

Regulations of 30 August 2016 No. 1042 on marine equipment

Legal basis: Laid down by the Norwegian Maritime Authority on 30 August 2016 under the Act of 16 February 2007 No. 9 relating to ship safety and security (Ship Safety and Security Act) sections 9, 32 and 45, cf. Formal Delegation of 16 February 2007 No. 171, Formal Delegation of 31 May 2007 No. 590 and Formal Delegation of 29 June 2007 No. 849, Act of 16 June 1994 No. 20 relating to Notified Bodies responsible for carrying out conformity assessments section 7, cf. Formal Delegation of 10 December 1998 No. 1568 and Act of 12 April 2013 No. 13 on the free movement of goods in the EEA (EEA Trade Act) section 2.

EEA references: EEA Agreement Annex II chapter XXXII point. 2 (Directive 2014/90/EU)

Section 1. *Scope of application*

These Regulations apply to marine equipment placed or to be placed on board Norwegian ships and mobile offshore units on or after the dates set out in Annex IV, and to marine equipment to be placed on board EEA ships.

Marine equipment means equipment set out in Appendix A.

EEA ships means ships flying the flag of an EEA member state, which are subject to the scope of application of relevant Conventions from the International Maritime Organization (IMO).

Section 2. *Requirements for marine equipment*

Marine equipment shall satisfy the design, construction, performance and testing requirements set out in Annex A.

Relevant conformity assessments procedures referred to in Annex II shall be used to demonstrate that the marine equipment satisfies the requirements of Annex A.

Marine equipment satisfying the requirements of the second and third paragraphs shall be wheel-marked.

Section 3. *Wheel-marking of marine equipment*

The form of the wheel mark shall be in accordance with Annex I.

The wheel mark shall be affixed visibly, legibly and indelibly to the product or to its data plate. Where relevant, the wheel mark shall be shown in the product's software.

Where affixing pursuant to the second paragraph is not possible on account of the nature of the product, the wheel mark shall be affixed to the packaging and to the accompanying documentation.

The wheel mark shall be affixed at the end of the production phase, along with the year in which the mark is affixed and the identification number of the notified body that has been involved in the quality assurance of the production process.

Section 4. *The manufacturer's responsibilities*

In addition to ensuring that the relevant requirements of Annex II are satisfied, the manufacturer is responsible for guaranteeing that products to which the wheel mark is affixed are in compliance with section 2, and that the relevant conformity assessment procedure has been carried out. Manufacturer means any person who manufactures marine equipment or has marine equipment designed or manufactured, and markets that equipment under its name or trademark.

The manufacturer shall mark the product with a serial number or similar element that can identify the product. The product shall furthermore be marked with the manufacturer's name or registered trademark and contact address.

Where marking pursuant to the second paragraph is not possible on account of the nature of the product, the information shall be indicated on the packaging or in the accompanying documentation.

The product shall be accompanied by the necessary information for correct installation, proper use and maintenance of the product.

When the manufacturer has reason to believe that a product which is wheel-marked by that manufacturer, is not in conformity with section 2, corrective measures shall be implemented immediately to bring that product into conformity. If necessary, the manufacturer shall recall products that have been placed on the market or on

board. Where the product presents a risk, the manufacturer shall immediately inform the Norwegian Maritime Authority.

Manufacturers who are not established in the EEA shall, by a written mandate, appoint an authorised representative who can fulfil the manufacturer's obligations to provide information and documentation and to cooperate with the market surveillance authorities. The representative shall keep declarations of conformity for at least 10 years after the products were wheel-marked, and in no case for a shorter period than the expected life of the products. The manufacturer's responsibility pursuant to the first paragraph cannot be delegated.

Section 5. *Importers and distributors*

Persons or companies established in the EEA are considered importers if they place marine equipment from a third country on the market in the EEA.

Persons or companies in the supply chain other than the manufacturer or the importer, are considered distributors.

The importer shall ensure that the product is marked with the importer's name or registered trademark and contact address.

Where marking pursuant to the third paragraph is not possible on account of the nature of the product, the information shall be indicated on the packaging and in the accompanying documentation.

An importer or distributor who places marine equipment on the market or makes marine equipment available on the market under its name or trademark, has the same responsibilities as the manufacturer when:

- a) such equipment is placed on board an EEA ship; or
- b) modifications have been made to products already placed on the market, and these modifications may affect whether the product is in compliance with section 2.

Section 6. *Conformity assessment procedures*

The manufacturer or the manufacturer's representative shall choose conformity assessment procedures set out in Annex II. Annex A sets out the conformity assessment procedures that are allowed for the equipment in question.

If module B is used, module D, E or F shall also be used.

Conformity assessments shall be carried out by companies which are designated pursuant to the Act of 16 June 1994 No. 20 relating to Notified Bodies, or which are designated pursuant to other member states' rules for conformity assessment bodies and are published on the European Commission's list of notified bodies.

Section 7. *Declaration of conformity*

The manufacturer or the manufacturer's representative shall issue a declaration of conformity in English in accordance with Annex III.

The manufacturer shall provide a copy of the declaration of conformity to the company and to the notified body or bodies that carried out the conformity assessments.

The company shall keep the declaration of conformity on board the ship or unit where the equipment is placed.

Section 8. *Market surveillance*

The Norwegian Maritime Authority supervises the compliance with the provisions of these Regulations.

The Norwegian Maritime Authority shall be given access to the manufacturer's premises, and the Norwegian Maritime Authority may instruct the manufacturer to make product samples available for control. When the Norwegian Maritime Authority so requires, manufacturers or their representatives, importers and distributors (economic operators) shall provide all necessary information and documentation in Norwegian or English to demonstrate that a product is in compliance with section 2.

Economic operators shall keep information about other economic operators to whom they have supplied products or who have supplied them with products. The information shall be kept for at least 10 years after the products were wheel-marked, and in no case for a shorter period than the expected life of the products.

Section 9. *Marine equipment presenting a risk to life, health, the environment or material values*

If any marine equipment is found to present a risk to life, health, the environment or material values, the economic operators are obliged to cooperate with the Norwegian Maritime Authority and to ensure that necessary corrective measures are implemented for equipment placed on the marked and for equipment placed on board.

If any marine equipment is found not to be in compliance with section 2, or when the Norwegian Maritime Authority has reason to believe that a product that is in compliance with section 2, nevertheless presents a risk to life, health, the environment or material values, the Norwegian Maritime Authority may instruct economic operators to implement appropriate corrective measures. If necessary, such instructions may include that products that have been placed on the market or on board, are recalled.

Section 10. *Formal non-compliance*

If marine equipment does not satisfy the requirements for marking, technical documentation or declaration of conformity pursuant to sections 3, 4 and 7, the Norwegian Maritime Authority may instruct the economic operators to implement corrective measures.

If the economic operators do not implement sufficient corrective measures in accordance with the first paragraph, the Norwegian Maritime Authority may restrict or prohibit the marine equipment being made available on the market, or require the marine equipment to be recalled.

Section 11. *Exemptions from requirement for wheel-marked equipment for technical innovations*

In the event of technical innovation, the Norwegian Maritime Authority may in exceptional circumstances permit marine equipment which is not wheel-marked, to be placed on board. The company must document, by trial or otherwise, that the safety is properly ensured.

For such equipment, the Norwegian Maritime Authority shall issue a certificate as evidence that the equipment may be placed on board. Restrictions or other conditions relating to the use of the equipment shall be set out in the certificate. The certificate shall be kept on board and shall follow the equipment.

Section 12. *Exemptions from requirement for wheel-marked equipment for testing and evaluation of equipment*

The Norwegian Maritime Authority may permit marine equipment which is not wheel-marked, and which is not covered by section 11, to be placed on board when the purpose is testing and evaluation of the equipment. Such equipment shall not replace, nor be used in such a way that it may interfere with, equipment required pursuant to section 2.

The Norwegian Maritime Authority shall issue a certificate as evidence that the equipment may be placed on board. Restrictions or other conditions relating to the use of the equipment shall be set out in the certificate. The certificate shall be kept on board, be time-limited and shall follow the equipment.

Section 13. *Exemptions from requirement for wheel-marked equipment when replacing equipment in a port outside the EEA*

In exceptional circumstances when marine equipment needs to be replaced in a port outside the EEA, and where it would take unreasonably long time or cause unreasonably high costs to obtain wheel-marked equipment, other equipment may be placed on board.

Such equipment shall be accompanied by documentation issued by, or on behalf of, a State which has acceded to the relevant convention or conventions. The documentation shall attest compliance with the requirements of the relevant international conventions.

The company shall inform the Norwegian Maritime Authority at once of the equipment in question and give a description of its characteristics. The company shall furthermore give a detailed description of the the circumstances causing such equipment to be placed on board.

The company shall as soon as possible provide the Norwegian Maritime Authority with sufficient documentation, including documentation of testing, to enable the Norwegian Maritime Authority to assess whether the equipment complies with the relevant international conventions.

Section 14. *Exemptions from requirement for wheel-marked equipment when wheel-marked equipment is not available on the market*

When the company can document that any specific wheel-marked equipment is not available on the market, the Norwegian Maritime Authority may permit other equipment to be placed on board.

The equipment shall comply, as much as possible, with the requirements of section 2, and shall be accompanied by an interim certificate issued by the Norwegian Maritime Authority or by another EEA State. The certificate shall provide information on:

- a) the wheel-marked equipment being replaced;
- b) the background for and the necessity of the certificate being issued;
- c) the design, construction and performance requirements on which the certification is based; and
- d) the testing standards applied, if any, for the certification.

Section 15. *Transfer of a ship to the Norwegian flag*

Ships being transferred to the Norwegian flag from a register outside the EEA shall carry marine equipment required in accordance with the relevant international conventions.

The marine equipment shall be wheel-marked. Compliance with international conventions may alternatively be documented in another equivalent way. For such equipment, the Norwegian Maritime Authority shall issue a certificate. Restrictions or other conditions relating to the use of the equipment shall be set out in the certificate.

Marine equipment not satisfying the requirements of the second paragraph shall be replaced.

Section 16. *Exemptions*

For ships engaged on domestic voyages and mobile offshore units the Norwegian Maritime Authority may, upon written application, grant exemptions from the requirements of these Regulations if it is necessary and justifiable in terms of safety.

Section 17. *Entry into force*

These Regulations enter into force on 18 September 2016. As from the same date, the Regulations of 29 December 1998 No. 1455 on marine equipment are repealed.

Appendix A. Equipment for which detailed testing standards already exist in international instruments

Notes applicable to the whole of Appendix A

General note to Appendix A: References to SOLAS regulations refer to the consolidated SOLAS 2014 edition, as last amended by IMO Resolution MSC.366(93).

General note to Appendix A: Within certain item designations, column 5 shows some possible product variants under the same item designation. Product variants are independently provisioned and separated by a full stop from each other. For certification purposes only the relevant product variant shall be chosen, as appropriate (e.g. A/3.3).

- a) General: In addition to the testing standards specifically mentioned, a number of provisions, which must be checked during type-examination (type approval) as referred to in the modules for conformity assessment in Appendix B to these Regulations, are to be found in the international conventions and the relevant resolutions and circulars of the IMO.
- b) Equipment in column 1 in Appendix A which is marked as “Ex A.2/x.yy”, and which is manufactured before 30 April 2016 in accordance with the type approval procedures already in force prior to this date, may be marketed and installed or placed on board ships until 30 April 2018.
- c) Equipment listed in Appendix A column 1 which is marked with the letter “a” and is manufactured before 4 December 2014 in accordance with the type approval procedures already in force prior to this date, may be marketed and installed or placed on board ships until 4 December 2016.
- d) Column 5: Where IMO Resolutions (Res.) are cited, only the testing standards contained in relevant parts of the Annexes to the Resolutions are applicable and exclude the provisions of the Resolutions themselves.
- e) Column 5: International conventions and testing standards are applied in their up-to-date version. For the purpose of identifying correctly the relevant standards, the test reports, certificates of conformity and declarations of conformity shall identify the specific testing standard and its version.
- f) Column 5: Where two sets of standards are separated by “or”, each set fulfils all the testing requirements to meet IMO performance standards. Thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant international instruments. Conversely, when other separators (comma) are used, all the listed references apply.
- g) The requirements laid down in this Appendix shall be without prejudice to carriage requirements in the international conventions.

