific stability requirements laid down in this section.

(12) For ro-ro passenger high-speed crafts which are to be operated only for a shorter period, the Norwegian Maritime Authority shall determine, under an agreement with the country at which the ship is to call, the significant wave height to be used.

(13) In applying the requirements of this section, the Norwegian Maritime Authority shall follow the indicative guidelines to national administrations contained in Annex II to Directive 2003/25/EC of 14 April 2003 on specific stability requirements for ro-ro passenger ships, amended by Directive 2005/12/EC of 18 February 2005.

(14) For ro-ro passenger high-speed craft in regular scheduled service in areas other than those covered by the maps in Appendix 1, cf. section 8C, a significant wave height of 4 m shall be used, unless it can be documented that a smaller wave height may be used.

(15) Model tests shall be conducted in accordance with Appendix 2.

(16) All ro-ro passenger high-speed craft the keel of which is laid or which were at a similar stage of construction prior to 1 October 2004, with the exception of ships as mentioned in the eleventh paragraph, shall comply with the requirements of this section not later than 1 October 2010.

(17) All ro-ro passenger high-speed craft which on 17 May 2003 were in compliance with the requirements of the SOLAS Convention, regulation II-1/B/8, shall comply with the requirements of this section not later than 1 October 2015.

(18) Ro-ro passenger high-speed craft which are in full compliance with the requirements of the High-Speed Craft Code, need not comply with the requirements of this section.

(19) For ro-ro passenger ships required to comply with the requirements of this section, an attachment to the Passenger Ship Safety Certificate shall be issued. The attachment shall indicate the maximum significant wave height at which the

ship is capable of complying with the specific stability requirements contained in this section. The attachment shall remain valid so long as the ship is engaged in voyages in an area with a corresponding or smaller significant wave height.

Added by Regulation of 20 March 2001 No. 375, amended by Regulations of 4 June 2002 No. 618 (formerly section 7A), 2 December 2004 No. 1560, 10 March 2006 No. 336, 20 December 2017 No. 2379 (in force on 1 January 2018), 15 September 2021 No. 3116 (in force on 19 September 2021).

<sup>1</sup> Cf. section 5 of Regulations of 28 March 2000 No. 305 on surveys, construction and equipment of passenger ships engaged on domestic voyages.

## <sup>2</sup> See Appendix 2. Section 8B

### *Seasonal and short-time period operations on a regular service*

(1) If a shipping company operating a regular service on a year-round basis wishes to introduce additional ro-ro passenger high-speed craft to operate for a shorter period on that service, it shall notify the Norwegian Maritime Authority not later than one month before the said craft are operated on that service. However, in cases where, following unforeseen circumstances, a replacement ro-ro passenger high-speed craft must be introduced rapidly to ensure continuity of service, the craft may be put into service, provided that:

- a. a visual inspection and document check raise no concerns that the craft does not fulfil the necessary requirements for safe operation; and
- b. the Norwegian Maritime Authority completes the verifications and surveys prescribed by these Regulations within one month.

(2) If a shipping company wishes to operate seasonally a regular service for a shorter time period not exceeding six months a year, it shall notify the Norwegian Maritime Authority not later than three months before such operation takes place.

(3) Where such operations take place under conditions of lower significant wave height than those established for the same sea area for all-year-round operation, the significant wave height applicable for this shorter time period shall be used by the Norwegian Maritime Authority for determining the height of water on the deck when applying the specific stability requirements contained in section 8. The value of the significant wave height applicable for this shorter time period shall be determined by the Norwegian Maritime Authority or by agreement with the EEA country in which the craft will be engaged on a regular service.

(4) Where permission is granted for such operations as are mentioned in the first and second paragraphs, an attachment to the Permit to Operate High-Speed Craft shall be issued, as prescribed in section 20 third paragraph.

Added by Regulation of 2 December 2004 No. 1560.

## Section 8C

### *Sea areas*

(1) A list shall be established of sea areas crossed by ro-ro passenger high-speed craft engaged on a regular service on foreign voyages to or from Norwegian ports as well as the corresponding values of significant wave heights in these areas.

(2) The sea areas and the applicable values of the significant wave height in these areas shall be defined by agreement between the EEA countries or, wherever applicable and possible, between EEA countries and third countries at both ends of the route.

(3) Where the craft's route crosses more than one sea area, the craft shall satisfy the specific stability requirements for the highest value of significant wave height identified for these areas.

Added by Regulation of 2 December 2004 No. 1560.

## Chapter 3

### Approval of equipment

## Section 9

### *Approval of equipment*

(1) Equipment which is prescribed by the provisions of these Regulations or the High-Speed Craft Code shall be approved, type-approved or accepted.

(2) Equipment which satisfies the requirement of the Regulations of 30 August 2016 No. 1042 on marine equipment is deemed to comply with the requirements of these Regulations, regardless of whether the first paragraph herein or other relevant regulations prescribe that the equipment shall be approved, type-approved or accepted.

Amended by Regulations of 28 March 2000 No. 307 (in force on 1 May 2000), 20 March 2001 No. 375, 4 June 2002 No. 618 (formerly section 8), 20 December 2017 No. 2379 (in force on 1 January 2018).

## Chapter 4

### Notification, documentation and control

#### Section 10

##### *Duty to notify*

(1) The construction of high-speed craft shall be notified to the Norwegian Maritime Authority or to whomever is authorised by the Authority, as soon as the building contract has been concluded. The notification shall be submitted in triplicate on the prescribed form.

(2) In the event of cancellation, variations in the contractual relationship, or similar circumstances implying that the ship is no longer to be registered under the Norwegian flag, or in the event of modifications in the design of the ship, a notification shall be sent to the Norwegian Maritime Authority immediately, or to whomever is authorised by the Authority.

Amended by Regulations of 4 June 2002 No. 618 (formerly section 9), 29 June 2007 No. 1006 (in force on 1 July 2007).

#### Section 11

##### *Drawings and other documentation*

(1) Drawings and other documentation to be sent in are specified in the Norwegian Maritime Authority's list of drawings and documentation for high-speed craft valid at any time.

(2) Stability calculations and calculation of gross and net tonnage, and supporting documents, shall be prepared with the aid of an approved computer program. The same database shall be used for both stability and tonnage calculations. The documentation shall be in a simple and straightforward format for easy reference. Stability and tonnage calculations shall be sent together, but as separate attachments.

