# ANNEX 2

## RESOLUTION MSC.338(91) (adopted on 30 November 2012)

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

THE MARITIME SAFETY COMMITTEE,

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

RECALLING ALSO Article VIII(b) of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention"), concerning the amendment procedure applicable to the annex to the Convention, other than to the provisions of chapter I thereof,

HAVING CONSIDERED, at its ninety-first session, amendments to the Convention, proposed and circulated in accordance with Article VIII(b)(i) thereof,

1. ADOPTS, in accordance with Article VIII(b)(iv) of the Convention, amendments to the Convention, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with Article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 January 2014, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;

3. INVITES SOLAS Contracting Governments to note that, in accordance with Article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 July 2014 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with Article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

5. ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Contracting Governments to the Convention.

\* \* \*

## ANNEX

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

## CHAPTER II-1 CONSTRUCTION – STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS

# Part A-1 Structure of ships

1 The following new regulation 3-12 is added after the existing regulation 3-11:

## "Regulation 3-12 – Protection against noise

- 1 This regulation shall apply to ships of 1,600 gross tonnage and above:
  - .1 for which the building contract is placed on or after 1 July 2014; or
  - .2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2015; or
  - .3 the delivery of which is on or after 1 July 2018,

unless the Administration deems that compliance with a particular provision is unreasonable or impractical.

- 2 On ships delivered before 1 July 2018 and:
  - .1 contracted for construction before 1 July 2014 and the keels of which are laid or which are at a similar stage of construction on or after 1 January 2009 but before 1 January 2015; or
  - .2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2009 but before 1 January 2015,

measures\* shall be taken to reduce machinery noise in machinery spaces to acceptable levels as determined by the Administration. If this noise cannot be sufficiently reduced the source of excessive noise shall be suitably insulated or isolated or a refuge from noise shall be provided if the space is required to be manned. Ear protectors shall be provided for personnel required to enter such spaces, if necessary.

3 Ships shall be constructed to reduce onboard noise and to protect personnel from the noise in accordance with the *Code on noise levels on board ships*, adopted by the Maritime Safety Committee by resolution MSC.337(91), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of Article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I. For the purpose of this regulation, although the Code on noise levels on board ships is treated as a mandatory instrument, recommendatory parts as specified in chapter I of the Code shall be treated as non-mandatory, provided that amendments to such recommendatory parts are adopted by the Maritime Safety Committee in accordance with its Rules of Procedure.

4 Notwithstanding the requirements of paragraph 1, this regulation does not apply to types of ships listed in paragraph 1.3.4 of the Code on noise levels on board ships.

Refer to the *Code on Noise levels on board ships*, adopted by the Organization by resolution A.468(XII)."

## Part C Machinery installations

2 The existing regulation 36 is deleted and left blank.

# CHAPTER II-2 CONSTRUCTION – FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

## Part A General

# Regulation 1 – Application

- 3 The following footnote is added to the title of Regulation 1:
  - "\* The application date of 1 July 2012 was introduced by resolution MSC.308(88). However, this resolution amended, under chapter II-2, regulations II-2/3.23 (definition of "Fire Test Procedures Code") and II-2/7.4.1 (new subparagraph .3) only, and all other regulations with the original application date of 1 July 2002 were not amended."

4 In the existing paragraph 2.4, the following new subparagraphs are added after the existing subparagraph .6:

- ".7 cargo ships of 500 gross tonnage and upwards and passenger ships constructed on or after 1 February 1992 but before 1 July 2002 need not comply with regulation 19.3.3 provided that they comply with regulation 54.2.3 as adopted by resolution MSC.13(57); and
- .8 cargo ships of 500 gross tonnage and upwards and passenger ships constructed on or after 1 September 1984 but before 1 July 2002 need not comply with regulations 19.3.1, 19.3.5, 19.3.6, 19.3.9, provided that they comply with regulations 54.2.1, 54.2.5, 54.2.6, 54.2.9 as adopted by resolution MSC.1(XLV)."

5 The following new paragraph 2.5 is added:

"2.5 Ships constructed before 1 July 2012 shall also comply with regulation 10.1.2, as adopted by resolution MSC.338(91)."

# Part C Suppression of fire

# **Regulation 9 – Containment of fire**

6 In table 9.3, column (11) (Special category and ro-ro spaces), row (2) (Corridors), the symbol "A-15" is replaced by the symbol "A-30  $^{g}$  ".

7 In table 9.3, column (11) (Special category and ro-ro spaces), row (4) (Stairways), the symbol "A-15" is replaced by the symbol "A-30  $^{g}$  ".

8 In table 9.3, column and row (11) (Special category and ro-ro spaces), the symbol "A-0" is replaced by the symbol "A-30<sup>g</sup>".

9 In table 9.4, column (11) (Special category and ro-ro spaces), row (1) (Control stations), the symbol "A-30" is replaced by the symbol "A-60<sup>g</sup>".

10 In table 9.4, column (11) (Special category and ro-ro spaces), row (2) (Corridors), the symbol "A-0" is replaced by the symbol "A-30  $^{g}$  ".

11 In table 9.4, column (11) (Special category and ro-ro spaces), row (4) (Stairways), the symbol "A-0" is replaced by the symbol "A-30  $^{g}$  ".

12 In table 9.4, column and row (11) (Special category and ro-ro spaces), the symbol "A-0" is replaced by the symbol "A-30<sup>g</sup>".

13 In table 9.4, column (2) (Corridors), row (11) (Special category and ro-ro spaces), the symbol "A-15" is replaced by the symbol "A-30<sup>g</sup>".