1. Life-saving appliances

Column 4: IMO MSC/Circ.980 shall apply except when superseded by the specific instruments referred to in column 4.

No.	Item designation	Regulation SOLAS 74, as amended, where “type-approval” is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A/1.1	Lifebuoys	- Reg. III/4, - Reg. X/3.	- Reg. III/7, - Reg. III/34, - IMO Res MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, II, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F

A/1.2	Position-indicating lights for life-saving appliances: a. for survival craft and rescue boats b. for lifebuoys c. for lifejackets	- Reg. III/4, - Reg. X/3.	- Reg. III/7, - Reg. III/22, - Reg. III/26, - Reg. III/32, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) II, IV, - IMO Res. MSC.97(73)- (2000 HSC Code) 8	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.3	Lifebuoys self-activating smoke signals	- Reg. III/4, - Reg. X/3.	- Reg. III/7, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, II, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.4	Lifejackets	- Reg. III/4, - Reg. X/3.	- Reg. III/7, - Reg. III/22, - Reg. III/34, - IMO Res. MSC.36(63) (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, II, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, - IMO MSC/Circ.922, - IMO MSC.1/Circ.1304, - IMO MSC.1/Circ.1470.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.5	Immersion suits and anti-exposure suits designed to be worn in conjunction WITH a lifejacket a) immersion suit without inherent insulation b) immersion suit with inherent insulation c) anti-exposure suit	- Reg. III/4, - Reg. X/3.	- Reg. III/7, - Reg. III/22, - Reg. III/32, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, II, - IMO Res. MSC.97(73)- (2000 HSC) Code 8, - IMO MSC/Circ. 1046.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.6	Immersion suits and anti-exposure suits designed to be worn WITHOUT a lifejacket a) immersion suit without inherent insulation b) immersion suit with inherent insulation c) anti-exposure suit	- Reg. III/4, - Reg. X/3.	- Reg. III/7, - Reg. III/22, - Reg. III/32, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, II, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, - IMO MSC/Circ. 1046.	IMO Res. MSC.81(70).	B+D B+E B+F
A/1.7	Thermal protective aids	- Reg. III/4, - Reg. X/3.	- Reg. III/22, - Reg. III/32, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, II, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, - IMO MSC/Circ. 1046.	IMO Res. MSC.81(70).	B+D B+E B+F

A/1.8	Rocket parachute flares (pyrotechnics)	- Reg. III/4, - Reg. X/3.	- Reg. III/6, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, III, - IMO Res. MSC 97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.9	Hand flares (pyrotechnics)	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, III, - IMO Res. MSC 97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.10	Buoyant smoke signals (pyrotechnics)	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) I, III.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.11	Line-throwing appliances	- Reg. III/4, - Reg. X/3.	- Reg. III/18, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, VII, - IMO Res. MSC 97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.12	Inflatable liferafts	- Reg. III/4, - Reg. X/3.	- Reg. III/13, - Reg. III/21, - Reg. III/26, - Reg. III/31, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, - IMO Res. MSC 97(73)- (2000 HSC Code) 8, - IMO MSC/Circ.811, - IMO MSC.1/Circ.1328.	- IMO Res. MSC.81(70). And for extended service intervals: - IMO MSC.1/Circ.1328.	B+D B+E B+F
A/1.13	Rigid liferafts	- Reg. III/4, - Reg. X/3.	- Reg. III/21, - Reg. III/26, - Reg. III/31, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, - IMO Res. MSC 97(73)- (2000 HSC Code) 8, - IMO MSC/Circ.811.	- IMO Res. MSC.81(70), - IMO MSC/Circ.1006.	B+D B+E B+F
A/1.14	Automatically self-righting liferafts	- Reg. III/4, - Reg. X/3.	- Reg. III/26, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, - IMO Res. MSC 97(73)- (2000 HSC Code) 8, - IMO MSC/Circ.809, - IMO MSC/Circ.811, - IMO MSC.1/Circ.1328.	- IMO Res. MSC.81(70). And for extended service intervals: - IMO MSC.1/Circ.1328.	B+D B+E B+F

A/1.15	Canopied reversible liferafts	- Reg. III/4, - Reg. X/3.	- Reg. III/26, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, - IMO Res. MSC 97(73)- (2000 HSC Code) 8, - IMO MSC/Circ.809, - IMO MSC/Circ.811, - IMO MSC.1/Circ.1328.	- IMO Res. MSC.81(70). And for extended service intervals: - IMO MSC.1/Circ.1328.	B+D B+E B+F
A/1.16	Float-free arrangements for liferafts (hydrostatic release units)	- Reg. III/4, - Reg. X/3.	- Reg. III/13, - Reg. III/26, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, - IMO Res. MSC 97(73)- (2000 HSC Code) 8, - IMO MSC/Circ.811.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.17	Liferafts: a) davit-launched lifeboats: - partially enclosed, - totally enclosed. b) free-fall life-boats.	- Reg. III/4, - Reg. X/3.	- Reg. III/21, - Reg. III/31, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, - IMO Res. MSC 97(73)- (2000 HSC Code) 8. - IMO MSC.1/Circ.1423.	- IMO Res. MSC.81(70), - IMO MSC/Circ.1006.	B+D B+F G
A/1.18	Rigid rescue boats	- Reg. III/4, - Reg. X/3.	- Reg. III/21, - Reg. III/31, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, V, - IMO Res. MSC 97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70), - IMO MSC/Circ.1006.	B+D B+F G
A/1.19	Inflated rescue boats	- Reg. III/4, - Reg. X/3.	- Reg. III/21, - Reg. III/31, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, V, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70), - ISO 15372 (2000).	B+D B+F G
A/1.20	Fast rescue boats: a) inflated, b) rigid, c) rigid-inflated	- Reg. III/4.	- Reg. III/26, - Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) I, V, - IMO MSC/Circ.1016, - IMO MSC/Circ.1094.	- IMO Res. MSC.81(70), - IMO MSC/Circ.1006, - ISO 15372 (2000).	B+D B+F G

A/1.21	Launching appliances using falls (davits)	- Reg. III/4, - Reg. X/3.	- Reg. III/23, - Reg. III/33, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, VI, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F G
A/1.22	Float free launching appliances for survival craft	Moved to A.2/1.3			
A/1.23	Launching appliances for free-fall lifeboats	- Reg. III/4, - Reg. X/3.	- Reg. III/16, - Reg. III/23, - Reg. III/33, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, VI, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F G
A/1.24	Liferaft launching appliances (Davits)	- Reg. III/4, - Reg. X/3.	- Reg. III/12, - Reg. III/16, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, VI, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F G
A/1.25	Fast rescue boat launching appliances (Davits)	- Reg. III/4.	- Reg. III/26, - Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) I, VI.	- IMO Res. MSC.81(70).	B+D B+E B+F G
A/1.26	Release mechanism for: a) lifeboats and rescue boats (launched by a fall or falls) b) liferafts (launched by a fall or falls) c) free fall lifeboats	- Reg. III/4, - Reg. X/3.	- Reg. III/16, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, VI, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, - IMO MSC.1/Circ.1419.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.27	Marine evacuation systems	- Reg. III/4, - Reg. X/3.	- Reg. III/15, - Reg. III/26, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, VI, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81 (70).	B+D B+F G
A/1.28	Means of rescue	- Reg. III/4.	- Reg. III/26, - Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) I, VI.	- IMO Res. MSC.81(70), - MSC/Circ.810.	B+D B+F

A/1.29	Embarkation ladders	- Reg. III/4 - Reg. III/11, - Reg. X/3	- Reg. III/11, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code), - IMO Res. MSC.48(66)- (LSA Code), - IMO Res. MSC.97(73)- (2000 HSC Code), - IMO MSC.1/Circ.1285.	- IMO Res. MSC.81(70), - ISO 5489 (2008).	B+D B+F
A/1.30	Retro-reflective materials	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. A.658(16).	B+D B+E B+F
A/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A/5.17 and A/5.18			
A/1.32	9GHz SAR transponder (SART)	Moved to A/4.18			
A/1.33	Radar reflector for lifeboats and rescue boats (passive)	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. A.384(X), - IMO Res. MSC.36(63)- (1994 HSC Code) 8,- IMO Res. MSC.48(66)-(LSA Code) I, IV, V, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, - IMO Res. MSC.164(78).	- EN ISO 8729 (1998), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - EN ISO 8729 (1998), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - ISO 8729-1 (2010), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - ISO 8729-1 (2010), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B+D B+E B+F
A/1.34	Compass for lifeboats and rescue boats	Moved to A/4.23			
A/1.35	Portable fire-extinguishing equipment for lifeboats and rescue boats	Moved to A/3.38			
A/1.36	Lifeboat/rescue boat propulsion engine	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) IV, V.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.37	Rescue boat propulsion engine – outboard motor	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) V.	- IMO Res. MSC.81(70).	B+D B+E B+F
A/1.38	Searchlights for use in lifeboats and rescue boats	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, IV, V, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F

A/1.39	Open reversible liferafts	- Reg. III/4, - Reg. X/3.	- IMO Res. MSC.36(63)- (1994 HSC Code) 8, Annex 10, - IMO Res. MSC.48(66)- (LSA Code) I, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, Annex 11, - IMO MSC.1/Circ.1328.	- IMO Res. MSC.36(63)- (1994 HSC Code) Annex 10, - IMO Res. MSC.97(73)- (2000 HSC Code) Annex 11. And for extended service intervals: - IMO MSC.1/Circ.1328.	B+D B+F
A/1.40	Mechanical pilot hoist	Moved to A/4.48			
A/1.41	Winches for survival craft and rescue boats: a) davit-launched lifeboats, b) free-fall lifeboats, c) liferafts, d) rescue boats, e) fast rescue boats.	- Reg. III/4, - Reg. X/3.	- Reg. III/16 - Reg. III/17, - Reg. III/23, - Reg. III/24, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, VI, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70).	B+D B+E B+F G
A/1.42	Pilot ladder	Moved to A/4.49			
A/1.43	Rigid/inflated rescue boats	- Reg. III/4, - Reg. X/3.	- Reg. III/21, - Reg. III/31, - Reg. III/34, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, - IMO Res. MSC.48(66)- (LSA Code) I, V, - IMO Res. MSC.97(73)- (2000 HSC Code) 8.	- IMO Res. MSC.81(70), - IMO MSC/Circ.1006, - ISO 15372 (2000).	B+D B+F G

2. Marine pollution prevention

No.	Item designation	Regulation MARPOL 73/78 as amended where "type-approval" is required	Regulations of MARPOL 73/78, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A/2.1	Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	- Annex I, Reg. 14.	- Annex I, Reg. 14, - IMO MEPC.1 /Circ.643.	- IMO Res. MEPC.107(49), - IMO MEPC.1 /Circ.643.	B+D B+E B+F
A/2.2	Oil/water interface detectors	- Annex I, Reg. 32.	- Annex I, Reg. 32	- IMO Res. MEPC.5 (XIII).	B+D B+E B+F
A/2.3	Oil-content meters	- Annex I, Reg. 14.	- Annex I, Reg. 14, - IMO MEPC.1 /Circ.643.	- IMO Res. MEPC.107(49), - IMO MEPC.1 /Circ.643.	B+D B+E B+F
A/2.4	Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Deliberately left blank			
A/2.5	Oil discharge monitoring and control system for oil tankers	- Annex I, Reg. 31, - IMO MEPC.1/Circ.761 Rev. 1.	- Annex I, Reg. 31	- IMO Res. MEPC.108(49).	B+D B+E B+F

A/2.6	Sewage systems	- Annex IV, Reg. 9.	- Annex IV, Reg. 9.	Until 31 December 2015: - IMO Res. MEPC.159(55). As from 1 January 2016: - IMO Res. MEPC.227(64).	B+D B+E B+F
A/2.7	Shipboard incinerators	- Annex VI, Reg. 16.	- Annex VI, Reg. 16, - IMO MEPC.1/Circ.793.	- IMO Res. MEPC.244(66).	B+D B+E B+F G
A/2.8	NOx analyser for use in on board as per NOx Technical Code 2008	- IMO Res. MEPC.176(58)- - (Revised MARPOL Annex VI, Reg. 13)	- IMO Res. MEPC.176(58)- (Revised MARPOL Annex VI, Reg. 13); - IMO Res. MEPC.177(58)- (NOx Technical Code 2008), - IMO Res. MEPC.198(62), - IMO MEPC.1 /Circ.638	- IMO Res. MEPC.177(58)- (NOx Technical Code).	B+D B+E B+F G
A/2.9	Equipment using other technological methods to limit SOx emissions	Moved to A.2/2.4			
A/2.10	On board exhaust gas cleaning systems	- IMO Res. MEPC.176(58)- (Revised MARPOL Annex VI, Reg. 4), - IMO Res. MEPC.259(68).	- IMO Res. MEPC.176(58)- (Revised MARPOL Annex VI, Reg. 4).	- IMO Res. MEPC.259(68).	B+D B+E B+F G