(3) Unless provided otherwise, drawings and other documentation shall be submitted in triplicate to the station (local office) of the Norwegian Maritime Authority for craft that are to be built or undergo conversion in Norway, or to anyone authorised by the Norwegian Maritime Authority.

(4) For high-speed craft to be built or converted abroad or purchased from abroad, drawings and other documentation shall be submitted direct to the Norwegian Maritime Authority, unless provided otherwise.

(5) The shipyard and the company are responsible for submitting drawings and documentation, in the same manner as set out in section 10.

(6) Where no specific time-limits for submitting documentation have been given, drawings and other documentation shall be submitted as early as possible, in order to allow sufficient time for the processing of the supporting documents before a survey is to take place and the required certificates may be issued.

(7) For high-speed craft with novel and special design features or specific operational conditions, the Norwegian Maritime Authority may require risk analyses or other documentation to be prepared in addition to what is specified in the list of drawings and documentation.

Amended by Regulation of 4 June 2002 No. 618 (formerly section 10).

#### Section 12

##### *Survey during construction*

(1) When a high-speed craft is constructed, modified or altered, the Norwegian Maritime Authority or whoever is authorised by the Authority for that purpose, shall carry out a survey to the extent considered necessary. The survey shall be carried out on the basis of, *inter alia*, the existing drawings and documentation. Requests, arrangements and preparations relating to the survey are the responsibility of the shipyard and the company for craft built in Norway, and of the company (the person placing the order) for craft built abroad.

(2) For minor conversions or alterations it is the duty of the shipyard and the company to notify the supervisory authority.

Added by Regulation of 4 June 2002 No. 618.

#### Section 13

##### *Construction requirements*

(1) For high-speed craft built wholly or partly of reinforced fibre glass polyester or other cast material, surveys under section 12 shall also include inspection of production conditions and premises which shall comply with the rules of Det Norske Veritas or equivalent rules for production conditions, etc. If documentation is available that production conditions, etc. have been previously inspected and found to be satisfactory and are not altered at a later time, no new inspection of the production conditions and premises is required.

(2) At the survey during the construction of the individual craft, the shipyard shall also be able to produce documentary evidence that production and production conditions, use of materials, etc. for the craft in question are in compliance with the rules.

(3) For classed cargo craft, the classification society has a general authorisation to carry out surveys within the classification areas. For other areas on classed cargo craft, all areas on un-classed high-speed craft, and passenger craft irrespective of class status, such surveys are to be carried out by the Norwegian Maritime Authority, or whoever is authorised by the Authority.

Added by Regulation of 4 June 2002 No. 618.

## Section 14

### *Classed high-speed craft*

(1) A classed high-speed craft shall, as regards dimensioning and construction of hull, watertight bulkheads with means of closure for bulkhead openings, superstructures, deckhouses, rudder, mooring equipment, etc., satisfy the rules of the classification society concerned relating to building material, size, type, and use.

(2) A classed high-speed craft shall, in respect of machinery, electrical systems, steering gear, pumps, piping systems, etc., as well as stabilisation and directional control systems, satisfy the rules of the classification society concerned in relation to type and use.

Added by Regulation of 4 June 2002 No. 618.

## Section 15

### *Unclassed high-speed craft*

(1) An unclassified high-speed craft shall, in respect of the matters referred to in section 14, satisfy the rules of a recognised classification society for high-speed craft.

(2) The design of electrical systems shall be in conformity with the regulations in force at any time concerning electrical systems (maritime installations), laid down by the Norwegian Directorate for Product and Electrical Safety, or according to the rules of a recognised classification society approved by the Norwegian Directorate for Product and Electrical Safety for the inspection of electrical systems in ships and barges.

Added by Regulation of 4 June 2002 No. 618, amended by Regulation of 20 December 2017 No. 2379 (in force on 1 January 2018).

## Chapter 5

### Survey for the issue of high-speed craft safety certificate and permit to operate high-speed craft and survey of electrical systems

## Section 16

### *Request for survey for the issue of prescribed certificates*

(1) In order that a high-speed craft may be surveyed for the prescribed certificates, the owner or master shall, in good time before the survey is scheduled to take place, submit a request for survey. For periodical and renewal surveys the request shall be sent not later than one month before the date entered in the certificate. A special form, available from the Norwegian Maritime Authority on request, must be used. The preferred time and place of survey shall be stated.

(2) When submitting a request for survey of a high-speed craft which is not new and which has not previously been Norwegian, the request shall be accompanied by a general arrangement drawing in plan and profile, information on life-saving appliances, stability, fire protection and fire extinction arrangements and, where appropriate, towing and anchor-handling equipment, as well as the accommodation arrangement. In the case of purchase from abroad of a passenger craft which is not classed, main drawings of hull and drawings of the engine-room arrangement shall also accompany the request. In the case of purchase from abroad of a craft constructed of reinforced fibre glass polyester or other cast material, documentation about the craft's origin, conditions during construction, use of material, material quality, etc., shall also be submitted. If the necessary documentation is not submitted, a piece of the laminate may be required to be cut from the hull for testing purposes.

(3) The request shall be submitted to the station of the Norwegian Maritime Authority where the survey is to be carried out.

(4) For surveys of newbuildings abroad, the request shall be submitted to the Norwegian Maritime Authority. For high-speed craft already in service, the request for survey is to be submitted to the station of the Norwegian Maritime Authority in ports where the Authority has a permanent surveyor, otherwise to the nearest Norwegian foreign service mission.

Amended by Regulation of 4 June 2002 No. 618 (formerly section 11).



## Section 17

### *General provisions relating to the conduct of surveys*

(1) When a high-speed craft is being surveyed, the company or the master shall ensure that the Norwegian Maritime Authority is given such assistance as is considered necessary. Where necessary, the Norwegian Maritime Authority may call in extra personnel, and the related costs shall be covered by the owner.

(2) Any recommendations imposed and the time-limit within which they must be complied with shall be entered in a recommendations list, to be attached to the certificate.

(3) The Norwegian Maritime Authority may also check other items inspected by recognised survey institutions when classing newbuildings and during class surveys and renewals for existing high-speed craft.