14 In table 9.4, column (4) (Stairways), row (11) (Special category and ro-ro spaces), the symbol "A-15" is replaced by the symbol "A-30  $^{g}$  ".

15 In table 9.4, column (6) (Machinery spaces of category A), row (11) (Special category and ro-ro spaces), the symbol "A-30" is replaced by the symbol "A-60<sup>g</sup>".

16 In table 9.4, a new note is added as follows:

"<sup>g</sup> Ships constructed before 1 July 2014 shall comply, as a minimum, with the previous requirements applicable at the time the ship was constructed, as specified in regulation 1.2."

17 In table 9.5, column and row (11) (Ro-ro and vehicle spaces), the symbol " $*^{h}$ " is replaced by the symbol "A-30<sup>j</sup>".

18 In table 9.6, column (11) (Ro-ro and vehicle spaces), row (10) (Open decks), the symbol "\*" is replaced by the symbol "A- $0^{j}$ ".

19 In table 9.6, column and row (11) (Ro-ro and vehicle spaces), the symbol "\*<sup>h</sup>" is replaced by the symbol "A- $30^{j}$ ".

20 In table 9.6, column (10) (Open decks), row (11) (Ro-ro and vehicle spaces), the symbol "\*" is replaced by the symbol "A-0<sup>j</sup>".

- 21 In table 9.6, the existing text of note "h" is replaced with the word "deleted".
- 22 In table 9.6, a new note is added as follows:
  - " Ships constructed before 1 July 2014 shall comply, as a minimum, with the previous requirements applicable at the time the ship was constructed, as specified in regulation 1.2."

23 Paragraphs 6.2 and 6.3 are deleted and the subsequent paragraphs are renumbered accordingly.

# Regulation 10 – Fire fighting

- In paragraph 5.6.3, the existing subparagraph .1 is replaced by the following:
  - ".1 the fire hazard portions of internal combustion machinery or, for ships constructed before 1 July 2014, the fire hazard portions of internal combustion machinery used for the ship's main propulsion and power generation;"
- 25 The existing paragraph 10.1 is replaced by the following:
  - "10.1 Types of firefighter's outfits
    - .1 Fire-fighter's outfits shall comply with the Fire Safety Systems Code; and
    - .2 Self-contained compressed air breathing apparatus of fire-fighter's outfits shall comply with paragraph 2.1.2.2 of chapter 3 of the Fire Safety Systems Code by 1 July 2019."
- After the existing paragraph 10.3, the following new paragraph is added:
  - "10.4 Fire-fighter's communication

For ships constructed on or after 1 July 2014, a minimum of two two-way portable radiotelephone apparatus for each fire party for fire-fighter's communication shall be carried on board. Those two-way portable radiotelephone apparatus shall be of an explosion-proof type or intrinsically safe. Ships constructed before 1 July 2014 shall comply with the requirements of this paragraph not later than the first survey after 1 July 2018."

# Part E Operational requirements

## **Regulation 15 – Instructions, onboard training and drills**

27 After the existing paragraph 2.2.5, the following new paragraph is added:

"2.2.6 An onboard means of recharging breathing apparatus cylinders used during drills shall be provided or a suitable number of spare cylinders shall be carried on board to replace those used."

Part G Special requirements

## **Regulation 20 – Protection of vehicle, special category and ro–ro spaces**

The existing paragraph 6.1, including paragraphs 6.1.1 and 6.1.2, are replaced by the following:

## "6.1 Fixed fire-extinguishing systems

(The requirements of paragraphs 6.1.1 and 6.1.2 shall apply to ships constructed on or after 1 July 2014. Ships constructed before 1 July 2014 shall comply with the previously applicable requirements of paragraphs 6.1.1 and 6.1.2.)

6.1.1 Vehicle spaces and ro-ro spaces, which are not special category spaces and are capable of being sealed from a location outside of the cargo spaces, shall be fitted with one of the following fixed fire-extinguishing systems:

- .1 a fixed gas fire-extinguishing system complying with the provisions of the Fire Safety Systems Code;
- .2 a fixed high-expansion foam fire-extinguishing system complying with the provisions of the Fire Safety Systems Code; or
- .3 a fixed water-based fire fighting system for ro-ro spaces and special category spaces complying with the provisions of the Fire Safety Systems Code and paragraphs 6.1.2.1 to 6.1.2.4.

6.1.2 Vehicle spaces and ro-ro spaces not capable of being sealed and special category spaces shall be fitted with a fixed water-based fire-fighting system for ro-ro spaces and special category spaces complying with the provisions of the Fire Safety Systems Code which shall protect all parts of any deck and vehicle platform in such spaces. Such a water-based fire-fighting system shall have:

- .1 a pressure gauge on the valve manifold;
- .2 clear marking on each manifold valve indicating the spaces served;
- .3 instructions for maintenance and operation located in the valve room; and
- .4 a sufficient number of drainage valves to ensure complete drainage of the system."

## CHAPTER III LIFE-SAVING APPLIANCES AND ARRANGEMENTS

# Part B Requirements for ships and life-saving appliances

After existing regulation 17, the following new regulation 17-1 is inserted:

# Regulation 17-1 Recovery of persons from the water

1 All ships shall have ship-specific plans and procedures for recovery of persons from the water, taking into account the guidelines developed by the Organization.<sup>\*</sup> The plans and procedures shall identify the equipment intended to be used for recovery purposes and measures to be taken to minimize the risk to shipboard personnel involved in recovery operations. Ships constructed before 1 July 2014 shall comply with this requirement by the first periodical or renewal safety equipment survey of the ship to be carried out after 1 July 2014, whichever comes first.