3. Fire protection equipment

No.	Item designation	Regulation SOLAS 74 as amended where "type approval" is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A/3.1	Primary decks coverings	- Reg. II-2/4, - Reg. II-2/6, - Reg. X/3.	- Reg. II-2/4, - Reg. II-2/6, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.2	Portable fire extinguishers	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 4.	- Reg. II-2/4 - Reg. II-2/10, - Reg. II-2/18, - Reg. II-2/19, - Reg. II-2/20, - IMO Res. A.951(23), - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 4, - IMO MSC/Circ.1239, - IMO MSC/Circ.1275.	- EN 3-7(2004) including A.1 (2007), - EN 3-8 (2006) including AC (2007), - EN 3-9 (2006) including AC (2007), - EN 3-10 (2009).	B+D B+E B+F

A/3.3	Fire-fighter's outfit: protective clothing (close proximity clothing)	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 3.	Protective clothing for fire-fighting: - EN 469 (2005) including A1 (2006) and AC (2006). Protective clothing for fire-fighting - Reflective clothing for specialised fire-fighting: - EN 1486 (2007). Protective clothing for fire-fighting - Protective clothing with a reflective outer surface: - ISO 15538 (2001) Level 2.	B+D B+E B+F
A/3.4	Fire-fighter's outfit: boots	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 3.	- EN 15090 (2012).	B+D B+E B+F
A/3.5	Fire-fighter's outfit: gloves	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 3.	- EN 659 (2003) including A1 (2008) and AC (2009).	B+D B+E B+F
A/3.6	Fire-fighter's outfit: helmet	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 3.	- EN 443 (2008).	B+D B+E B+F
A/3.7	Self-contained compressed-air-operated breathing apparatus <i>Note:</i> For use in accidents involving dangerous goods a positive pressure type mask is required.	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97 (73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 3. And where the apparatus is for use in accidents with cargo: - IMO Res. MSC.4(48)- (IBC Code) 14, - IMO Res. MSC.5(48)- (IGC Code) 14.	- EN 136 (1998) including AC (2003), - EN 137 (2006). And where the apparatus is for use in accidents with cargo: - ISO 23269-3 (2011).	B+D B+E B+F
A/3.8	Compressed air line breathing apparatus	- Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 7. <i>Note:</i> This equipment is only for high-speed craft constructed under provisions of the 1994 HSC Code.	- IMO Res. MSC.36(63)- (1994 HSC Code) 7.	- EN 14593-1 (2005), - EN 14593-2 (2005) including AC (2005), - EN 14594 (2005) including AC (2005).	B+D B+E B+F

A/3.9	Sprinkler systems components for accommodation spaces, service spaces and control stations equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited to nozzles and their performance). (Nozzles for fixed sprinkler systems, for high-speed craft (HSC) are included under this item)	- Reg. II-2/7, - Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 8.	- Reg. II-2/7, - Reg. II-2/9, - Reg. II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.44(65), - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 8, - IMO MSC./Circ.912.	- IMO Res. A.800(19).	B+D B+E B+F
A/3.10	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces and cargo pump-rooms	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 7.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97 (73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 7, - IMO MSC./ Circ.1313.	- IMO MSC/Circ.1165, Appendix A.	B+D B+E B+F
A/3.11	“A” and “B” class divisions fire integrity a) “A” class divisions, b) “B” class divisions.	“A” class: - Reg. II-2/3.2. “B” class: - Reg. II-2/3.4.	- Reg. II-2/9, and, “A” class: - Reg. II-2/3.2, - IMO MSC/ Circ.1120, - IMO MSC.1/Circ.1434. “B” class: - Reg. II-2/3.4.	- IMO Res. MSC.307(88)- (2010 FTP Code), - IMO MSC.1/Circ.1435 (the latter is only for “A” class divisions).	B+D B+E B+F
A/3.12	Devices to prevent the passage of flame into the cargo tanks in tankers	- Reg. II-2/4, - Reg. II-2/16.	- Reg. II-2/4, - Reg. II-2/16.	- EN 12874 (2001), - ISO 15364 (2007), - IMO MSC/Circ.677.	For equipment other than valves: B+D B+E B+F For valves: B+F
A/3.13	Non-combustible materials	- Reg. II-2/3, - Reg. X/3.	- Reg. II-2/3, - Reg. II-2/5, - Reg. II-2/9, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.14	Materials other than steel for pipes penetrating “A” or “B” class division	Item included in A/3.26 and A/3.27			
A/3.15	Materials other than steel for pipes conveying oil or fuel oil a) pipes and fittings, b) valves, c) flexible pipe assemblies, d) metallic pipe components with resilient and elastomeric seals.	- Reg. II-2/4, - Reg. X/3.	- Reg. II-2/4, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, 10, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, 10, - IMO MSC/ Circ.1120.	Pipes and fittings: - IMO Res. A.753(18), - IMO Res. MSC.307(88)- (2010 FTP Code). Valves: - ISO 10497 (2010). Flexible pipe assemblies: - ISO 15540 (2001), - ISO 15541 (2001). Metallic pipe components with resilient and elastomeric seals: - ISO 19921 (2005), - ISO 19922 (2005).	B+D B+E B+F
A/3.16	Fire doors	- Reg. II-2/9.	- Reg. II-2/9.	- IMO Res. MSC.307(88)- (2010 FTP Code), - IMO MSC.1/Circ.1319.	B+D B+E B+F

A/3.17	Fire door control systems components. <i>Note:</i> When the term “system components” is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international requirements are fulfilled.	- Reg. II-2/9, - Reg. X/3.	- Reg. II-2/9, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.18	Surface materials and floor coverings with low flame-spread characteristics a) decorative veneers, b) paint systems, c) floor coverings, d) pipe insulation covers, e) adhesives used in the construction of “A”, “B” and “C” class divisions, f) combustible ducts membrane.	- Reg. II-2/3, - Reg. II-2/5, - Reg. II-2/6 for a), b), c), - Reg. II-2/9 for e), f), - Reg. X/3.	- Reg. II-2/3, - Reg. II-2/5, - Reg. II-2/6, - Reg. II-2/9, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO MSC/Circ.1120.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.19	Draperies, curtains and other suspended textile materials and films	- Reg. II-2/3, - Reg. II-2/9, - Reg. X/3.	- Reg. II-2/3, - Reg. II-2/9, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code), - IMO MSC.1/1456.	B+D B+E B+F
A/3.20	Upholstered furniture	- Reg. II-2/3, - Reg. II-2/5, - Reg. II-2/9, - Reg. X/3.	- Reg. II-2/3, - Reg. II-2/5, - Reg. II-2/9, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.21	Bedding components	- Reg. II-2/3, - Reg. II-2/9, - Reg. X/3.	- Reg. II-2/3, - Reg. II-2/9, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.22	Fire dampers	- Reg. II-2/9.	- Reg. II-2/9.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.23	Non-combustible duct penetrations through “A” class divisions	Moved to A/3.26			
A/3.24	Electric cable transits through “A” class divisions	Moved to A/3.26 (a)			
A/3.25	“A” and “B” class fire-proof windows and side scuttles	- Reg. II-2/9.	- Reg. II-2/9, - IMO MSC/Circ.1120.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.26	Penetrations through “A” class divisions a) electric cable transits, b) pipe, duct, trunk, etc. penetrations.	- Reg. II-2/9.	- Reg. II-2/9, - IMO MSC.1/Circ.1276. (only applicable to b))	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.27	Penetrations through “B” class divisions a) electric cable transits, b) pipe, duct, trunk, etc. penetrations.	- Reg. II-2/9.	- Reg. II-2/9.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F

A/3.28	Sprinkler systems (limited to sprinkler heads). (Nozzles for fixed sprinkler systems, for high-speed craft (HSC) are included under this item)	- Reg. II-2/7, - Reg. II-2/10, - Reg. X/3.	- Reg. II-2/7, - Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.44(65), - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 8, - IMO MSC/Circ.912.	- ISO 6182-1 (2014). or - EN 12259-1 (1999) including A1 (2001), A2 (2004) and A3 (2006).	B+D B+E B+F
A/3.29	Fire hoses with diameter ≤ 52 mm	- Reg. II-2/10, - Reg. X/3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- EN 14540 (2004) including A.1 (2007).	B+D B+E B+F
A/3.30	Portable oxygen analysis and gas detection equipment	- Reg. II-2/4, - Reg. VI/3.	- Reg. II-2/4, - Reg. VI/3, - IMO Res. MSC.98(73)- (FSS Code) 15.	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008) or IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60533 (1999), and as applicable to: a) Category 1: (safe area): - EN 50104 (2010), - EN 60079-29-1 (2007). b) Category 2: (explosive gas atmospheres): - EN 50104 (2010), - EN 60079-29-1 (2007), - IEC 60079-0 (2012) including A11:2013, - IEC 60079-1 (2007) including IEC 60079-1 Corrigendum 1 (2008), - IEC 60079-10-1 (2009), - IEC 60079-11 (2012), - IEC 60079-15 (2010), - IEC 60079-26 (2007).	B+D B+E B+F
A/3.31	Nozzles for fixed sprinkler systems, for high-speed craft (HSC)	Item deleted as it is covered by A/3.9 and A/3.28			
A/3.32	Fire restricting materials (except furniture) for high-speed craft	- Reg. X/3.	- IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7. - IMO MSC.1/Circ.1457.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.33	Fire restricting materials for furniture for high-speed craft	- Reg. X/3.	- IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.34	Fire resisting divisions for high-speed craft	- Reg. X/3.	- IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7. - IMO Res. MSC.1/Circ.1457.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F

A/3.35	Fire doors on high-speed craft	- Reg. X/3.	- IMO Res. MSC.36(63)-(1994 HSC Code) 7, - IMO Res. MSC.97(73)-(2000 HSC Code) 7.	- IMO Res. MSC.307(88)-(2010 FTP Code).	B+D B+E B+F
A/3.36	Fire dampers on high-speed craft	- Reg. X/3.	- IMO Res. MSC.36(63)-(1994 HSC Code) 7, - IMO Res. MSC.97(73)-(2000 HSC Code) 7.	- IMO Res. MSC.307(88)-(2010 FTP Code).	B+D B+E B+F
A/3.37	Penetrations through fire resisting divisions on high-speed craft a) electric cable transits, b) pipe, duct, trunk, etc. penetrations	- Reg. X/3.	- IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	- IMO Res. MSC.307(88)-(2010 FTP Code).	B+D B+E B+F
A/3.38	Portable fire-extinguishing equipment for lifeboats and rescue boats	- Reg. III/4, - Reg. X/3.	- Reg. III/34, - IMO Res. A.951(23), - IMO Res. MSC.36(63)-(1994 HSC Code) 8, - IMO Res. MSC.48(66)-(LSA-Code) I, IV, V, - IMO Res. MSC.97(73)-(2000 HSC Code) 8.	- EN 3-7 (2004) including A1 (2007), - EN 3-8 (2006) including AC (2007), - EN 3-9 (2006) including AC (2007), - EN 3-10 (2009).	B+D B+E B+F
A/3.39	Nozzles for equivalent water-mist fire extinguishing systems for machinery spaces and cargo pump rooms	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)-(FSS Code) 7.	- Reg. II-2/10, - IMO Res. MSC.36(63)-(1994 HSC Code) 7, - IMO Res. MSC.97(73)-(2000 HSC Code) 7, - IMO Res. MSC.98(73)-(FSS Code) 7, - IMO MSC.1/Circ.1313, - IMO MSC.1/Circ.1458.	- IMO MSC/Circ.1165.	B+D B+E B+F
A/3.40	Low-location lighting systems (components only)	- Reg. II-2/13, - IMO Res. MSC.98(73)-(FSS Code) 11.	- Reg. II-2/13, - IMO Res. A.752(18), - IMO Res. MSC.98(73)-(FSS Code) 11.	- IMO Res. A.752(18). or - ISO 15370 (2010).	B+D B+E B+F
A/3.41	Emergency escape breathing devices (EEBD)	- Reg. II-2/13.	- Reg. II-2/13, - IMO Res. MSC.98(73)-(FSS Code) 3, - IMO MSC/Circ.849.	- ISO 23269-1 (2008), and alternatively: For self-contained open-circuit compressed air breathing apparatus with full mask or mouthed piece assembly for escape: - EN 402(2003). For self-contained open-circuit compressed air breathing apparatus with a hood for escape: - EN 1146(2005). For self-contained: closed-circuit compressed air breathing apparatus: - EN 13794(2002).	B+D B+E B+F