(4) In carrying out the surveys, IMO Res. A.746(18) on guidelines under the harmonised system for surveys and certification, with subsequent amendments in force on 17 March 1998, shall apply.

Amended by Regulations of 28 March 2000 No. 1575 (in force on 1 May 2000), 4 June 2002 No. 618 (formerly section 12).

## Section 18

### *Survey of electrical systems*

(1) When requesting survey of electrical systems<sup>1</sup> with voltages exceeding 50 V, the following shall apply:

a. For the survey of new installations on board high-speed craft being built in Norway, the request for survey shall be sent to the Norwegian Directorate for Civil Protection. For craft being built abroad, the request for such survey is to be sent to the Norwegian Maritime Authority.

b. When the entire system has been installed and any recommendations have been complied with, the Norwegian Directorate for Civil Protection will issue a proof of survey, to be kept on board together with the certificates.

(2) When issuing an installation attestation for electrical systems with voltages of 50 V and below, the following shall apply:

a. For high-speed craft being built in Norway, the installation of the system shall be done by an electrical installer or an accepted electrical enterprise.

b. The electrical installer or accepted electrical enterprise shall issue an attestation when the system is fully installed, in triplicate and on the form prescribed by the Norwegian Maritime Authority. One copy shall be kept on board and two copies shall be sent to the Norwegian Maritime Authority.

c. For high-speed craft being built abroad, the owner's request for survey of the electrical system shall be sent to the Norwegian Maritime Authority, which for the inspection of the installation designates the recognised classification society, the Norwegian Directorate for Civil Protection, or an accepted electrical enterprise. The designated institution or enterprise shall issue an installation attestation in triplicate. One copy shall be kept on board and two copies sent to the Norwegian Maritime Authority.

(3) For periodical surveys of electrical systems with voltages exceeding 50 V, the following shall apply:

a. The survey of high-speed craft shall be carried out by the Norwegian Directorate for Civil Protection and the survey report shall be sent to the Norwegian Maritime Authority.

b. Periodical surveys are to be carried out:

1. For passenger high-speed craft engaged on foreign voyages; at least once every 12 months.

2. For passenger high-speed craft engaged on domestic voyages; at least once every five years.

3. For cargo high-speed craft of 500 gross tonnage and upwards; at least once every five years.

(4) For periodical surveys of electrical systems with voltages of 50 V and below, the following shall apply:

a. For high-speed craft to which these Regulations apply, the system shall be inspected by an electrical installer or accepted electrical enterprise at least once every five years. The inspection shall be carried out as indicated on the installation attestation and confirmed by signature thereon.

Amended by Regulation of 4 June 2002 No. 618 (formerly section 13).

<sup>1</sup> The EMC directive (Directives 89/336/EEC and 92/21/EEC) also applies to electrical equipment in ships. The Norwegian Directorate for Civil Protection's regulations of 10 August 1995 No. 713 concerning electrical equipment implement the EU's EMC directive of 3 May 1995 in Norwegian law. The EMC directive applies to all appliances which can cause electromagnetic disturbance or whose functioning can be affected by such disturbance and prescribes, *inter alia*, CE-marking of such equipment.

## Section 19

### *High-Speed Craft Safety Certificate*

(1) The High-Speed Craft Safety Certificate and the Record of Equipment for High-Speed Craft Safety Certificate shall be issued for a period of five years by the Norwegian Maritime Authority or whoever is authorised by the Authority.

(2) Any exemptions granted under section 4 of these Regulations shall be noted on the safety certificate.

Amended by Regulations of 28 March 2000 No. 1575 (in force on 1 May 2000), 4 June 2002 No. 618 (formerly section 14), 14 February 2012 No. 236.

## Section 20

### *Permit to Operate High-Speed Craft*

(1) The Permit to Operate High-Speed Craft shall be issued for a period of up to five years by the Norwegian Maritime Authority or whoever is authorised by the Authority.

(2) Before issuing a Permit to Operate for domestic voyages in a host State, any operating conditions shall be determined after consultations with the host State. Such operating conditions shall be entered on the Permit to Operate.

(3) For ro-ro passenger high-speed craft required to comply with the requirements of section 8, an attachment to the Permit to Operate High-Speed Craft shall be issued. The attachment shall indicate the maximum significant wave height at which the ship is capable of complying with the specific stability requirements contained in section 8. The attachment shall remain valid so long as the ship is engaged on voyages in an area with a corresponding or smaller significant wave height.

(4) Craft with a valid High-Speed Craft Safety Certificate may during a crossing go outside of the trade area specified in the operating permit, provided that:

- a. other limitations stated in the operating permit are complied with;
- b. it is a domestic voyage without passengers and cargo;
- c. a voyage plan for the crossing has been submitted so that the manning can be assessed.

Amended by Regulations of 28 March 2000 No. 1575 (in force on 1 May 2000), 4 June 2002 No. 618 (formerly section 15), 2 December 2004 No. 1560, 2 January 2006 No. 1714.

## Chapter 6

### Technical and equipment-related requirements

## Section 21

### *Life-saving appliances and equipment*

(1) For immersion suits and life-saving equipment, the following shall apply:

- a. All crew members, including catering/restaurant personnel, shall be provided with an immersion suit.
- b. Lifejackets on new and existing passenger high-speed craft shall have an arrangement or be of a design which makes the lifejacket easy to don correctly. The lifejackets shall be provided with fastening straps not requiring the use of loops or similar devices and not based on knotting. Additionally, lifejackets shall be provided with thigh straps or an equivalent solution which ensures that the jacket stays in place when used. Lifejackets shall be provided with a light in accordance with regulation III/22.3.1 of the SOLAS Convention (1996 Amendments) and give thermal protection in compliance with the requirements of the IMO's MSC/Circ.922. The thermal protection requirement does not apply to craft exclusively engaged on voyages between 30° S and 30° N.
- c. In passenger accommodation spaces, all seating shall have an arrangement whereby lifejackets are placed under the seats, or they shall be placed at arm's length from the seats. Lifejackets intended for children may be stowed in suitable places. Such lifejackets as exceed 100 per cent of the total number of passengers the craft is certified to carry may be stowed in suitable places.
- d. On high-speed craft to which a permission to use open liferafts has been granted in accordance with paragraph 8.10.2 in Chapter 8 of the Code, each liferaft shall be provided with thermal protective aids corresponding to the total number of persons the liferaft is certified to carry. Thermal protective aids shall at least satisfy the requirements of chapter II paragraph 2.5 of the LSA Code.