2 Ro-ro passenger ships which comply with regulation 26.4 shall be deemed to comply with this regulation.

# APPENDIX CERTIFICATES

30 All the forms of certificates and records of equipment contained in the appendix to the annex are replaced by the following:

Refer to the Guidelines for the development of plans and procedures for recovery of persons from the water (MSC.1/Circ.1412)."

# FORM OF SAFETY CERTIFICATE FOR PASSENGER SHIPS

# PASSENGER SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Passenger Ship Safety (Form P)

(Official seal)

for *an/a short*<sup>1</sup> international voyage

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

#### Particulars of ship<sup>2</sup>

or 
-

All applicable dates shall be completed.

#### THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation I/7 of the Convention.
- 2 That the survey showed that:
- 2.1 the ship complied with the requirements of the Convention as regards:
  - .1 the structure, main and auxiliary machinery, boilers and other pressure vessels;
  - .2 the watertight subdivision arrangements and details;
  - .3 the following subdivision load lines:

Subdivision load lines assigned and marked on the ship's side amidships (regulation II-1/18) <sup>4</sup>	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
P1		
P2		
P3		

<sup>&</sup>lt;sup>1</sup> Delete as appropriate.

<sup>&</sup>lt;sup>2</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>3</sup> In accordance with *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

<sup>&</sup>lt;sup>4</sup> For ships constructed before 1 January 2009, the applicable subdivision notation "C.1, C.2 and C.3" should be used.

- 2.2 the ship complied with the requirements of the Convention as regards structural fire protection, fire safety systems and appliances and fire control plans;
- 2.3 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
- 2.4 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.5 the ship complied with the requirements of the Convention as regards radio installations;
- 2.6 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.7 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.8 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.9 in all other respects the ship complied with the relevant requirements of the Convention;
- 2.10 the ship was/was not<sup>1</sup> subjected to an alternative design and arrangements in pursuance of regulation(s) II-1/55 / II-2/17 / III/38<sup>1</sup> of the Convention;
- 2.11 a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection/life-saving appliances and arrangements<sup>1</sup> is/is not<sup>1</sup> appended to this Certificate.
- 3 That an Exemption Certificate has/has not<sup>1</sup> been issued.

This certificate is valid until

(Place of issue of certificate)

(Date of issue)

(Signature of authorized official issuing the certificate)

<sup>&</sup>lt;sup>1</sup> Delete as appropriate.

## RECORD OF EQUIPMENT FOR PASSENGER SHIP SAFETY (FORM P)

#### RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

#### 1 Particulars of ship

Name of ship ..... Distinctive number or letters ..... Number of passengers for which certified ..... Minimum number of persons with required qualifications to operate the radio installations .....

#### 2 **Details of life-saving appliances**

1	Total number of persons for which life-saving app	liances are provided	
		Port Side	Starboard side
2	Total number of lifeboats		
2.1	Total number of persons accommodated by them		
2.2	Number of partially enclosed lifeboats (regulation III/21 and LSA Code, section 4.5)		
2.3	Number of self-righting partially enclosed lifeboats (regulation III/43 <sup>1</sup> )		
2.4 2.5	Number of totally enclosed lifeboats (regulation III/21 and LSA Code, section 4.6) Other lifeboats		
2.5.1	Number		
2.5.2	Туре		
3	Number of motor lifeboats (included in the total		
U	lifeboats shown above)		
3.1	Number of lifeboats fitted with searchlights		
4	Number of rescue boats		
4.1	Number of boats which are included in the total lifeboats shown above		
4.2	Number of boats which are fast rescue boats		
5	Liferafts		
5.1	Those for which approved launching appliances are required		
5.1.1	Number of liferafts		
5.1.2 5.2	Number of persons accommodated by them Those for which approved launching appliances are not required		
5.2.1	Number of liferafts		
5.2.2	Number of persons accommodated by them		
6	Number of Marine Evacuation Systems (MES)		
6.1	Number of liferafts served by them		
6.2	Number of persons accommodated by them		
7.	Buoyant apparatus		
7.1	Number of apparatus		
7.2	Number of persons capable of being supported		

<sup>&</sup>lt;sup>1</sup> Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998.

#### Details of life-saving appliances (continued) Number of lifebuoys 8 9 Number of lifejackets (total) ..... 9.1 Number of adult lifejackets Number of child lifejackets 9.2 Number of infant lifejackets 9.3 10 Immersion suits 10.1 Total number 10.2 Number of suits complying with the requirements for lifejackets 11 Number of anti-exposure suits 12 Number of thermal protective aids<sup>2</sup> Radio installations used 13 in life-saving appliances Number of search and rescue locating devices 13.1 13.1.1 Radar search and rescue transponders (SART) 13.1.2 AIS search and rescue transmitters (AIS-SART) 13.2 Number of two-way VHF radiotelephone apparatus

#### Details of radio facilities 3

2

	Item	Actual provision
1	Primary systems	
1.1	VHF radio installation	
1.1.1	DSC encoder	
1.1.2	DSC watch receiver	
1.1.3	Radiotelephony	
1.2	MF radio installation	
1.2.1	DSC encoder	
1.2.2	DSC watch receiver	
1.2.3	Radiotelephony	
1.3	MF/HF radio installation	
1.3.1	DSC encoder	
1.3.2	DSC watch receiver	
1.3.3	Radiotelephony	
1.3.4	Direct-printing radiotelegraphy	
1.4	Inmarsat ship earth station	
2	Secondary means of alerting	
3	Facilities for reception of maritime safety information	
3.1	NAVTEX receiver	
3.2	EGC receiver	
3.3	HF direct-printing radiotelegraph receiver	
4	Satellite EPIRB	
4.1	COSPAS-SARSAT	
5	VHF EPIRB	
6	Ship's search and rescue locating device	
6.1	Radar search and rescue transponder (SART)	
6.2	AIS search and rescue transmitter (AIS- SART)	

<sup>2</sup> Excluding those required by the LSA Code, paragraphs 4.1.5.1.24, 4.4.8.31 and 5.1.2.2.13.