A/3.42	Inert gas systems components	- Reg. II-2/4.	- Reg. II-2/4, - IMO Res. A.567(14), - IMO Res. MSC.98(73)- (FSS Code) 15, - IMO MSC/Circ.353, - IMO MSC/Circ.485, - IMO MSC/Circ.731, - IMO MSC/Circ.1120.	- IMO MSC/Circ.353.	B+D B+E B+F G
A/3.43	Nozzles for deep fat cooking equipment fire extinguishing systems (automatic or manual type).	- Reg. II-2/1, - Reg. II-2/10, - Reg. X/3.	- Reg. II-2/1, - Reg. II-2/10, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO MSC.1/Circ.1433.	- ISO 15371 (2009).	B+D B+E B+F
A/3.44	Fire-fighters outfit – lifeline	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 3.	- IMO Res. MSC.98(73)- (FSS Code) 3, - IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F
A/3.45	Equivalent fixed gas fire extinguishing systems components (extinguishing medium, head valves and nozzles) for machinery spaces and cargo pump rooms	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 5.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 5, - IMO MSC/Circ.848, - IMO MSC.1/Circ.1313, - IMO MSC.1/Circ.1316.	- IMO MSC/Circ.848, - IMO MSC.1/Circ.1316.	B+D B+E B+F
A/3.46	Equivalent fixed gas fire extinguishing systems for machinery spaces (aerosol systems)	- Reg. II-2/10, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 5.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 5, - IMO MSC.1/Circ.1270 including Corrigendum 1, - IMO MSC.1/Circ.1313.	- IMO MSC.1/Circ.1270 including Corrigendum 1.	B+D B+E B+F
A/3.47	Concentrate for fixed high expansion foam fire extinguishing systems for machinery spaces and cargo pump rooms. <i>Note:</i> The fixed high expansion foam fire extinguishing system (including those systems which use inside air from their working spaces for their intended performance), for machinery spaces and cargo pump rooms must still be tested with the approved concentrate to the satisfaction of the administration.	- Reg. II-2/10.	- Reg. II-2/10, - IMO Res. MSC.98(73)- (FSS Code) 6.	- IMO MSC/Circ.670.	B+D B+E B+F

A/3.48	Fixed water-based local application fire-fighting systems components for use in category "A" machinery spaces (nozzles and performance tests)	- Reg. II-2/10, - Reg. X/3.	- Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- IMO MSC.1/Circ.1387.	B+D B+E B+F
A/3.49	Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces – a) Prescriptive-based systems as per Circ. 1430 Clause 4; b) Prescriptive-based systems as per Circ. 1430 Clause 5.	- Reg. II-2/19, - Reg. II-2/20, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 7.	- Reg. II-2/19, - Reg. II-2/20, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 7.	- IMO MSC.1/Circ.1430.	B+D B+E B+F
A/3.50	Protective clothing resistant to chemical attack	Moved to A.2/3.9			
A/3.51	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces a) Control and indicating equipment b) Power supply equipment c) Heat detectors – Point detectors d) Smoke detectors: Point detectors using scattered light, transmitted light or ionization e) Flame detectors: Point detectors f) Manual call points g) Short circuit isolators h) Input/output devices i) Cables	- Reg. II-2/7, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 9.	- Reg. II-2/7, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 9, - IMO MSC.1/Circ.1242.	Control and indicating equipment. Electrical installations in ships: - EN 54-2 (1997) including AC(1999) and A1(2006). Power supply equipment: - EN 54-4 (1997) including AC(1999), A1(2002) and A2(2006). Heat detectors - Point detectors: - EN 54-5 (2000) including A1(2002). Smoke detectors - Point detectors using scattered light, transmitted light or ionisation: - EN 54-7 (2000) including A1(2002) and A2(2006). Flame detectors - Point detectors: - EN 54-10 (2002) including A1(2005). Manual call points: - EN 54-11 (2001) including A1(2005). Short circuit isolators: - EN 54-17 (2007) including AC(2007). Input/output devices: - EN 54-18 (2005) including AC(2007). Cables: - EN 60332-1-1 (2004), - IEC 60092-376(2003). And, as applicable, electrical and electronic installations in ships: - IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60533 (1999).	B+D B+E B+F
A/3.52	Non-portable and transportable fire extinguishers	- Reg. II-2/10, - Reg. X/3.	- Reg. II-2/4, - Reg. II-2/10, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	- EN 1866-1 (2007), - EN 1866-3 (2013), or - ISO 11601 (2008).	B+D B+E B+F

A/3.53	Fire alarm devices – Sounders	- Reg. II-2/7, - Reg. X/3, - IMO Res. MSC.98(73)- (FSS Code) 9.	- Reg. II-2/7, - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7, - IMO Res. MSC.98(73)- (FSS Code) 9, - IMO MSC.1/Circ.1242.	Sounders: - EN 54-3 (2001) including A1(2002) and A2(2006), - IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60533 (1999).	B+D B+E B+F
A/3.54	Fixed oxygen analysis and gas detection equipment	- Reg. II-2/4, - Reg. VI/3.	- Reg. II-2/4, - Reg. VI/3, - IMO Res. MSC.98(73)- (FSS Code) 15. For combined O ₂ /HC systems additionally: - IMO MSC.1/Circ.1370.	- IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60533 (1999), and as applicable to: (a) Category 4: (safe area): - EN 50104 (2010). (b) Category 3: (explosive gas atmospheres): - EN 50104 (2010), - EN 60079-0 (2011), - EN 60079-29-1 (2007). For combined O ₂ /HC systems additionally: - IMO MSC.1/Circ.1370.	B+D B+E B+F
A/3.55	Dual-purpose type nozzles (spray/jet type)	- Reg. II-2/10, - Reg. X/3.	- Reg. II-2/10 - IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	Hand-held branch pipes for fire service use - Combination branch pipes PN 16: - EN 15182-1 (2007) including A1(2009), - EN 15182-2 (2007) including A1(2009). Hand-held branch pipes for fire service use - Smooth bore jet and/or one fixed spray jet angle branch pipes PN 16: - EN 15182-1 (2007) including A1(2009), - EN 15182-3 (2007) including A1(2009).	B+D B+E B+F
A/3.56	Fire hoses (reel type)	- Reg. II-2/10, - Reg. X/3.	- IMO Res. MSC.36(63)- (1994 HSC Code) 7, - IMO Res. MSC.97(73)- (2000 HSC Code) 7.	EN 671-1 (2012).	B+D B+E B+F
A/3.57	Medium expansion foam fire extinguishing systems components - Fixed deck foam for tankers	- Reg. II-2/10.	- Reg. II-2/10.8.1, - IMO Res. MSC.98(73)- (FSS Code) 14, - IMO MSC.1/Circ.1239, - IMO MSC.1/Circ.1276.	- IMO MSC/Circ.798.	B+D B+E B+F
A/3.58	Fixed low expansion foam fire extinguishing systems components for machinery spaces and tanker deck protection.	- Reg. II-2/10.	- Reg. II-2/10, - IMO Res. MSC.98(73)- (FSS Code) 6, 14, - IMO MSC.1/Circ.1239, - IMO MSC.1/Circ.1276.	- IMO MSC.1/Circ.1312, - IMO MSC.1/Circ.1312/Corr.1.	B+D B+E B+F

A/3.59	Expansion foam for fixed fire extinguishing systems for chemical tankers	- Reg. II-2/1, - IMO Res. MSC.4(48)- (IBC Code) 11.	- IMO Res. MSC.4(48)- (IBC Code) 11, - IMO MSC/Circ.553.	- IMO MSC.1/Circ.1312, - IMO MSC.1/Circ.1312/Corr.1.	B+D B+E B+F
A/3.60	Nozzles for fixed pressure water-spraying fire-extinguishing systems for cabin balconies	- Reg. II-2/10, - IMO Res. MSC.98(73)- (FSS Code) 7.	- Reg. II-2/10, - IMO Res. MSC.98(73)- (FSS Code) 7, - IMO MSC.1/Circ.1313.	- IMO MSC.1/Circ.1268.	B+D B+E B+F
A/3.61	a) Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms. b) Outside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms. <i>Note:</i> Inside(Outside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms shall be tested with the approved concentrate to the satisfaction of the Administration.	- Reg. II-2/10.	- Reg. II-2/10, - IMO Res. MSC.98(73)- (FSS Code) 6.	- IMO MSC.1/Circ.1384.	B+D B+E B+F
A/3.62	Dry chemical powder extinguishing systems	- Reg. II-2/1.	- Reg. II-2/1, - IMO Res. MSC.5(48)- (IGC Code) 11.	- IMO MSC.1/Circ.1315.	B+D B+E B+F
A/3.63	Sample extraction smoke detection systems components	- Reg. II-2/7, - Reg. II-2/19, - Reg. II-2/20.	- Reg. II-2/7, - Reg. II-2/19, - Reg. II-2/20, - IMO Res. MSC.98(73)- (FSS Code) 10.	- IMO Res. MSC.98(73)- (FSS Code) 10, and for: Control and indicating equipment. Electrical installations in ships: - EN 54-2 (1997) including AC(1999) and A1(2006). Power supply equipment: - EN 54-4 (1997) including AC(1999), A1(2002) and A2(2006). Aspiring smoke detectors: - EN 54-20 (2006) including AC(2008). And, as applicable, electrical and electronic installations in ships: - IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60533 (1999). And, as applicable for explosive atmospheres: - EN 60079-0 (2012) including A11:2013.	B+D B+E B+F
A/3.64	C class divisions	- Reg. II-2/3.	- Reg. II-2/3 - Reg. II-2/9.	- IMO Res. MSC.307(88)- (2010 FTP Code).	B+D B+E B+F

A/3.65	Fixed hydrocarbon gas detection system	- Reg. II-2/4.	- Reg. II-2/4, - IMO Res. MSC.98(73)- (FSS Code) 16, - IMO MSC.1/Circ.1370.	- IMO MSC.1/Circ.1370, - EN 60079-0 (2012) including A11:2013. - EN 60079-29-1 (2007), - IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60533 (1999).	B+D B+E B+F
A/3.66	Evacuation guidance systems used as an alternative to low-location lighting systems	- Reg. II-2/13.	- Reg. II-2/13, - IMO MSC.1/Circ.1168.	- IMO MSC.1/Circ.1168.	B+D B+E B+F
A/3.67 "a"	Helicopter facility foam fire-fighting appliances	- Reg. II-2/18.	- Reg. II-2/18, - IMO MSC.1/Circ.1431.	- EN 13565-1 (2003) including A1 (2007)	B+D B+E B+F
A/3.68 Ex A.2/3.22	Galley exhaust duct fixed fire extinguishing systems components	- Reg. II-2/9.	- Reg. II-2/9.	- ISO 15371(2009).	B+D B+E B+F

4. Navigation equipment

Notes applicable to section 4: Navigation equipment.

Column 4: Navigational equipment shall comply with relevant parts of IMO's Assembly Resolution A.1021(26) "Code on alerts and indicators, 2009", and MSC Resolution MSC.302(87) "Adoption of performance standards for bridge alert management", as applicable.