(2) The provisions relating to stowage of survival craft and embarkation arrangements in paragraphs 8.6.5, 8.7.4 and 8.7.5 of chapter 8 of the Code also apply to existing passenger high-speed craft. For existing passenger high-speed craft not certified under the High-Speed Craft Code, the arrangement shall be considered in relation to the damage waterlines of the calculations made. For existing passenger high-speed craft where no calculations are available, the freeboard considered shall have the necessary safety margin in relation to the life-saving arrangement to ensure dry-shod evacuation.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001), 4 June 2002 No. 618 (formerly section 16), 24 January 2022 No. 118.

## Section 22

### *Emergency lighting in the passenger accommodation*

All existing passenger high-speed craft shall be provided with emergency lighting in the passenger accommodation which at least complies with the requirements of Chapter 12, paragraphs 12.7.9.1 and 12.7.9.2 of the Code. The emergency lighting shall, for the first 30 minutes, be capable of working with a luminous intensity in the passenger accommodation sufficient to permit the reading of emergency instructions and the handling of lifejackets.

## Section 23

### *Compasses*

In addition to the magnetic compass required by paragraph 13.2.1 in Chapter 13 of the Code, high-speed craft shall be equipped with a compass which at least satisfies the requirements of IMO Res. A.694(17) "General requirements for shipborne radio equipment forming part of the GMDSS and for electronic navigational aids" and IMO Res. A.821(19) "Performance standards for gyro-compasses for high speed craft".

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 17), 4 June 2002 No. 618 (formerly section 18).

## Section 24

### *Devices to indicate speed and distance*

(1) Devices installed to indicate speed and distance on high-speed craft in foreign trade shall at least satisfy IMO Res. A.824(19), "Performance standards for devices to indicate speed and distance". In addition, such devices shall satisfy the requirements of IMO Res. A.694(17), "General requirements for shipborne radio equipment forming part of the GMDSS and for electronic navigational aids".

(2) High-speed craft engaged on domestic voyages may, in lieu of the devices for measuring speed and distance referred to in the first paragraph, be equipped with a device which measures speed and distance and which functions reliably at all speeds and under all operational conditions.

- a. The device may be based on the differential GPS provided that the trade area in which the craft is to operate is reliably covered and a differential correction alarm is fitted.
- b. Devices for measuring speed and distance based on the GPS shall at least satisfy IMO Res. A.815(19), "World-Wide radionavigation system".
- c. The devices shall further at least satisfy IMO Res. A.819(19) "Performance standards for shipborne global position system (GPS) receiver equipment".
- d. In addition, the devices shall comply with the requirements of IMO Res.A.694(17), "General requirements for shipborne radio equipment forming part of the GMDSS and for electronic navigational aids".

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 18), 4 June 2002 No. 618 (formerly section 19), 1 June 2004 No. 816.

## Section 25

### *Echo-sounding equipment*

The equipment shall comply with the requirements of IMO Res. A.694(17) "General requirements for shipborne radio equipment forming part of the GMDSS and for electronic navigational aids".

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 19), 4 June 2002 No. 618 (formerly section 20).

## Section 26

### *Radar installations*

A high-speed craft which according to its Safety Certificate is permitted to carry more than 100 passengers shall be provided with at least two radar installations. In addition, the following shall apply:

- a. The provisions of IMO Res.A.694(17) "General requirements for shipborne radio equipment forming part of the GMDSS and for electronic navigational aids" and IMO Res. A.820(19) "Performance standards for navigational radar equipment for high speed craft" shall apply.
- b. For high-speed craft designed for an operating speed of 36 knots or more, the scan rate shall not be less than 60 revolutions per minute. Where such craft are equipped with two radars, one of which is an S-band radar (10 cm radar), the scan rate of this radar need not exceed 48 revolutions per minute.
- c. The equipment shall without external magnification provide a relative plan display in the head-up unstabilised mode with an effective diameter of not less than:
  1. 180 mm in craft of less than 40 metres in length.
  2. 250 mm in craft of 40 metres in length and more but less than 70 metres.
  3. 340 mm where one radar is required, and 250 mm for the second display where two radars are required, on craft of 70 metres in length and upwards.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 20), 4 June 2002 No. 618 (formerly section 21).

## Section 27

### *Rate-of-turn and rudder angle indicators*

Paragraph 13.7.1 in Chapter 13 of the Code does not apply to high-speed craft of less than 80 m in length which are engaged on domestic voyages.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 21), 4 June 2002 No. 618 (formerly section 22).

## Section 28

### *Automatic steering aids (automatic pilot equipment)*

Where installed, automatic steering aids shall at least satisfy IMO Res. A.822(19) "Performance standards for automatic steering aids (automatic pilots) for high speed craft".

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 22), 4 June 2002 No. 618 (formerly section 23).

## Section 29

### *Charts and nautical publications*

All high-speed craft shall carry up-to-date charts, nautical publications, etc. required for the area in which they operate.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 23), 4 June 2002 No. 618 (formerly section 24).

## Section 30

### *Binoculars, barometer and thermometer*

All high-speed craft shall be provided with binoculars, a barometer and a thermometer.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 24), 4 June 2002 No. 618 (formerly section 25).

## Section 31

### *Radiocommunications*

Paragraphs 14.7.1.5 (NAVTEX) and 14.7.1.6 (float-free satellite EPIRB) of the Code shall not apply to high-speed craft engaged on voyages where no unsheltered stretches of sea exceeding 5 nautical miles are crossed.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 25), 4 June 2002 No. 618 (formerly section 26), 27 March 2023 No. 459.

## Section 32

### *Megaphone*

(1) New and existing passenger high-speed craft shall be provided with two battery-operated megaphones, one of which shall be located on the bridge and the other in the passenger accommodation.

(2) The megaphones shall be of a type that permits continuous recharging and provides a speaking time of at least 15 minutes per unit.

Added by Regulation of 22 December 2000 No. 1575 (in force on 1 January 2001). Amended by Regulation of 4 June 2002 No. 618 (formerly section 27).