#### 4 *Methods used to ensure availability of radio facilities* (regulations IV/15.6 and 15.7)

- 4.1 Duplication of equipment .....
- 4.2 Shore-based maintenance
- 4.3 At-sea maintenance capability.....

## 5 Details of navigational systems and equipment

	Item	Actual provision
1.1	Standard magnetic compass <sup>3</sup>	
1.2	Spare magnetic compass <sup>3</sup>	
1.3	Gyro-compass <sup>3</sup>	
1.4	Gyro-compass heading repeater <sup>3</sup>	
1.5 1.6	Gyro-compass bearing repeater <sup>3</sup> Heading or track control system <sup>3</sup>	
1.0	Pelorus or compass bearing device <sup>3</sup>	
1.8	Means of correcting heading and bearings	
1.9	Transmitting heading device (THD) <sup>3</sup>	
2.1	Nautical charts/Electronic chart display and	
	information system (ECDIS) <sup>4</sup>	
2.2	Back-up arrangements for ECDIS	
2.3	Nautical publications	
2.4	Back-up arrangements for electronic nautical publications	
3.1	Receiver for a global navigation satellite system/terrestrial radionavigation system <sup>314</sup>	
3.2	9 GHz radar <sup>3</sup>	
3.3	Second radar (3 GHz/9 GHz <sup>4</sup> ) <sup>3</sup>	
3.4	Automatic radar plotting aid $(ARPA)^3$	
3.5	Automatic tracking aid <sup>3</sup>	
3.6	Second automatic tracking aid <sup>3</sup>	
3.7	Electronic plotting aid <sup>3</sup>	
4.1	Automatic identification system (AIS)	
4.2	Long-range identification and tracking system	
5	Voyage data recorder (VDR)	
6.1	Speed and distance measuring device (through the water) <sup>3</sup>	
6.2	Speed and distance measuring device (over the ground in the forward and athwartships direction) <sup>3</sup>	
7	Echo-sounding device <sup>3</sup>	
8.1	Rudder, propeller, thrust, pitch and operational mode indicator <sup>3</sup>	
8.2	Rate-of-turn indicator <sup>3</sup>	
9	Sound reception system <sup>3</sup>	
10	Telephone to emergency steering position <sup>3</sup>	
11	Daylight signalling lamp <sup>3</sup>	
12	Radar reflector <sup>3</sup>	
13	International Code of Signals	
14	IAMSAR Manual, Volume III	
15	Bridge navigational watch alarm system (BNWAS)	

<sup>&</sup>lt;sup>3</sup> Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means they shall be specified.

<sup>&</sup>lt;sup>4</sup> Delete as appropriate.

## THIS IS TO CERTIFY that this Record is correct in all respects.

(Date of issue)

(Signature of duly authorized official issuing the Record)

# FORM OF SAFETY CONSTRUCTION CERTIFICATE FOR CARGO SHIPS

## CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE

(Official seal)

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

## Particulars of ship<sup>1</sup>

lame of ship
Distinctive number or letters
Port of registry
Bross tonnage
Deadweight of ship (metric tons) <sup>2</sup>
Bross tonnage Deadweight of ship (metric tons) <sup>2</sup> MO Number <sup>3</sup>

Type of ship<sup>4</sup>

Bulk carrier Oil tanker Chemical tanker Gas carrier Cargo ship other than any of the above

Date of build:

Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character
was commenced (where applicable)

All applicable dates shall be completed.

<sup>&</sup>lt;sup>1</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>2</sup> For oil tankers, chemical tankers and gas carriers only.

<sup>&</sup>lt;sup>3</sup> In accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

<sup>&</sup>lt;sup>4</sup> Delete as appropriate.

#### THIS IS TO CERTIFY:

- 1. That the ship has been surveyed in accordance with the requirements of regulation I/10 of the Convention.
- 2. That the survey showed that the condition of the structure, machinery and equipment as defined in the above regulation was satisfactory and the ship complied with the relevant requirements of chapters II-1 and II-2 of the Convention (other than those relating to fire safety systems and appliances and fire control plans).
- 3. That an Exemption Certificate has/has  $not^4$  been issued.
- 4. That the ship was/was not<sup>4</sup> subjected to an alternative design and arrangements in pursuance of regulation(s)  $II-1/55 / II-2/17^4$  of the Convention.
- 5. That a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection<sup>4</sup> is/is not<sup>4</sup> appended to this Certificate.

This certificate is valid until				
Completion date of the survey on wh	nich this certificate is based:		(dd/mm/yyyy)	
Issued at	(Place of issue of certificate	)		
(Date of issue)	(Signature of authoriz	ed official issuing	g the certificate)	

<sup>&</sup>lt;sup>4</sup> Delete as appropriate.