Column 5:

IEC 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems – Digital interfaces:

- IEC 61162-1 ed4.0 (2010-11) – Part 1: Single talker and multiple listeners
- IEC 61162-2 ed1.0 (1998-09) – Part 2: Single talker and multiple listeners, high-speed transmission
- IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07) – Part 3: Serial data instrument network
 - IEC 61162-3 ed1.0 (2008-05) – Part 3: Serial data instrument network
 - IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 – Part 3: Serial data instrument network
 - IEC 61162-3-am2 ed1.0 (2014-07) Amendment 2 – Part 3: Serial data instrument network
- IEC 61162-450 ed1.0 (2011-06) – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection

EN 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems – Digital interfaces:

- EN 61162-1 (2011) – Part 1: Single talker and multiple listeners
- EN 61162-2 (1998) – Part 2: Single talker and multiple listeners, high-speed transmission
- EN 61162-3 (2008) – Part 3: Serial data instrument network
 - EN 61162-3-am1 (2010) Amendment 1 – Part 3: Serial data instrument network
 - IEC 61162-3-am2 ed1.0 (2014-07) Amendment 2 – Part 3: Serial data instrument network
- EN 61162-450 (2011) – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection.

No.	Item designation	Regulation SOLAS 74, as amended, where "type approval" is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable, and ITU recommendations, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6

A/4.1	Magnetic compass Class A for ships	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.382(X), - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- ISO 1069 (1973), - ISO 25862 (2009), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - ISO 1069 (1973), - ISO 25862 (2009), - IEC 60945 (2002) including IEC 60975 Corrigendum 1 (2008).	B+D B+E B+F G
A/4.2	Transmitting heading device THD (magnetic method)	- Reg. V/18, - Reg. V/19, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.116(73), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 (Corrigendum 1 (2008), - EN 61162 series, - ISO 22090-2 (2014), - IEC 62288 Ed. 2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 (Corrigendum 1 (2008), - IEC 61162 series, - ISO 22090-2 (2014), - IEC 62288 Ed. 2.0 (2014- 07).	B+D B+E B+F G
A/4.3	Gyro compass	- Reg. V/18.	- Reg. V/19, - IMO Res. A.424(XI), - IMO Res. A.694(17), - IMO Res. MSC.191(79).	- EN ISO 8728 (1998), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed. 2.0 (2014- 07). or - ISO 8728 (1997), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.4	Radar equipment	Moved to A/4.34, A/4.35 and A/4.36.			
A/4.5	Automatic radar plotting aid (ARPA)	Moved to A/4.34.			
A/4.6	Echo-sounding equipment	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.224(VII), - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.74(69) Annex 4, - IMO Res. MSC 97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79).	- EN ISO 9875 (2001) including ISO Technical Corrigendum 1: 2006, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - ISO 9875 (2000) including ISO Technical Corrigendum 1: 2006, - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G

A/4.7	Speed and distance measuring equipment (SDME)	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. A.824(19), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res.MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum (2008), - EN 61023 (2007), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61023 (2007), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.8	Rudder angle, rpm, pitch indicator	Moved to A/4.20, A/4.21 and A/4.22.			
A/4.9	Rate-of-turn indicator	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13	- Reg. V/19, - IMO Res.A.526(13), - IMO Res.A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res.MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ISO 20672 (2007) including Corrigendum 1 (2008), - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - ISO 20672 (2007) including Corrigendum 1 (2008), - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.10	Direction finder	Deliberately left blank			
A/4.11	Loran-C equipment	Moved to A.2/4.38			
A/4.12	Chayka equipment	Moved to A.2/4.39			
A/4.13	Decca navigator equipment	Deliberately left blank			
A/4.14	GPS equipment	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code), - IMO Res. MSC.97(73)- (2000 HSC Code), - IMO Res. MSC.112(73), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61108-1 (2003), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-1 Ed.2.0 (2003), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G

A/4.15	GLONASS equipment	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.113(73), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61108-2 (1998), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-2 Ed.1.0 (1998), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.16	Heading control system (HCS)	- Reg. V/18.	- Reg. V/19, - IMO Res. A.342(IX), - IMO Res. A.694(17), - IMO Res. MSC.64(67) Annex 3, - IMO Res. MSC.191(79).	- ISO 11674 (2006), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - ISO 11674 (2006), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.17	Mechanical pilot hoist	Moved to A/1.40.			
A/4.18	Search and rescue locating devices (SRLD): 9 GHz SAR transponder (SART)	- Reg. III/4, - Reg. IV/14, - Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. III/6, - Reg. III/26, - Reg. IV/7, - IMO Res. A.530(13), - IMO Res. A.802(19), - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 8, 14, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, 14, - ITU-R M.628-3(11/93).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61097-1 (2007). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-1 (2007).	B+D B+E B+F G
A/4.19	Radar equipment for high speed craft	Moved to A/4.37			
A/4.20	Rudder angle indicator	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ISO 20673 (2007), - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - ISO 20673 (2007), - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G

A/4.21	Propeller revolution indicator	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ISO 22554 (2007), - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - ISO 22554 (2007), - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.22	Pitch indicator	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ISO 22555 (2007), - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - ISO 22555 (2007), - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.23	Compass for lifeboats and rescue boats	- Reg. III/4, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. III/34, - IMO Res. MSC.48(66)- (LSA Code) IV, V, - IMO Res. MSC.36(63)- (1994 HSC Code) 8, 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 8, 13.	- ISO 1069 (1973), - ISO 25862 (2009), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B+D B+E B+F G
A/4.24	Automatic radar plotting aid (ARPA) for high-speed craft	Moved to A/4.37.			
A/4.25	Automatic tracking aid (ATA)	Moved to A/4.35.			
A/4.26	Automatic tracking aid (ATA) for high-speed craft	Moved to A/4.38.			
A/4.27	Electronic plotting aid (EPA)	Moved to A/4.36			
A/4.28	Integrated bridge system	Moved to A.2/4.30			
A/4.29	Voyage data recorder (VDR)	- Reg. V/18, - Reg. V/20, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/20, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79), - IMO Res. MSC.333(90).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - EN 61996-1 (2013), - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 61996-1 Ed. 2.0 (2013-05), - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G

A/4.30	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS).	<ul style="list-style-type: none"> - Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13. 	<ul style="list-style-type: none"> - Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79), - IMO Res. MSC.232(82), - IMO SN.1/Circ.266 <p>[ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested.]</p>	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - EN 61174 (2008), - IEC 62288 Ed.2.0 (2014-07). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 61174 (2008), - IEC 62288 Ed.2.0 (2014-07). 	B+D B+E B+F G
A/4.31	Gyro compass for high-speed craft	<ul style="list-style-type: none"> - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13. 	<ul style="list-style-type: none"> - IMO Res. A.694(17), - IMO Res. A.821(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79). 	<ul style="list-style-type: none"> - ISO 16328 (2014), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07). <p>or</p> <ul style="list-style-type: none"> - ISO 16328 (2014), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07). 	B+D B+E B+F G
A/4.32	Universal automatic identification system equipment (AIS)	<ul style="list-style-type: none"> - Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13. 	<ul style="list-style-type: none"> - Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.74(69), - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79), - ITU-R M. 1371-5(2014). <p><i>Note:</i> ITU-R M. 1371-5(2014) shall only be applicable in accordance with requirements of IMO Res. MSC.74(69).</p>	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - EN 61993-2 (2013), - IEC 62288 Ed.2.0 (2014-07). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 61993-2 (2012), - IEC 62288 Ed.2.0 (2014-07). 	B+D B+E B+F G
A/4.33	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)	<ul style="list-style-type: none"> - Reg. V/18. 	<ul style="list-style-type: none"> - Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.74(69), - IMO Res. MSC.191(79). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62065 Ed.2.0 (2014-02), - IEC 62288 Ed.2.0 (2014-07). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62065 Ed.2.0 (2014-02), - IEC 62288 Ed.2.0 (2014-07). 	B+D B+E B+F G

A/4.34	Radar equipment CAT 1	- Reg. V/18.	- Reg. V/19. - IMO Res. A.278(VIII), - IMO Res. A.694(17), - IMO Res. A.823(19), - IMO Res. MSC.191(79), - IMO Res. MSC.192(79), - ITU-R M. 1177-4(04/11).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07), - EN 62388 (2013). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07), - IEC 62388 Ed.2.0 (2013-06).	B+D B+E B+F G
A/4.35	Radar equipment CAT 2	- Reg. V/18.	- Reg. V/19, - IMO Res. A.278(VIII), - IMO Res. A.694(17), - IMO Res. MSC.191(79), - IMO Res. MSC.192(79), - ITU-R M. 1177-4(04/11).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07), - EN 62388 (2013). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07), - IEC 62388 Ed. 2.0 (2013-06).	B+D B+E B+F G
A/4.36	Radar equipment CAT 3	- Reg. V/18.	- Reg. V/19, - IMO Res. A.278(VIII), - IMO Res. A.694(17), - IMO Res. MSC.191(79), - IMO Res. MSC.192(79), - ITU-R M. 1177-4(04/11).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07), - EN 62388 (2013). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07), - IEC 62388 Ed.2.0 (2013-06).	B+D B+E B+F G
A/4.37	Radar equipment for high-speed craft applications (CAT 1H and CAT 2H)	- Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13.	- IMO Res. A.278(VIII), - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79), - IMO Res. MSC.192(79), - ITU-R M. 1177-4(04/11).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07), - EN 62388 (2013). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07), - IEC 62388 Ed.2.0 (2013-06).	B+D B+E B+F G
A/4.38	Radar equipment approved with a chart option, namely: a) CAT 1C, b) CAT 2C, c) CAT 1HC for HSC, d) CAT 2 HC for HSC.	- Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13.	- IMO Res. A.278(VIII), - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79), - IMO Res. MSC.192(79), - ITU-R M. 1177-4(04/11).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07), - EN 62388 (2013). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07), - IEC 62388 Ed.2.0 (2013-06).	B+D B+E B+F G

A/4.39	Radar reflector – passive type	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.164(78).	- ISO 8729-1 (2010), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - ISO 8729-1 (2010), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B+D B+E B+F G
A/4.40	Heading control system for high-speed craft	- Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- IMO Res. A.694(17), - IMO Res. A.822(19), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79).	- ISO 16329 (2003), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - ISO 16329 (2003), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.41	Transmitting heading device THD (GNSS method)	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.116(73), - IMO Res. MSC.191(79).	- ISO 22090-3 (2014), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - ISO 22090-3 (2010), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.42	Searchlight for high-speed craft	- Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- ISO 17884 (2004), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - ISO 17884 (2004), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B+D B+E B+F G
A/4.43	Night vision equipment for high-speed craft	- Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.94(72), - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.191(79).	- ISO 16273 (2003), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 62288 Ed.2.0 (2014- 07). or - ISO 16273 (2003), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G

A/4.44	Differential beacon receiver for DGPS and DGLONASS equipment	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.114(73).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-4 (2004), - EN 61162 series. or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-4 (2004), - IEC 61162 series.	B+D B+E B+F G
A/4.45	Chart facilities for shipborne radar	Item deleted, as it is covered by A/4.38			
A/4.46	Transmitting heading device THD (gyroscopic method)	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.116(73), - IMO Res. MSC.191(79).	- ISO 22090-1 (2014), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - ISO 22090-1 (2014), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.47	Simplified voyage data recorder (S-VDR)	- Reg. V/20.	- Reg. V/20, - IMO Res. A.694(17), - IMO Res. MSC.163(78), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - EN 61996-2 (2008), - IEC 62288 Ed.2.0 (2014- 07), or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 61996-2 (2007), - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G
A/4.48	Mechanical pilot hoist	Deliberately left blank (as IMO Res. MSC.308(88), in force on 1 July 2012, quotes: "Mechanical pilot hoists shall not be used")			
A/4.49	Pilot ladder	- Reg. V/23, - Reg. X/3.	- Reg. V/23, - IMO Res. A.1045(27), - IMO MSC/Circ.1428.	- IMO Res. A.1045(27), - ISO 799 (2004).	B+D B+E B+F G
A/4.50	DGPS equipment	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.964(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 13, - IMO Res. MSC.97(73)- (2000 HSC Code) 13, - IMO Res. MSC.112(73), - IMO Res. MSC.114(73), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61108-1 (2003), - EN 61108-4 (2004), - EN 61162 series, - IEC 62288 Ed.2.0 (2014- 07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-1 (2003), - IEC 61108-4 (2004), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014- 07).	B+D B+E B+F G