## Section 33

### *Safety requirements for persons with reduced mobility*

(1) IMO circular MSC/735 of 24 June 1996 (Recommendation on the design and operation of passenger ships to respond to elderly and disabled persons' needs) shall be complied with to the extent deemed appropriate.

(2) For passenger high-speed craft the keel of which is laid or which were at a similar stage of construction on or after 1 October 2004, the following shall apply:

a. *Access to the ship*

The craft shall be constructed and equipped in such a way that a person with reduced mobility can embark and disembark easily and safely, and can be ensured access between decks, either unassisted or by means of ramps, elevators or lifts. Directions to such access shall be posted at the other accesses to the craft and at other appropriate locations through the craft.

b. *Signs*

Signs provided to aid passengers shall be accessible and easy to read for persons with reduced mobility (including persons with sensory disabilities), and be positioned at key points.

c. *Means to communicate messages*

The operator shall have the means onboard the craft visually and verbally to provide announcements, such as those regarding delays, schedule changes and on-board services, to persons with various forms of reduced mobility.

d. *Alarm*

The alarm system and alarm buttons must be designed so as to be accessible by and to alert all passengers with reduced mobility, including persons with sensory disabilities and persons with learning disabilities.

e. *Additional requirements ensuring mobility inside the craft*

Handrails, corridors and passageways, doorways and doors shall accommodate the movement of a person in a wheelchair. Elevators, vehicle decks, passenger lounges, accommodation and washrooms shall be designed in order to be accessible in a reasonable and proportionate manner to persons with reduced mobility.

(3) For passenger high-speed craft the keel of which is laid or which were at a similar stage of construction prior to 1 October 2004, the first and second paragraphs of this section shall apply for conversions to the extent determined by the Norwegian Maritime Authority, cf. section 1 third, fifth and sixth paragraphs.

Added by Regulation of 2 December 2004 No. 1560.

## Section 34

### *Windows in operating compartment*

(1) Front windows shall be angled so that their tops are forward of the lowest part of the window.

(2) Windows forward of the operating stations shall be fitted with windscreen wipers. They shall be fitted with an interval control function and a fresh-water screenwasher. The windscreen wipers shall be capable of keeping the windows clear in all weather conditions in which the craft may be expected to operate.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 26), 4 June 2002 No. 618 (formerly section 29).

## Section 35

### *Emergency plans*

(1) For passenger high-speed craft which from ports within the EEA are engaged on a regular service on foreign voyages or on domestic voyages in sea areas covered by Class A, regulation III/29 of the SOLAS Convention (1996 Amendments) shall apply. Emergency plans shall be in accordance with IMO Res. A.852(20).

(2) If the regular service concerns two or more EEA States in their capacity as host States, they shall jointly prepare a plan for the different routes.

Added by Regulation of 20 March 2001 No. 375. Amended by Regulation of 4 June 2002 No. 618 (formerly section 29A).

## Chapter 7

### Operational requirements, handling, etc.

## Section 36

### *Operational requirements*

(1) The provisions relating to operational requirements in Chapter 18 of the Code shall also apply to existing passenger high-speed craft.

(2) The documentation required for operational control under section 18.1 in Chapter 18 of the Code and the craft documentation required under section 18.2 in Chapter 18 of the Code shall be in the Norwegian language and shall be carried on board.

(3) The company's system for training and evaluation of the crew's level of competence for the type of craft concerned required in Chapter 18.3 of the Code shall at least comply with the following requirements:

a. *Assessor*

The company shall designate a co-ordinating assessor qualified pursuant to section 13 of the Regulations of 22 December 2011 No. 1523 on qualifications and certificates for seafarers (Qualifications Regulations).

b. *Training*

The company's training programme shall specify the duration and contents of training to enable the candidate, in addition to acquiring knowledge, to acquire the practical skills necessary to perform his or her functions, both in normal situations and emergency situations, prior to taking up position on board. Relevant parts of the training shall take place when the craft is under way, to enable the candidate to become familiar with all applicable ports and the entire area of operation, both during day and night time sailing on the craft concerned.

c. *Competence*

The company shall make sure that each member of the crew has achieved the level of competence specified below, prior to taking up position on board:

<b>A = Management level</b> Make complex strategic decisions on an independent basis <b>B = Operate</b> Use processes, components and systems on an independent basis <b>C = Understand</b> Understand the intention, the use and the effect of processes, systems and components	Crew of navigational bridge		
	Master and navigator	Engineer	Other members of the crew
.1 Knowledge of all on-board propulsion and control systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems and bilge and fire pumping;	A	B	C
.2 The failure mode of the control, steering and propulsion systems and proper responses to such failures;	A	B	C
.3 Handling characteristics of the craft and the limiting operational conditions;	A	B	C
.4 Bridge communication and navigation procedures;	A	C	C
.5 Intact and damage stability and survivability of the craft in damage condition;	A	B	C
.6 Location and use of the craft's life-saving appliances, including survival craft equipment;	A	B	B
.7 Location and use of escapes in the craft and the evacuation of passengers;	A	B	B
.8 Location and use of fire protection and fire detection and extinguishing appliances and systems in the event of fire on board;	A	B	B
.9 Location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps;	A	B	C
.10 Cargo and vehicle stowage security systems;	A	B	C
.11 Methods for control and communication with passengers in an emergency;	A	B	B
.12 All items listed in the training manual. Cf. paragraph 18.2.3 of the Code.	A	B	B
.13 Ports, routes and specific conditions or requirements relating to the operation and evacuation of the craft. Cf. paragraph 18.2.2 Route operational manual of the Code.	A	B	C
.14 Restrictions relating to operation and the basis of the Permit to Operate. Cf. paragraph 18.1.3 of the Code.	A	A	C
.15 Passenger management, passenger comfort and information to passengers, including the use of the public address system during normal operation.	A	B	B
.16 Company policy and procedures for passenger management in compliance with Regulation V3 (V2) of the STCW Code, viewed in relation to paragraph 18.2.3.24 of the Code.	A	B	B
.17 Company policy and procedures for security.	A	B	B
.18 Company practice to ensure a proper working environment ("HMS", i.e. occupational health and safety – OHS).	A	B	B

d. *Final evaluation*

The evaluation of the level of competence shall consist of a practical and a written part. The candidate shall also by practical use display satisfactory skills in the use of instruments, equipment and technical appliances that form part of job functions.