# FORM OF SAFETY EQUIPMENT CERTIFICATE FOR CARGO SHIPS

## CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety (Form E)

(Official seal)

(State)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

## Particulars of ship<sup>1</sup>

lame of ship	
Distinctive number or letters	
Port of registry	
Gross tonnage Deadweight of ship (metric tons) <sup>2</sup>	
Deadweight of ship (metric tons) <sup>2</sup>	
ength of ship (regulation III/3.12)	
ength of ship (regulation III/3.12) MO Number <sup>3</sup>	

Type of ship<sup>4</sup>

Bulk carrier Oil tanker Chemical tanker Gas carrier Cargo ship other than any of the above

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced.....

#### THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation I/8 of the Convention.
- 2 That the survey showed that:
- 2.1 the ship complied with the requirements of the Convention as regards fire safety systems and appliances and fire control plans;

<sup>&</sup>lt;sup>1</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>2</sup> For oil tankers, chemical tankers and gas carriers only.

<sup>&</sup>lt;sup>3</sup> In accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

<sup>&</sup>lt;sup>4</sup> Delete as appropriate.

- 2.2 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
- 2.3 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.4 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.5 the ship was provided with lights, shapes and means of making sound signals and distress signals in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.6 in all other respects the ship complied with the relevant requirements of the Convention;
- 2.7 the ship was/was not<sup>4</sup> subjected to an alternative design and arrangements in pursuance of regulation(s) II-2/17 / III/38<sup>4</sup> of the Convention;
- 2.8 a Document of approval of alternative design and arrangements for fire protection/ life-saving appliances and arrangements<sup>4</sup> is/is not<sup>4</sup> appended to this Certificate.
- 3 That the ship operates in accordance with regulation III/26.1.1.1<sup>5</sup> within the limits of the trade area .....
- 4 That an Exemption Certificate has/has not<sup>4</sup> been issued.

This certificate is valid until	
Completion date of the survey	on which this certificate is based:(dd/mm/yyyy)
Issued at	
	(Place of issue of certificate)
(Date of issue)	(Signature of authorized official issuing the certificate)

<sup>&</sup>lt;sup>4</sup> Delete as appropriate.

<sup>&</sup>lt;sup>5</sup> Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998 in the case of self-righting partially enclosed lifeboat(s) on board.

## RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY (FORM E)

## RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

#### 1 Particulars of ship

Name of ship ..... Distinctive number or letters .....

#### 2 **Details of life-saving appliances**

1	1 Total number of persons for which life-saving appliances are provided		
		Port side	Starboard side
2	Total number of lifeboats		
2.1	Total number of persons accommodated by		
2.2	them Number of self-righting partially enclosed		
2.2	lifeboats (regulation III/43 <sup>1</sup> )		
2.3	Number of totally enclosed lifeboats		
	(regulation III/31 and LSA Code, section 4.6)		
2.4	Number of lifeboats with a self-contained air support system		
	(regulation III/31 and LSA Code, section 4.8)		
2.5	Number of fire-protected lifeboats		
0.0	(regulation III/31 and LSA Code, section 4.9)		
2.6 2.6.1	Other lifeboats Number		
2.6.2	Туре		
2.7	Number of free-fall lifeboats		
2.7.1	Totally enclosed		
2.7.2	(regulation III/31 and LSA Code, section 4.7) Self-contained		
2.1.2	(regulation III/31 and LSA Code, section 4.8)		
2.7.3	Fire-protected		
_	(regulation III/31 and LSA Code, section 4.9)		
3	Number of motor lifeboats (included in the total lifeboats shown above)		
3.1	Number of lifeboats fitted with searchlights		
4	Number of rescue boats		
4.1	Number of boats which are included in the total		
	lifeboats shown above		
5	Liferafts		
5.1	Those for which approved launching appliances		
5.1.1	are required Number of liferafts		
5.1.2	Number of persons accommodated by them		
5.1.2		•••••	

<sup>&</sup>lt;sup>1</sup> Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998.

## 2 **Details of life-saving appliances** (continued)

5.2	Those for which approved launching appliances	
	are not required	
5.2.1	Number of liferafts	
5.2.2	Number of persons accommodated by them	
5.3	Number of liferafts required by regulation III/31.1.4	
6	Number of lifebuoys	
7	-	
1	Number of lifejackets	
8	Immersion suits	
8.1	Total number	
8.2	Number of suits complying with the	
	requirements for lifejackets	
9	Number of anti-exposure suits	
10	Radio installations used in life-saving	
	appliances	
10.1	Number of search and rescue locating devices	
10.1.1	Radar search and rescue transponders (SART)	
10.1.2	AIS search and rescue transmitters (AIS-SART)	
10.2	· · · · · · · · · · · · · · · · · · ·	
10.2		
	apparatus	

## 3 Details of navigational systems and equipment

	Item	Actual provision
1.1	Standard magnetic compass <sup>2</sup>	
1.2	Spare magnetic compass <sup>2</sup>	
1.3	Gyro-compass <sup>2</sup>	
1.4	Gyro-compass heading repeater <sup>2</sup>	
1.5	Gyro-compass bearing repeater <sup>2</sup>	
1.6	Heading or track control system <sup>2</sup>	
1.7	Pelorus or compass bearing device <sup>2</sup>	
1.8	Means of correcting heading and bearings	
1.9	Transmitting heading device (THD) <sup>2</sup>	
2.1	Nautical charts/Electronic chart display and information system	
0.0	(ECDIS) <sup>3</sup>	
2.2	Back-up arrangements for ECDIS	
2.3	Nautical publications	
2.4	Back-up arrangements for electronic nautical publications	
3.1	Receiver for a global navigation satellite system/terrestrial radionavigation system <sup>2, 3</sup>	
3.2	9 GHz radar <sup>2</sup>	
3.3	Second radar (3 GHz/9 GHz <sup>3</sup> ) <sup>2</sup>	
3.4	Automatic radar plotting aid (ARPA) <sup>2</sup>	
3.5	Automatic tracking aid <sup>2</sup>	
3.6	Second automatic tracking aid <sup>2</sup>	
3.7	Electronic plotting aid <sup>2</sup>	

<sup>&</sup>lt;sup>2</sup> Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means, they shall be specified.