A/4.51	DGLONASS equipment	<ul style="list-style-type: none"> - Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13. 	<ul style="list-style-type: none"> - Reg. V/19, - IMO Res. A.964(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.113(73), - IMO Res. MSC.114(73), - IMO Res. MSC.191(79). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61108-2 (1998), - EN 61108-4 (2004), - EN 61162 series, - IEC 62288 Ed.2.0 (2014-07). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-2 (1998), - IEC 61108-4 (2004), - IEC 61162 series, - IEC 62288 Ed.2.0 (2014-07). 	<ul style="list-style-type: none"> B+D B+E B+F G
A/4.52	Daylight signalling lamp	<ul style="list-style-type: none"> - Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code), - IMO Res. MSC.97(73)-(2000 HSC Code). 	<ul style="list-style-type: none"> - Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code), - IMO Res. MSC.95(72), - IMO Res. MSC.97(73)-(2000 HSC Code). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ISO 25861 (2007). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ISO 25861 (2007). 	<ul style="list-style-type: none"> B+D B+E B+F
A/4.53	Radar target enhancer	<ul style="list-style-type: none"> - Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13. 	<ul style="list-style-type: none"> - Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.164(78), - ITU-R M.1176-1 (02/13). 	<ul style="list-style-type: none"> - ISO 8729-2 (2009), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). <p>or</p> <ul style="list-style-type: none"> - ISO 8729-2 (2009), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). 	<ul style="list-style-type: none"> B+D B+E B+F G
A/4.54	Bearing device	<ul style="list-style-type: none"> - Reg. V/18. 	<ul style="list-style-type: none"> - Reg. V/19. 	<ul style="list-style-type: none"> - ISO 25862 (2009), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). <p>or</p> <ul style="list-style-type: none"> - ISO 25862 (2009), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). 	<ul style="list-style-type: none"> B+D B+E B+F G
A/4.55	Search and rescue locating devices (SRLD): AIS SART equipment	<ul style="list-style-type: none"> - Reg. III/4, - Reg. IV/14. 	<ul style="list-style-type: none"> - Reg. III/6, - Reg. III/26, - Reg. IV/7, - IMO Res. MSC.246(83), - IMO Res. MSC.256(84), - ITU-R M.1371-5(2014). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61097-14 (2010). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-14 (2010). 	<ul style="list-style-type: none"> B+D B+E B+F G

A/4.56	Galileo receiver	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. A.813(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79), - IMO Res. MSC.233(82).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61108-3 (2010), - EN 61162 series, - IEC 62288 Ed. 2.0 (2014-07). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61108-3 (2010), - IEC 61162 series, - IEC 62288 Ed. 2.0 (2014-07).	B+D B+E B+F G
A/4.57	Bridge navigational watch alarm system (BNWAS)	- Reg. V/18.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.128(75), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - IEC 62288 Ed. 2.0 (2014-07), - IEC 62616(2010) including IEC 62616 Corrigendum 1 (2012). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed. 2.0 (2014-07), - IEC 62616 (2010) including IEC 62616 Corrigendum 1 (2012).	B+D B+E B+F G
A/4.58 "a"	Sound reception system	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code), - IMO Res. MSC.97(73)-(2000 HSC Code).	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code), - IMO Res. MSC.86(70), - IMO Res. MSC.97(73)-(2000 HSC Code), - IMO Res. MSC.191(79).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - EN 62288 Ed. 2.0 (2014-07), - ISO 14859 (2012). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed. 2.0 (2014-07), - ISO 14859 (2012).	B+D B+E B+F G
A/4.59 "a"	Integrated navigation system	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13.	- Reg. V/19, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13, - IMO Res. MSC.191(79), - IMO Res. MSC.252(83), - IMO Res. MSC.302(83) – (Bridge Alert Management, (BAM)).	- EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - EN 62288 Ed. 2.0 (2014-07), - IEC 61924-2 (2012). or - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - IEC 62288 Ed. 2.0 (2014-07), - IEC 61924-2 (2012).	B+D B+E B+F G

5. Radio-communication equipment

Notes applicable to section 5: Radio-communication equipment.

Column 5: In case of conflicting requirements between IMO MSC/Circ.862 and the product testing standards, the IMO MSC/Circ.862 requirements shall take precedence.

Column 5:

IEC 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems – Digital interfaces:

- IEC 61162-1 ed4.0 (2010-11) – Part 1: Single talker and multiple listeners

- IEC 61162-2 ed1.0 (1998-09) – Part 2: Single talker and multiple listeners, high-speed transmission
- IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07) – Part 3: Serial data instrument network
 - IEC 61162-3 ed1.0 (2008-05) – Part 3: Serial data instrument network
 - IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 – Part 3: Serial data instrument network
 - IEC 61162-3-am2 ed1.0 (2014-07) Amendment 2 – Part 3: Serial data instrument network
- IEC 61162-450 ed1.0 (2011-06) – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection

EN 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems – Digital interfaces:

- EN 61162-1 (2011) – Part 1: Single talker and multiple listeners
- EN 61162-2 (1998) – Part 2: Single talker and multiple listeners, high-speed transmission
- EN 61162-3 (2008) – Part 3: Serial data instrument network
 - EN 61162-3-am1 (2010) Amendment 1 – Part 3: Serial data instrument network
 - IEC 61162-3-am2 ed1.0 (2014-07) Amendment 2 – Part 3: Serial data instrument network
- EN 61162-450 (2011) – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection.

No.	Item designation	Regulation SOLAS- 74, as amended, where “type approval” is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable, and ITU recommendations, as applicable.	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/7, - Reg. X/3, - IMO Res. A.385(X), - IMO Res. A.524(13), - IMO Res. A.694(17), - IMO Res. A.803(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO MSC/Circ.862, - IMO MSC.1/Circ.1460, - IMO COMSAR Circ.32, - ITU-R M.489-2 (10/95), - ITU-R M.493-13 (10/09), - ITU-R M.541-9 (05/04), - ITU-R M.689-3 (03/12). 	<ul style="list-style-type: none"> - IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI EN 300 338-1 V1.3.1 (2010-02), - ETSI EN 300 338-2 V1.3.1 (2010-02), - ETSI EN 301 843-2 V1.2.1 (2004-06), - ETSI EN 301 925 V1.4.1 (2013-05). 	<ul style="list-style-type: none"> B+D B+E B+F
A/5.2	VHF DSC watch-keeping receiver	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/7, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. A.803(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO COMSAR Circ.32, - ITU-R M.489-2 (10/95), - ITU-R M.493-13 (10/09), - ITU-R M.541-9 (05/04). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI EN 300 338-1 V1.3.1 (2010-02), - ETSI EN 300 338-2 V1.3.1 (2010-02), - ETSI EN 301 033 V1.4.1 (2013-09), - ETSI EN 301 843-2 V1.2.1. (2004-06). 	<ul style="list-style-type: none"> B+D B+E B+F

A/5.3	NAVTEX receiver	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/7, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO Res. MSC.148(77), - IMO COMSAR Circ.32, - ITU-R M.540-2 (06/90), - ITU-R M.625-4 (03/12). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ETSI EN 300 065-1 V1.2.1 (2009-01), - ETSI EN 301 843-4 V1.2.1 (2004-06), <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-6 (2012-01). 	B+D B+E B+F
A/5.4	EGC receiver	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/7, - Reg. X/3, - IMO Res. A.570(14), - IMO Res. A.694(17), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO Res. MSC.306(87), - IMO COMSAR Circ.32. 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ETSI ETS 300 460 Ed.1 (1996-05), - ETSI ETS 300 460/ A1 (1997-11), - ETSI EN 300 829 V1.1.1 (1998-03), - ETSI EN 301 843-1 V1.3.1 (2012-08). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-4 (2012-05). 	B+D B+E B+F
A/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/7, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. A.699(17), - IMO Res. A.700(17), - IMO Res. A.806(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO MSC.1/Circ.1460, - IMO COMSAR Circ.32, - ITU-R M.492-6 (10/95), - ITU-R M.540-2 (06/90), - ITU-R M.625-4 (03/12), - ITU-R M.688 (06/90). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI ETS 300 067 Ed.1 (1990-11), - ETSI ETS 300 067/ A1 Ed.1 (1993-10). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61162 series, - ETSI ETS 300 067 Ed.1 (1990-11), - ETSI ETS 300 067/ A1 Ed.1 (1993-10). 	B+D B+E B+F
A/5.6	406 MHz EPIRB (COSPAS-SARSAT)	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/7, - Reg. X/3, - IMO Res. A.662(16), - IMO Res. A.694(17), - IMO Res. A.696(17), - IMO Res. A.810(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO MSC/Circ.862, - IMO COMSAR Circ.32, - ITU-R M.633-4 (12/10), - ITU-R M.690-2 (03/12). 	<ul style="list-style-type: none"> - IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ETSI EN 300 066 V 1.3.1 (2001-01). <p>or</p> <ul style="list-style-type: none"> - IMO MSC/Circ.862, - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-2 (2008). <p><i>Note:</i> IMO MSC/Circ. 862 is applicable only to the optional remote activation device, not to the EPIRB itself.</p>	B+D B+E B+F
A/5.7	L-band EPIRB (INMARSAT)	Deliberately left blank			
A/5.8	MF DSC receiver	Deliberately left blank			
A/5.9	Two-tone alarm generator	Deliberately left blank			

A/5.10	<p>MF radio capable of transmitting and receiving DSC and ra-diotelephony.</p> <p><i>Note:</i> In line with IMO and ITU decisions, the requirements for two-tone alarm generator and transmission on H3E are no longer applicable in the testing standards</p>	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/9, - Reg. IV/10, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. A.804(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO MSC.1/Circ.1460, - IMO COMSAR Circ.32, - ITU-R M.493-13 (10/09), - ITU-R M.541-9 (05/04). 	<ul style="list-style-type: none"> - IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI EN 300 338-1 V1.3.1 (2010-02), - ETSI EN 300 338-2 V1.3.1 (2010-02), - ETSI ETS 300 373-1 V1.4.1 (2013-09), - ETSI EN 301 843-5 V1.1.1 (2004-06). 	<p>B+D B+E B+F</p>
A/5.11	<p>MF DSC watchkeeping receiver</p>	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/9, - Reg. IV/10, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. A.804(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO COMSAR Circ.32, - ITU-R M.493-13 (10-09), - ITU-R M.541-9 (05/04), - ITU-R M.1173-1 (03/12). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI EN 300 338-1 V1.3.1 (2010-02), - ETSI EN 300 338-2 V1.3.1 (2010-02), - ETSI EN 301 033 V1.4.1 (2013-09), - ETSI EN 301 843-5 V1.1.1 (2004-06). 	<p>B+D B+E B+F</p>
A/5.12	<p>Inmarsat-B SES</p> <p><i>Note:</i> The service will be discontinued on and after 31 December 2016.</p>	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/10, - Reg. X/3, - IMO Res. A.570(14), - IMO Res. A.694(17), - IMO Res. A.808(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO MSC/Circ.862, - IMO COMSAR Circ.32. 	<ul style="list-style-type: none"> - IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). <p>or</p> <ul style="list-style-type: none"> - IMO MSC/Circ.862, - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). 	<p>B+D B+E B+F</p>
A/5.13	<p>Inmarsat-C SES</p>	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/10, - Reg. X/3, - IMO Res. A.570(14), - IMO Res. A.664 (16), (applicable only if the Inmarsat C SES comprises EGC functions), - IMO Res. A.694(17), - IMO Res. A.807(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO Res. MSC.306(87), - IMO MSC/Circ.862, - IMO COMSAR Circ.32. 	<ul style="list-style-type: none"> - IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI ETS 300 460 Ed.1 (1996-05), - ETSI ETS 300 460/ A1 (1997-11), - ETSI EN 300 829 V1.1.1 (1998-03), - ETSI EN 301 843-1 V1.3.1 (2012-08). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-4 (2012), - IEC 61162 series. 	<p>B+D B+E B+F</p>