Relevant parts of the final evaluation shall take place when the craft is under way, and shall consist of at least one arrival at and one departure from all applicable ports and sailing in the entire area of operation both during day and night time on the craft concerned.

The final evaluation of the craft shall be performed by a certified assessor, cf. section 13 of the Qualifications Regulations. Craft training shall at least meet the requirements of the craft's operation, training, maintenance and service manual.

e. *Documentation of the final evaluation*

All crew members shall have passed, and must be able to document, the final evaluation before taking up their position on board a craft or in a new area of operation. A new final evaluation shall take place before taking up position following an interruption of more than 6 months of service on a craft or on a route.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 27), 4 June 2002 No. 618 (formerly section 30), 18 October 2004 No. 1377 (in force on 1 January 2005), 20 December 2017 No. 2379 (in force on 1 January 2018).

## Section 37

### *Handling, controllability and performance*

(1) The provisions relating to handling, controllability and performance in Chapter 17 of the Code also apply to existing passenger high-speed craft.

(2) The failure mode and effect analysis (FMEA) which is required under Chapter 17 paragraph 17.4 of the Code, may for existing passenger high-speed craft be replaced by a simplified analysis and practical test and based on experience from the operational history of the craft.

(3) Tests according to Annex 8 to the High-Speed Craft Code shall be performed for both new and existing passenger high-speed craft.

(4) Any limitations concerning safe speed in relation to sea conditions and, where appropriate, the craft's controllability shall be entered in the craft's operating manual. The company shall ensure that such limitations are brought to the knowledge of all officers on board.

Added by Regulation of 22 December 2000 No. 1575 (in force on 1 January 2001). Amended by Regulation of 4 June 2002 No. 618 (formerly section 31).

## Chapter 8

### Concluding provisions

## Section 38

### *Entry into force*

These Regulations enter into force on 1 July 1998.

Amended by Regulations of 22 December 2000 No. 1575 (in force on 1 January 2001, formerly section 29), 4 June 2002 No. 618 (formerly section 33), 29 June 2007 No. 1006 (in force on 1 July 2007, formerly section 39).

## Appendix 1

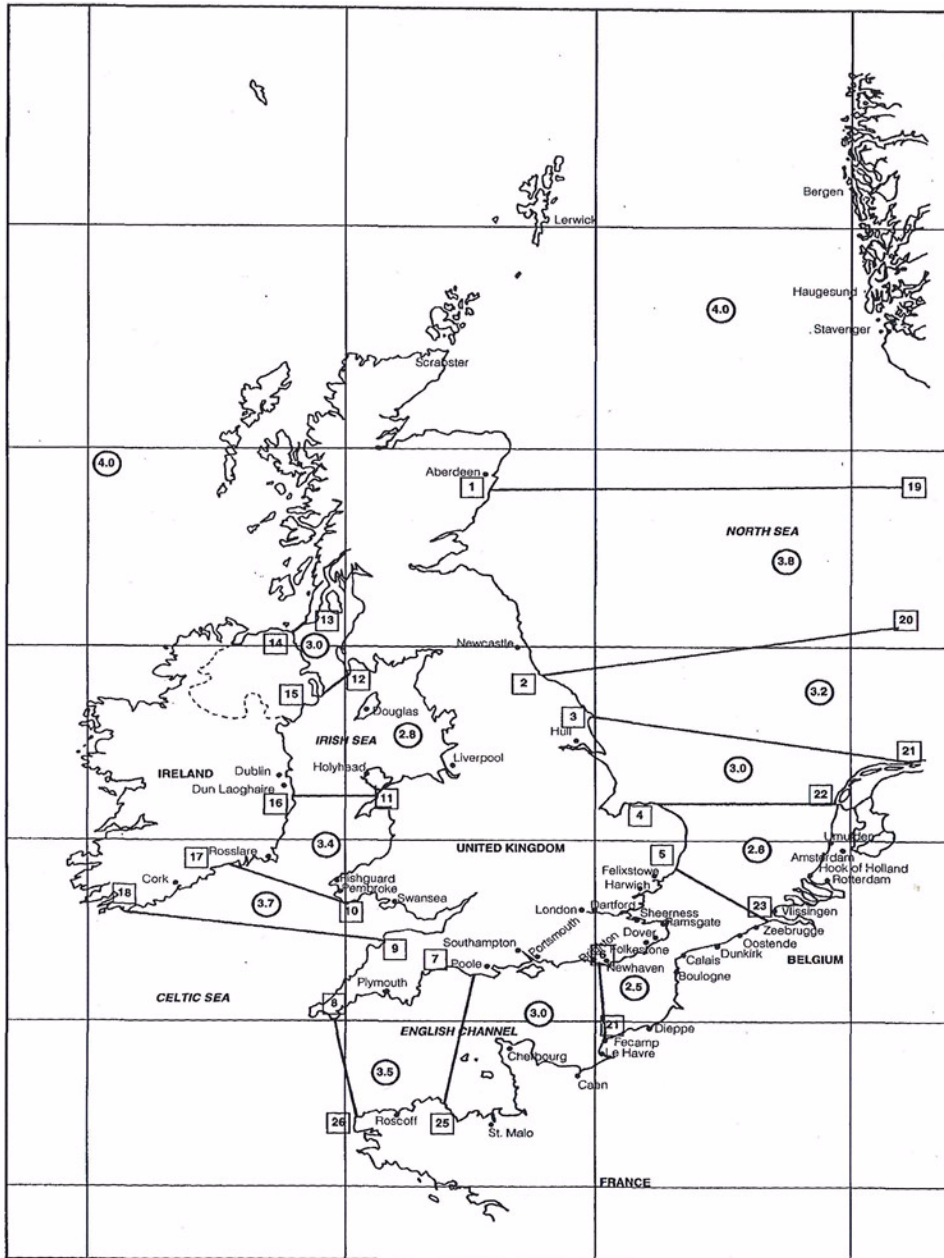
### Significant wave heights

The provisions of this Appendix are binding pursuant to section 8 of the Regulations of 5 January 1998 No. 6 on the construction, equipment and operation of high-speed craft used as passenger craft or cargo craft.