<sup>3</sup> Delete as appropriate.

#### 3 **Details of navigational systems and equipment** (continued)

	Item	Actual provision
4.1	Automatic identification system (AIS)	
4.2	Long-range identification and tracking system	
5.1	Voyage data recorder (VDR) <sup>3</sup>	
5.2	Simplified voyage data recorder (S-VDR) <sup>3</sup>	
6.1	Speed and distance measuring device (through the water) <sup>2</sup>	
6.2	Speed and distance measuring device (over the ground in the forward and athwartships direction) <sup>2</sup>	
7	Echo-sounding device <sup>2</sup>	
8.1	Rudder, propeller, thrust, pitch and operational mode indicator <sup>2</sup>	
8.2	Rate-of-turn indicator <sup>2</sup>	
9	Sound reception system <sup>2</sup>	
10	Telephone to emergency steering position <sup>2</sup>	
11	Daylight signalling lamp <sup>2</sup>	
12	Radar reflector <sup>2</sup>	
13	International Code of Signals	
14	IAMSAR Manual, Volume III	
15	Bridge navigational watch alarm system (BNWAS)	

THIS IS TO CERTIFY that this Record is correct in all respects.

(Date of issue)

(Signature of duly authorized official issuing the Record)

Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means, they shall be specified.

<sup>&</sup>lt;sup>3</sup> Delete as appropriate.

# FORM OF SAFETY RADIO CERTIFICATE FOR CARGO SHIPS

#### CARGO SHIP SAFETY RADIO CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety Radio (Form R)

(Official seal)

(State)

#### Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

by

(name of the State)

(person or organization authorized)

#### **Particulars of ship**<sup>1</sup>

•••
-

#### THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation I/9 of the Convention.
- 2 That the survey showed that:
- 2.1 the ship complied with the requirements of the Convention as regards radio installations;
- 2.2 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention.
- 3 That an Exemption Certificate has/has not<sup>3</sup> been issued.

<sup>&</sup>lt;sup>1</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>2</sup> In accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

<sup>&</sup>lt;sup>3</sup> Delete as appropriate.

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(Date of issue)

(Signature of authorized official issuing the certificate)

# RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY RADIO (FORM R)

## RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

## 1 Particulars of ship

Name of ship	
Distinctive number or letters	
Minimum number of persons with required	
qualifications to operate the radio installations	

#### 2 Details of radio facilities

	Item	Actual provision
1	Primary systems	
1.1	VHF radio installation	
1.1.1	DSC encoder	
1.1.2	DSC watch receiver	
1.1.3	Radiotelephony	
1.2	MF radio installation	
1.2.1	DSC encoder	
1.2.2	DSC watch receiver	
1.2.3	Radiotelephony	
1.3	MF/HF radio installation	
1.3.1	DSC encoder	
1.3.2	DSC watch receiver	
1.3.3	Radiotelephony	
1.3.4	Direct-printing telegraphy	
1.4	Inmarsat ship earth station	
2	Secondary means of alerting	
3	Facilities for reception of maritime safety information	
3.1	NAVTEX receiver	
3.2	EGC receiver	
3.3	HF direct-printing radiotelegraph receiver	
4	Satellite EPIRB	
4.1	COSPAS-SARSAT	
5	VHF EPIRB	
6	Ship's search and rescue locating device	
6.1	Radar search and rescue transponder (SART)	
6.2	AIS search and rescue transmitter (AIS-SART)	

3	Methods used to ensure availability of radio facilities (regulations IV/15.6 and 15.7)
3.1	Duplication of equipment
3.2	Shore-based maintenance
3.3	At-sea maintenance capability
	<b>TO CERTIFY</b> that this Record is correct in all respects. t

(Date of issue)

... (Signature of duly authorized official issuing the Record)

# FORM OF EXEMPTION CERTIFICATE

# **EXEMPTION CERTIFICATE**

(Official s	eal)			(State)
	INTERNATI	lssued under the pro ONAL CONVENTION AT SEA, 1974, a	FOR THE SAFETY	OF LIFE
	u	nder the authority of th	ne Government of	
		(name of the	e State)	
by		(person or organizat	ion authorized)	·····
Particula	rs of ship <sup>1</sup>			
Distinctiv Port of re Gross tor	e number or letters gistry			
THIS IS 1	O CERTIFY:			
	nvention, exempted fro	om the requirements	of	of the Convention.
Condition	s, if any, on which the	Exemption Certificate	-	
Voyages,	if any, for which the E	xemption Certificate		
to the				subject Certificate,
		-		
		(Place of issue of	f certificate)	
(Da	te of issue)	(Signature of	f authorized official	issuing the certificate)

<sup>&</sup>lt;sup>1</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>2</sup> In accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

# FORM OF NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE

## NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Passenger Ship Safety (Form P)

(Official seal)

(State)

for an/a short<sup>1</sup> international voyage

#### Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

# Particulars of ship<sup>2</sup>

lame of ship
Distinctive number or letters
Port of registry
Bross tonnage
tea areas in which ship is certified to operate (regulation IV/2)
MO Number <sup>3</sup>

Date of build:

Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character
was commenced (where applicable)

All applicable dates shall be completed.

## THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation VIII/9 of the Convention.
- 2 That the ship, being a nuclear ship, complied with all the requirements of chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship; and that:
- 2.1 the ship complied with the requirements of the Convention as regards:
  - .1 the structure, main and auxiliary machinery, boilers and other pressure vessels, including the nuclear propulsion plant and the collision protective structure;

<sup>&</sup>lt;sup>1</sup> Delete as appropriate.

<sup>&</sup>lt;sup>2</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>3</sup> In accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

- .2 the watertight subdivision arrangements and details;
- .3 the following subdivision load lines:

Subdivision load lines assigned and marked on the ship's side amidships (regulation II-1/18) <sup>4</sup>	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
P1		
P2		
P3		

- 2.2 the ship complied with the requirements of the Convention as regards structural fire protection, fire safety systems and appliances and fire control plans;
- 2.3 the ship complied with the requirements of the Convention as regards radiation protection systems and equipment;
- 2.4 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
- 2.5 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.6 the ship complied with the requirements of the Convention as regards radio installations;
- 2.7 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.8 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.9 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.10 in all other respects the ship complied with the relevant requirements of the Convention;
- 2.11 the ship was/was not<sup>1</sup> subjected to an alternative design and arrangements in pursuance of regulation(s) II-1/55 / II-2 /17 / III/38<sup>1</sup> of the Convention;
- 2.12 a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection/life-saving appliances and arrangements<sup>1</sup> is/is not<sup>1</sup> appended to this Certificate.

 This certificate is valid until

 Completion date of the survey on which this certificate is based:

 Ssued at

 (Place of issue of certificate)

 (Date of issue)

 (Signature of authorized official issuing the certificate)

<sup>&</sup>lt;sup>1</sup> Delete as appropriate.

For ships constructed before 1 January 2009, the applicable subdivision notation "C.1, C.2 and C.3" should be used.

# FORM OF NUCLEAR CARGO SHIP SAFETY CERTIFICATE

## NUCLEAR CARGO SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety (Form C)

(Official seal)

(State)

Issued under the provisions of the

#### INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

#### **Particulars of ship**<sup>1</sup>

Name of ship
Distinctive number or letters
Port of registry
Gross tonnage
Deadweight of ship (metric tons) <sup>2</sup>
_ength of ship (regulation III/3.12)
Sea areas in which ship is certified to operate (regulation IV/2)
MO Number <sup>3</sup>

Type of ship<sup>4</sup> Bulk carrier Oil tanker Chemical tanker Gas carrier Cargo ship other than any of the above

Date of build:

Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character
was commenced (where applicable)

All applicable dates shall be completed.

<sup>&</sup>lt;sup>1</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes.

<sup>&</sup>lt;sup>2</sup> For oil tankers, chemical tankers and gas carriers only.

In accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).
 Polyte as accordance with the *IMO ship identification number scheme*, adopted by the Organization by resolution A.600(15).

<sup>&</sup>lt;sup>4</sup> Delete as appropriate.

#### THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation VIII/9 of the Convention.
- 2 That the ship, being a nuclear ship, complied with all the requirements of chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship; and that:
- 2.1 the condition of the structure, machinery and equipment as defined in regulation I/10 (as applicable to comply with regulation VIII/9), including the nuclear propulsion plant and the collision protective structure, was satisfactory and the ship complied with the relevant requirements of chapter II-1 and chapter II-2 of the Convention (other than those relating to fire safety systems and appliances and fire control plans);
- 2.2 the ship complied with the requirements of the Convention as regards fire safety systems and appliances and fire control plans;
- 2.3 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
- 2.4 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.5 the ship complied with the requirements of the Convention as regards radio installations;
- 2.6 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.7 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.8 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.9 in all other respects the ship complied with the relevant requirements of the regulations, so far as these requirements apply thereto;
- 2.10 the ship was/was not<sup>3</sup> subjected to an alternative design and arrangements in pursuance of regulation(s) II-1/55 / II-2/17 / III/38<sup>3</sup> of the Convention;
- 2.11 a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection/life-saving appliance and arrangements<sup>3</sup> is/is not<sup>3</sup> appended to this Certificate.

This certificate is valid until.....

Issued at .....

(Place of issue of certificate)

(Date of issue)

(Signature of authorized official issuing the certificate)

<sup>&</sup>lt;sup>3</sup> Delete as appropriate.

# RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY (FORM C)

#### RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETYOF LIFE AT SEA, 1974, AS AMENDED

#### 1 Particulars of ship

Name of ship..... Distinctive number or letters..... Minimum number of persons with required qualifications to operate the radio installations .....