A/5.14	<p>MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony</p> <p><i>Note:</i> In line with IMO and ITU decisions, the requirements for two-tone alarm generator and transmission on A3H are no longer applicable in testing standards.</p>	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/10, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. A.806(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO MSC/Circ.862, - IMO MSC.1/Circ.1460, - IMO COMSAR Circ.32, - ITU-R M.476-5 (10/95), - ITU-R M.492-6 (10/95), - ITU-R M.493-13 (10/09), - ITU-R M.541-9 (05/04), - ITU-R M.625-4 (03/12), - ITU-R M.1173-1 (03/12). 	<ul style="list-style-type: none"> - IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI ETS 300 067 Ed.1 (1990-11), - ETSI ETS 300 067/ A1 Ed.1 (1993-10), - ETSI EN 300 338-1 V1.3.1 (2010-02), - ETSI EN 300 338-2 V1.3.1 (2010-02), - ETSI ETS 300 373-1 V1.4.1 (2013-09), - ETSI ETS 301 843-5 V1.1.1 (2004-06). 	B+D B+E B+F
A/5.15	MF/HF DSC scanning watchkeeping receiver	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. IV/10, - Reg. X/3, - IMO Res. A.694(17), - IMO Res. A.806(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14, - IMO COMSAR Circ.32, - ITU-R M.493-13 (10/09), - ITU-R M.541-9 (05/04). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - EN 61162 series, - ETSI EN 300 338-1 V1.3.1 (2010-02), - ETSI EN 300 338-2 V1.3.1 (2010-02), - ETSI EN 301 033 V1.4.1 (2013-09), - ETSI EN 301 843-5 V1.1.1 (2004-06). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-3 (1994), - IEC 61097-8 (1998), - IEC 61162 series. 	B+D B+E B+F
A/5.16	Aeronautical two way VHF radio telephone apparatus	Moved to A.2/5.8			
A/5.17	Portable survival craft two-way VHF radiotelephone apparatus.	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. III/6, - IMO Res. A.694(17), - IMO Res.A.809(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, - IMO Res. MSC.149(77), - ITU-R M.489-2 (10/95). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ETSI EN 300 225 V1.4.1 (2004-12), - ETSI EN 301 843-2 V1.2.1 (2004-06). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-12 (1996). 	B+D B+E B+F
A/5.18	Fixed survival craft two-way VHF radiotelephone apparatus.	<ul style="list-style-type: none"> - Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 14. 	<ul style="list-style-type: none"> - Reg. III/6, - IMO Res. A.694(17), - IMO Res. A.809(19), - IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, - IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, - ITU-R M.489-2 (10/95). 	<ul style="list-style-type: none"> - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - ETSI EN 301 466 V1.1.1 (2000-10). <p>or</p> <ul style="list-style-type: none"> - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-12 (1996). 	B+D B+E B+F

A.5.19	Inmarsat-F77	- Reg. IV/14, - Reg. X/3, - IMO Res. MSC.36(63)- (1994 HSC Code) 14, - IMO Res. MSC.97(73)- (2000 HSC Code) 14.	- Reg. IV/10, - IMO Res. A.570(14), - IMO Res. A.808(19), - IMO Res. A.694(17), - IMO Res. MSC.36(63)- (1994 HSC Code) 14, - IMO Res. MSC.97(73)- (2000 HSC Code) 14, - IMO MSC/Circ.862, - IMO COMSAR Circ.32.	- IMO MSC/Circ.862, - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC 61097-13 (2003). or - IMO MSC/Circ.862, - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-13 (2003).	B+D B+E B+F
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6. Equipment required under COLREG 72

No.	Item designation	Regulation COLREG 72 where “type approval” is required	Regulations of COLREG and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A/6.1	Navigation lights	- COLREG Annex I/14.	- COLREG Annex I/14, - IMO Res. A.694(17), - IMO Res. MSC.253(83).	- EN 14744 (2005) including AC (2006), - EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). or - EN 14744 (2005) including AC (2006), - IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B+D B+E B+F G

7. Bulk carrier safety equipment

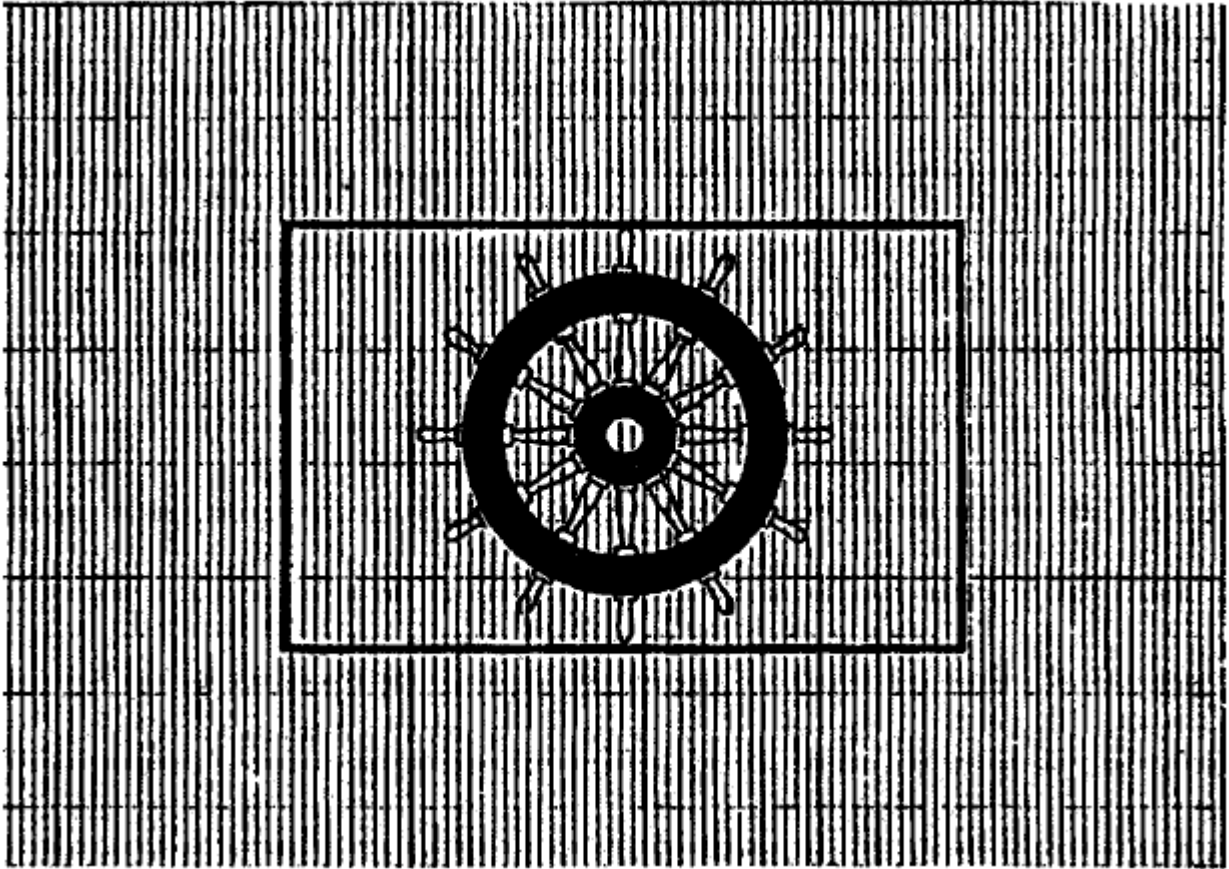
No items in Appendix A

8. Equipment under SOLAS Chapter II-1. Construction – structure, subdivision and stability, machinery and electrical installations

No.	Item designation	Regulation SOLAS 74, where “type approval” is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A/8.1	Water level detectors	- Reg. II-1/22-1, - Reg. II-1/25, - Reg. XII/12.	- Reg. II-1/25, - Reg. XII/12, - IMO Res. A.1021(26), - IMO Res. MSC.188(79), - IMO MSC.1/Circ.1464 Rec.1.	- IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), - IEC 60529 Ed.2.2 (2001), - IMO Res. MSC.188(79), - IMO MSC.1/Circ.1291.	B+D B+E B+F

Appendix I Wheel mark

The mark of conformity must take the following form:



If the wheel mark is reduced or enlarged the proportions given in the graduated drawing must be respected.

The various components of the wheel mark must have substantially the same vertical dimension, which may not be less than 5 mm.

That minimum dimension may be waived for small devices.

Appendix II Conformity assessment procedures

I. Module B: EC type-examination

1. EC type-examination is the part of a conformity assessment procedure in which a notified body examines the technical design of marine equipment and verifies and attests that the technical design of the marine equipment meets the relevant requirements.
2. EC type-examination may be carried out in either of the following manners:
 - examination of a specimen, representative of the production envisaged, of the complete product (production type);
 - assessment of the adequacy of the technical design of the marine equipment through examination of the technical documentation and supporting evidence referred to in point 3, plus examination of specimens, representative of the production envisaged, of one or more critical parts of the product (combination of production type and design type).

3. The manufacturer shall lodge an application for EC type-examination with a single notified body of its choice.

The application shall include:

- the name and address of the manufacturer and, if the application is lodged by the authorised representative, its name and address as well;
- a written declaration that the same application has not been lodged with any other notified body;
- the technical documentation. The technical documentation shall make it possible to assess the conformity of the marine equipment with the applicable requirements of the international instruments as referred to in Article 4, and shall include an adequate analysis and assessment of the risk(s). The technical documentation shall specify the applicable requirements and shall cover, as far as relevant for the assessment, the design, manufacture and operation of the marine equipment. The technical documentation shall contain, wherever applicable, at least the following elements:
 - a) a general description of the marine equipment;
 - b) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
 - c) descriptions and explanations necessary for the understanding of those drawings and schemes and of the operation of the marine equipment;
 - d) a list of the requirements and testing standards which are applicable to the marine equipment concerned in accordance with this Directive, together with a description of the solutions adopted to meet those requirements;
 - e) results of design calculations made, examinations carried out,
 - f) test reports;
- the specimens representative of the production envisaged. The notified body may request further specimens if needed for carrying out the test programme;
- the supporting evidence for the adequacy of the technical design solution. This supporting evidence shall mention any documents that have been used. The supporting evidence shall include, where necessary, the results of tests carried out by the appropriate laboratory of the manufacturer, or by another testing laboratory on the manufacturer's behalf and under its responsibility.

4. The notified body shall:

For the marine equipment:

- 4.1 examine the technical documentation and supporting evidence to assess the adequacy of the technical design of the marine equipment;

For the specimen(s):

- 4.2 verify that the specimen(s) have been manufactured in conformity with the technical documentation, and identify the elements which have been designed in accordance with the applicable provisions of the relevant requirements and testing standards, as well as the elements which have been designed without applying the relevant provisions of those standards;
- 4.3 carry out appropriate examinations and tests, or have them carried out, in accordance with this Directive;
- 4.4 agree with the manufacturer on a location where the examinations and tests will be carried out.

5. The notified body shall draw up an evaluation report that records the activities undertaken in accordance with point 4 and their outcomes. Without prejudice to its obligations vis-à-vis the notifying authorities, the notified body shall release the content of that report, in full or in part, only with the agreement of the manufacturer.

6. Where the type meets the requirements of the specific international instruments that apply to the marine equipment concerned, the notified body shall issue an EC type-examination certificate to the manufacturer. The certificate shall contain the name and address of the manufacturer, the conclusions of the examination, the conditions (if any) for its validity and the necessary data for identification of the approved type. The certificate may have one or more annexes attached.

The certificate and its annexes shall contain all relevant information to allow the conformity of manufactured products with the examined type to be evaluated and to allow for in-service control.

Where the type does not satisfy the applicable requirements of the international instruments, the notified body shall refuse to issue an EC type-examination certificate and shall inform the applicant accordingly, giving detailed reasons for its refusal.

7. If the approved type no longer complies with the applicable requirements, the notified body shall determine whether further testing or a new conformity assessment procedure is necessary.

The manufacturer shall inform the notified body that holds the technical documentation relating to the EC type-examination certificate of all modifications to the approved type that may affect the conformity of the marine equipment with the requirements of the relevant international instruments or the conditions for validity of the certificate. Such modifications shall require additional approval in the form of an addition to the original EC type-examination certificate.

8. Each notified body shall inform its notifying authorities concerning the EC type-examination certificates and/or any additions thereto which it has issued or withdrawn, and shall, periodically or upon request, make available to its notifying authorities the list of certificates and/or any additions thereto refused, suspended or otherwise restricted.

Each notified body shall inform the other notified bodies concerning the EC type-examination certificates and/or any additions thereto which it has refused, withdrawn, suspended or otherwise restricted, and, upon request, concerning the certificates and/or additions thereto which it has issued.