This Appendix states the significant wave heights ( $h_s$ ) which shall be used for determining the height of water when applying the technical standard contained in Appendix 2.

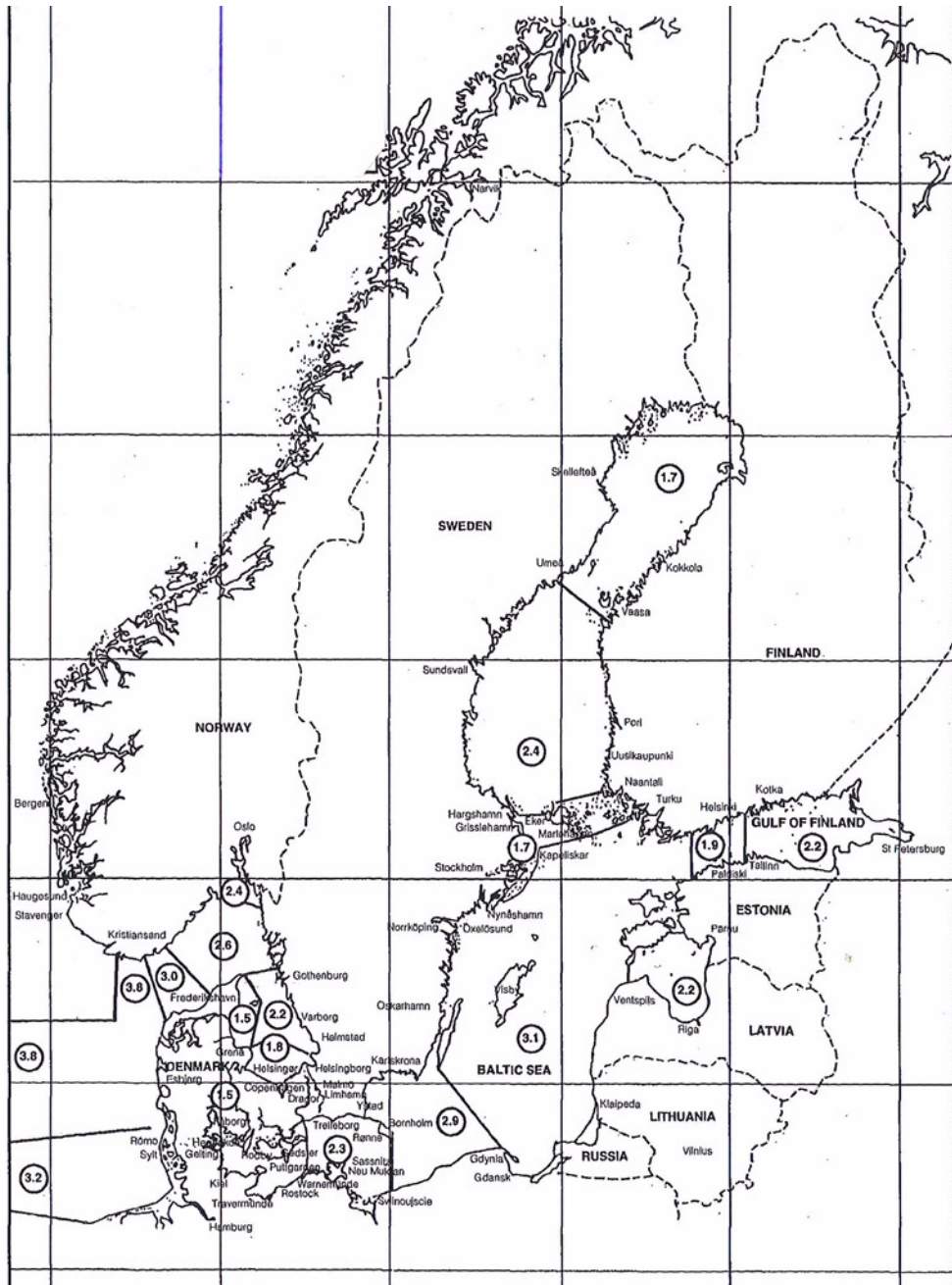
The figures are provided on a map presenting the significant wave heights which are not exceeded by a probability of more than 10% on a yearly basis for the different sea areas covered.

Inshore areas shall be considered to have significant wave heights of less than 1.5 m unless otherwise indicated on the map.



Note: The wave heights stated on this map are the significant wave heights (hs) which are not exceeded by a probability of more than 10% and which shall be used for determining the height of water.





Note: The wave heights stated on this map are the significant wave heights ( $h_s$ ) which are not exceeded by a probability of more than 10% and which shall be used for determining the height of water.

Added by Regulation of 20 March 2001 No. 375, amended by Regulation of 26 November 2008 No. 1260 (in force on 1 January 2009).

Maps are obtainable from the Norwegian Maritime Authority, P.O. Box 2222, N-5500 Haugesund, Norway. Telephone +47 52 74 50 00, fax +47 52 74 50 01 or post@sdir.no

## Appendix 2

### Model test method

The provisions of this Appendix are binding, cf. the sixth and seventh paragraph of section 8 of the Regulations of 5 January 1999 No. 6 on the construction, equipment and operation of high-speed craft used as passenger craft or cargo craft.

#### 1. Objectives

This revised model test method is a revision of the method contained in the Appendix to the Annex to resolution 14 of the 1995 SOLAS Conference. Since the entry into force of the Stockholm Agreement a number of model

tests have been carried out in accordance with the test method previously in force. During these tests a number of refinements in the procedures have been identified. This new model test method aims to include these refinements and, together with the appended Guidance Notes, provide a more robust procedure for the assessment of survivability of a damaged ro-ro passenger ship in a seaway. In the tests provided for in the sixth paragraph of section 8, the ship should be capable of withstanding a seaway as defined in paragraph 4 hereunder in the worst-damage-case scenario.