#### 2 **Details of life-saving appliances**

1	Total number of persons for which life-saving appliances are provided:		
		Port side	Starboard side
2	Total number of lifeboats		
2.1	Total number of persons accommodated by them		
2.2	Number of self-righting partially enclosed lifeboats (regulation III/43 <sup>1</sup> )		
2.3	Number of totally enclosed lifeboats (regulation III/31 and LSA Code, section 4.6)		
2.4	Number of lifeboats with a self-contained air support system (regulation III/31 and LSA Code, section 4.8)		
2.5	Number of fire-protected lifeboats (regulation III/31 and LSA Code, section 4.9)		
2.6	Other lifeboats		
2.6.1	Number		
2.6.2	Туре		
2.7	Number of free-fall lifeboats		
2.7.1	Totally enclosed (regulation III/31 and LSA Code, section 4.7)		
2.7.2	Self-contained (regulation III/31 and LSA Code, section 4.8)		
2.7.3	Fire-protected (regulation III/31 and LSA Code, section 4.9)		
3	Number of motor lifeboats (included in the total lifeboats shown above)		
3.1	Number of lifeboats fitted with searchlights		
4	Number of rescue boats		
4.1	Number of boats which are included in the total lifeboats shown above		

<sup>&</sup>lt;sup>1</sup> Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998.

-		
5	Liferafts	
5.1	Those for which approved launching appliances are required	
5.1.1	Number of liferafts	
5.1.2	Number of persons accommodated by them	
5.2	Those for which approved launching appliances are not required	
5.2.1	Number of liferafts	
5.2.2	Number of persons accommodated by them	
5.3	Number of liferafts required by regulation III/31.1.4	
6	Number of lifebuoys	
7	Number of lifejackets	
8	Immersion suits	
8.1	Total number	
8.2	Number of suits complying with the requirements for lifejackets	
9	Number of anti-exposure suits	
10	Radio installations used in life-saving appliances	
10.1	Number of search and rescue locating devices	
10.1.1	Radar search and rescue transponders (SART)	
10.1.2	AIS search and rescue transmitters (AIS-SART)	
10.2	Number of two-way VHF radiotelephone apparatus	

# 3 **Details of radio facilities**

	Item	Actual provision
1	Primary systems	
1.1	VHF radio installation	
1.1.1	DSC encoder	
1.1.2	DSC watch receiver	
1.1.3	Radiotelephony	
1.2	MF radio installation	
1.2.1	DSC encoder	
1.2.2	DSC watch receiver	
1.2.3	Radiotelephony	
1.3	MF/HF radio installation	
1.3.1	DSC encoder	
1.3.2	DSC watch receiver	
1.3.3	Radiotelephony	
1.3.4	Direct-printing telegraphy	
1.4	Inmarsat ship earth station	
2	Secondary means of alerting	
3	Facilities for reception of maritime safety information	
3.1	NAVTEX receiver	
3.2	EGC receiver	
3.3	HF direct-printing radiotelegraph receiver	
4	Satellite EPIRB	
4.1	COSPAS-SARSAT	
5	VHF EPIRB	
6	Ship's search and rescue locating device	
6.1	Radar search and rescue transponder (SART)	
6.2	AIS search and rescue transmitter (AIS-SART)	

# 4 *Methods used to ensure availability of radio facilities* (regulations IV/15.6 and 15.7)

4.1	Duplication of equipment
4.2	Shore-based maintenance
4.3	At-sea maintenance capability

	Item	Actual provision
1.1	Standard magnetic compass <sup>2</sup>	
1.2	Spare magnetic compass <sup>2</sup>	
1.3	Gyro-compass <sup>2</sup>	
1.4	Gyro-compass heading repeater <sup>2</sup>	
1.5	Gyro-compass bearing repeater <sup>2</sup>	
1.6	Heading or track control system <sup>2</sup>	
1.7	Pelorus or compass bearing device <sup>2</sup>	
1.8	Means of correcting heading and bearings	
1.9	Transmitting heading device (THD) <sup>2</sup>	
2.1	Nautical charts/Electronic chart display and information system (ECDIS) <sup>3</sup>	
2.2	Back-up arrangements for ECDIS	
2.3	Nautical publications	
2.4	Back-up arrangements for electronic nautical publications	
3.1	Receiver for a global navigation satellite system/terrestrial radionavigation system <sup>2, 3</sup>	
3.2	9 GHz radar <sup>2</sup>	
3.3	Second radar (3 GHz/9 GHz <sup>3</sup> ) <sup>2</sup>	
3.4	Automatic radar plotting aid (ARPA) <sup>2</sup>	
3.5	Automatic tracking aid <sup>2</sup>	
3.6	Second automatic tracking aid <sup>2</sup>	
3.7	Electronic plotting aid <sup>2</sup>	
4.1	Automatic identification system (AIS)	
4.2	Long-range identification and tracking system	
5.1	Voyage data recorder (VDR) <sup>3</sup>	
5.2	Simplified voyage data recorder (S-VDR) <sup>3</sup>	
6.1	Speed and distance measuring device (through the water) $^{2}$	
6.2	Speed and distance measuring device (over the ground in the forward and athwartships direction) <sup>2</sup>	
7	Echo-sounding device <sup>2</sup>	

<sup>3</sup> Delete as appropriate.

Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means they shall be specified.
 Balate as associate.

## 5 **Details of navigational systems and equipment** (continued)

8.1	Rudder, propeller, thrust, pitch and operational mode indicator <sup>2</sup>	
8.2	Rate-of-turn indicator <sup>2</sup>	
9	Sound reception system <sup>2</sup>	
10	Telephone to emergency steering position <sup>2</sup>	
11	Daylight signalling lamp <sup>2</sup>	
12	Radar reflector <sup>2</sup>	
13	International Code of Signals	
14	IAMSAR Manual, Volume III	
15	Bridge navigational watch alarm system (BNWAS)	

THIS IS TO CERTIFY that this Record is correct in all respects.

(Seal or stamp of the issuing authority, as appropriate)

\*\*\*

<sup>&</sup>lt;sup>2</sup> Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means they shall be specified.