## 2. Definitions

$L_{BP}$	is the length between perpendiculars
$H_s$	is the significant wave height
$B$	is the moulded breadth of the ship
$T_P$	is the peak period
$T_Z$	is the zero crossing period

## 3. Ship model

3.1. The model should copy the actual ship for both outer configuration and internal arrangement, in particular all damaged spaces having an effect on the process of flooding and shipping of water. Intact draught, trim, heel and limiting operational KG corresponding to the worst damage case should be used. Furthermore, the test case(s) to be considered should represent the worst damage case(s) defined in accordance with SOLAS regulation II-1/8.2.3.2 (SOLAS 90) with regard to the total area under the positive GZ curve and the centreline of the damage opening should be located within the following range:

3.1.1  $\pm 35\%$   $L_{BP}$  from midship.

3.1.2 an additional test will be required for the worst damage within  $\pm 10\%$   $L_{BP}$  from midship if the damage case referred to in .1 is outside of  $\pm 10\%$   $L_{BP}$  from midship.

3.2. The model should comply with the following:

3.2.1 length between perpendiculars ( $L_{BP}$ ) is to be at least 3 m or a length corresponding to a model scale of 1:40, whichever is greater, and the vertical extent up to at least three superstructure standard heights above the bulkhead (freeboard) deck;

3.2.2 hull thickness of flooded spaces should not exceed 4 mm;

3.2.3 in both intact and damaged conditions, the model should satisfy the correct displacement and draught marks ( $T_A$ ,  $T_M$ ,  $T_F$ , port and starboard) with a maximum tolerance in any draught mark of + 2 mm. Draught marks forward and aft should be located as near FP and AP as practicable;

3.2.4 all damaged compartments and ro-ro spaces should be modelled with the correct surface and volume permeabilities (actual values and distributions) ensuring that floodwater mass and mass distribution are correctly represented;

3.2.5 the characteristics of motion of the actual ship should be modelled properly, paying particular attention to the intact GM tolerance and radii of gyration in roll and pitch motion. Both radii should be measured in air and be in the range of 0.35B to 0.4B for roll motion, and 0.2LOA to 0.25LOA for pitch motion;

3.2.6 main design features such as watertight bulkheads, air escapes, etc., above and below the bulkhead deck that can result in asymmetric flooding should be modelled properly as far as practicable to represent the real situation; Ventilating and cross-flooding arrangements should be constructed to a minimum cross section of 500 mm<sup>2</sup>;

3.2.7 the shape of the damage opening should be as follows:

1. trapezoidal profile with side at 15° slope to the vertical and the width at the design waterline defined according to SOLAS regulation II-1/8.4.1;
2. isosceles triangular profile in the horizontal plane with the height equal to B/5 according to SOLAS regulation II-1/8.4.2. If side casings are fitted within B/5, the damaged length in way of the side casings should not be less than 25 mm;
3. notwithstanding the provisions of subparagraphs 3.2.7.1 and 3.2.7.2 above, all compartments taken as damaged in calculating the worst damage case(s) referred to in paragraph 3.1 should be flooded in the model tests;

3.3. The model in the flooded equilibrium condition should be heeled by an additional angle corresponding to that induced by the heeling moment  $M_h = \max(M_{pass}, M_{launch}) - M_{wind}$ , but in no case should the final heel be less than 1° towards damage.  $M_{pass}$ ,  $M_{launch}$  and  $M_{wind}$  are specified in SOLAS regulation II-1/8.2.3.4. For existing ships this angle may be taken as 1°.

## 4. Procedures for experiments

4.1. The model should be tested in a long-crested irregular seaway defined by the JONSWAP spectrum with significant wave height  $H_s$ , a peak enhancement factor  $\gamma = 3.3$  and a peak period  $T_P = (4\sqrt{H_s}(T_Z = (T_P/1.285)))$ .  $H_s$  is the significant wave height for the area of operation, which is not exceeded by a probability of more than 10% on a yearly basis, but limited to a maximum of 4 m.

Furthermore,

4.1.1 the basin width should be sufficient to avoid contact or other interaction with the sides of the basin and is recommended not to be less than  $L_{BP} + 2$  m;

4.1.2 the basin depth should be sufficient for proper wave modelling but should not be less than 1 m;

4.1.3 for a representative wave realisation to be used, measurements should be performed prior to the test at three different locations within the drift range;

- 4.1.4 the wave probe closer to the wave maker should be located at the position where the model is placed when the tests starts;
- 4.1.5 variation in  $H_s$  and  $T_p$  should be within  $\pm 5\%$  for the three locations; and
- 4.1.6 during the tests, for approval purposes, a tolerance of  $+ 2.5\%$  in  $H_s$ ,  $\pm 2.5\%$  in  $T_p$  and  $\pm 5\%$  in  $T_z$  should be allowed with reference to the probe closer to the wave maker.
- 4.2. The model should be free to drift and placed in beam seas ( $90^\circ$  heading) with the damage hole facing the oncoming waves, with no mooring system permanently attached to the model used. To maintain a beam sea heading of approximately  $90^\circ$  during the model test the following requirements should be satisfied:
  - 4.2.1. heading control lines, intended for minor adjustment, should be located at the centre line of the stem and stern, in a symmetrical fashion and at a level between the position of KG and the damaged waterline; and
  - 4.2.2. the carriage speed should be equal to the actual drift speed of the model with speed adjustment made when necessary.
- 4.3. At least 10 experiments should be carried out. The test period for each experiment should be of a duration such that a stationary state is reached, but not less than 30 min in full-scale. A different wave realisation train should be used for each experiment.
- 5. *Survival criteria*

The model should be considered as surviving if a stationary state is reached for the successive test runs as required in paragraph 4.3. The model should be considered as capsized if angles of roll of more than  $30^\circ$  to the vertical axis or steady (average) heel greater than  $20^\circ$  for a period longer than three minutes full-scale occur, even if a stationary state is reached.
- 6. *Test documentation*
  - 6.1. The model test programme should be approved by the Administration in advance.
  - 6.2. Tests should be documented by means of a report and a video or other visual records containing all relevant information on the model and the test results, which are to be approved by the Administration. These should include, as a minimum, the theoretical and measured wave spectra and statistics ( $H_s$ ,  $T_p$ ,  $T_z$ ) of the wave elevation at the three different locations in the basin for a representative realisation, and for the tests with the model, the time series of main statistics of the measured wave elevation close to the wave maker and records of model roll, heave and pitch motions, and of the drift speed.

Added by Regulation of 20 March 2001 No. 375. Amended by Regulations of 1 June 2004 No 815, 10 March 2006 No. 336.