The Commission, the Member States and the other notified bodies may, on request, obtain a copy of the EC type-examination certificates and/or additions thereto. On request, the Commission and the Member States may obtain a copy of the technical documentation and the results of the examinations carried out by the notified body. The notified body shall keep a copy of the EC type-examination certificate, its annexes and additions, as well as the technical file including the documentation submitted by the manufacturer, until the expiry of the validity of the certificate.

9. The manufacturer shall keep a copy of the EC type-examination certificate, its annexes and additions together with the technical documentation at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.
10. The manufacturer's authorised representative may lodge the application referred to in point 3 and fulfil the obligations set out in points 7 and 9, provided that they are specified in the mandate.

II. Module D: Conformity to type based on quality assurance of the production process

1. Conformity to type based on quality assurance of the production process is the part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2 and 5, and ensures and declares on its sole responsibility that the marine equipment concerned is in conformity with the type described in the EC type-examination certificate and that it satisfies the requirements of the international instruments that apply to it.
2. *Manufacturing*

The manufacturer shall operate an approved quality system for production, final product inspection and testing of the products concerned as specified in point 3, and shall be subject to surveillance as specified in point 4.

3. *Quality system*

3.1 The manufacturer shall lodge an application for assessment of its quality system with the notified body of its choice, for the marine equipment concerned.

The application shall include:

- the name and address of the manufacturer and, if the application is lodged by the authorised representative, its name and address as well;
- a written declaration that the same application has not been lodged with any other notified body;
- all relevant information for the marine equipment category envisaged;
- the documentation concerning the quality system;
- the technical documentation of the approved type and a copy of the EC type-examination certificate.

3.2 The quality system shall ensure that the products are in conformity with the type described in the EC type-examination certificate and that they comply with the requirements of the international instruments that apply to them.

All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality system documentation shall permit a consistent interpretation of the quality programmes, plans, manuals and records.

It shall, in particular, contain an adequate description of:

- the quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality;
- the corresponding manufacturing, quality control and quality assurance techniques, processes and systematic actions that will be used;
- the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out;
- the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.; and
- the means of monitoring the achievement of the required product quality and the effective operation of the quality system.

3.3 The notified body shall assess the quality system to determine whether it satisfies the requirements referred to in point 3.2.

In addition to experience in quality management systems, the auditing team shall have at least one member with experience of evaluation in the relevant marine equipment field and marine equipment technology concerned, and knowledge of the applicable requirements of the international instruments. The audit shall include an assessment visit to the manufacturer's premises. The auditing team shall review the technical documentation referred to in the fifth indent of point 3.1 in order to verify the manufacturer's ability to identify the relevant requirements of the international instruments and to carry out the necessary examinations with a view to ensuring compliance of the product with those requirements.

Produsenten skal underrettes om beslutningen. Underretningen skal inneholde konklusjonene av revisjonen og en begrunnelse for beslutningen.

3.4 The manufacturer shall undertake to fulfil the obligations arising out of the quality system as approved and to maintain it so that it remains adequate and efficient.

3.5 The manufacturer shall keep the notified body that has approved the quality system informed of any intended change to the quality system.

The notified body shall evaluate any proposed changes and decide whether the modified quality system will continue to satisfy the requirements referred to in point 3.2 or whether a re-assessment is necessary.

It shall notify the manufacturer of its decision. The notification shall contain the conclusions of the examination and the reasoned assessment decision.

4. *Surveillance under the responsibility of the notified body*

4.1 The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.

4.2 The manufacturer shall, for assessment purposes, allow the notified body access to the manufacture, inspection, testing and storage sites, and shall provide it with all necessary information, in particular:

- the quality system documentation;
- the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.

4.3 The notified body shall carry out periodic audits to make sure that the manufacturer maintains and applies the quality system, and shall provide the manufacturer with an audit report.

4.4 In addition, the notified body may pay unexpected visits to the manufacturer, except where, under national law, and for defence or security reasons, certain restrictions apply to such visits. During such visits the notified body may, if necessary, carry out product tests, or have them carried out, in order to verify that the quality system is functioning correctly. The notified body shall provide the manufacturer with a visit report and, if tests have been carried out, with a test report.

5. *Conformity marking and declaration of conformity*

5.1 The manufacturer shall affix the wheel mark referred to in Article 9, and, under the responsibility of the notified body referred to in point 3.1, the latter's identification number to each individual product that is in conformity with the type described in the EC type-examination certificate and that satisfies the applicable requirements of the international instruments.

5.2 The manufacturer shall draw up a written declaration of conformity for each product model and keep it at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned. The declaration of conformity shall identify the marine equipment model for which it has been drawn up.

A copy of the declaration of conformity shall be made available to the relevant authorities upon request.

6. The manufacturer shall keep at the disposal of the competent authorities, for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned:

- the documentation referred to in point 3.1;
- the change referred to in point 3.2, as approved;
- the decisions and reports of the notified body referred to in points 3.5, 4.3 and 4.4.

7. Each notified body shall inform its notifying authorities of quality system approvals issued or withdrawn, and shall, periodically or upon request, make available to its notifying authorities the list of quality system approvals refused, suspended or otherwise restricted.

Each notified body shall inform the other notified bodies of quality system approvals which it has refused, suspended, withdrawn or otherwise restricted, and, upon request, of quality system approvals which it has issued.

8. *Authorised representative*

The manufacturer's obligations set out in points 3.1, 3.5, 5 and 6 may be fulfilled by its authorised representative, on its behalf and under its responsibility, provided that they are specified in the mandate.

III. Module E: Conformity to type based on product quality assurance

1. Conformity to type based on product quality assurance is that part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2 and 5, and ensures and declares on its sole responsibility that the marine equipment concerned is in conformity with the type described in the EC type-examination certificate and that it satisfies the requirements of the international instruments that apply to it.

2. *Manufacturing*

The manufacturer shall operate an approved quality system for final product inspection and testing of the products concerned as specified in point 3, and shall be subject to surveillance as specified in point 4.

3. *Quality system*

- 3.1 The manufacturer shall lodge an application for assessment of its quality system with the notified body of its choice, for the marine equipment concerned.

The application shall include:

- the name and address of the manufacturer and, if the application is lodged by the authorised representative, its name and address as well;
- a written declaration that the same application has not been lodged with any other notified body;
- all relevant information for the marine equipment category envisaged;
- the documentation concerning the quality system; and
- the technical documentation of the approved type and a copy of the EC type-examination certificate.

- 3.2 The quality system shall ensure compliance of the products with the type described in the EC type-examination certificate and with the applicable requirements of the international instruments.

All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality system documentation shall permit a consistent interpretation of the quality programmes, plans, manuals and records.

It shall, in particular, contain an adequate description of:

- the quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality;
- the examinations and tests that will be carried out after manufacture;
- the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.;
- the means of monitoring the effective operation of the quality system.

- 3.3 The notified body shall assess the quality system to determine whether it satisfies the requirements referred to in point 3.2.

In addition to experience in quality management systems, the auditing team shall have at least one member with experience of evaluation in the relevant marine equipment field and marine equipment technology concerned, and knowledge of the applicable requirements of the international instruments. The audit shall include an assessment visit to the manufacturer's premises. The auditing team shall review the technical documentation referred to in the fifth indent of point 3.1, in order to verify the manufacturer's ability to identify the relevant requirements of the international instruments and to carry out the necessary examinations with a view to ensuring compliance of the product with those requirements.

The decision shall be notified to the manufacturer. The notification shall contain the conclusions of the audit and the reasoned assessment decision.

- 3.4 The manufacturer shall undertake to fulfil the obligations arising out of the quality system as approved and to maintain it so that it remains adequate and efficient.

- 3.5 The manufacturer shall keep the notified body that has approved the quality system informed of any intended change to the quality system.

The notified body shall evaluate any proposed changes and decide whether the modified quality system will continue to satisfy the requirements referred to in point 3.2 or whether a re-assessment is necessary.

It shall notify the manufacturer of its decision. The notification shall contain the conclusions of the examination and the reasoned assessment decision.

4. *Surveillance under the responsibility of the notified body*

- 4.1 The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.

- 4.2 The manufacturer shall, for assessment purposes, allow the notified body access to the manufacture, inspection, testing and storage sites, and shall provide it with all necessary information, in particular:
- the quality system documentation;
 - the quality records, such as inspection reports and test data, calibration data, qualification reports on the personnel concerned, etc.

- 4.3 The notified body shall carry out periodic audits to make sure that the manufacturer maintains and applies the quality system, and shall provide the manufacturer with an audit report.

- 4.4 In addition, the notified body may pay unexpected visits to the manufacturer, except where, under national law, and for defence or security reasons, certain restrictions apply to such visits. During such visits the notified body may, if necessary, carry out product tests, or have them carried out, in order to verify that the quality system is functioning correctly. The notified body shall provide the manufacturer with a visit report and, if tests have been carried out, with a test report.

5. *Conformity marking and declaration of conformity*

- 5.1 The manufacturer shall affix the wheel mark referred to in Article 9, and, under the responsibility of the notified body referred to in point 3.1, the latter's identification number to each individual product that is in conformity with the type described in the EC type-examination certificate and that satisfies the applicable requirements of the international instruments.

- 5.2 The manufacturer shall draw up a written declaration of conformity for each product model and keep it at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned. The declaration of conformity shall identify the marine equipment model for which it has been drawn up.

A copy of the declaration of conformity shall be made available to the relevant authorities upon request.

6. The manufacturer shall keep at the disposal of the competent authorities, for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned:

- the documentation referred to in point 3.1;
- the change referred to in point 3.5, as approved;
- the decisions and reports of the notified body referred to in points 3.5, 4.3 and 4.4.

7. Each notified body shall inform its notifying authorities of quality system approvals issued or withdrawn, and shall, periodically or upon request, make available to its notifying authorities the list of quality system approvals refused, suspended or otherwise restricted.

Each notified body shall inform the other notified bodies of quality system approvals which it has refused, suspended or withdrawn, and, upon request, of quality system approvals which it has issued.

8. *Authorised representative*

The manufacturer's obligations set out in points 3.1, 3.5, 5 and 6 may be fulfilled by its authorised representative, on its behalf and under its responsibility, provided that they are specified in the mandate.

IV. Module F: Conformity to type based on product verification

1. Conformity to type based on product verification is the part of a conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 5.1 and 6, and ensures and declares on its sole responsibility that the products concerned, which have been subject to the provisions of point 3, are in conformity with the type described in the EC type-examination certificate and that they satisfy the requirements of the international instruments that apply to them.

2. *Manufacturing*

The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured products with the approved type described in the EC type-examination certificate and with the requirements of the international instruments that apply to them.

3. *Verification*

A notified body chosen by the manufacturer shall carry out appropriate examinations and tests in order to check the conformity of the products with the approved type described in the EC type-examination certificate and with the appropriate requirements of the international instruments.

The examinations and tests to check the conformity of the products with the appropriate requirements shall be carried out, at the choice of the manufacturer, either by examination and testing of every product as specified in point 4 or by examination and testing of the products on a statistical basis as specified in point 5.

4. *Verification of conformity by examination and testing of every product*

- 4.1 All products shall be individually examined and tested in accordance with this Directive, in order to verify conformity with the approved type described in the EC type-examination certificate and with the appropriate requirements of the international instruments.
- 4.2 The notified body shall issue a certificate of conformity in respect of the examinations and tests carried out, and shall affix its identification number to each approved product or have it affixed under its responsibility.
- The manufacturer shall keep the certificates of conformity available for inspection by the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.
5. *Statistical verification of conformity*
- 5.1 The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure the homogeneity of each lot produced, and shall present its products for verification in the form of homogeneous lots.
- 5.2 A random sample shall be taken from each lot. All products in a sample shall be individually examined and tested in accordance with this Directive, in order to ensure their conformity with the applicable requirements of the international instruments and to determine whether the lot is accepted or rejected.
- 5.3 If a lot is accepted, all products of the lot shall be considered approved, except for those products from the sample that have been found not to satisfy the tests.
- The notified body shall issue a certificate of conformity in respect of the examinations and tests carried out, and shall affix its identification number to each approved product or have it affixed under its responsibility.
- The manufacturer shall keep the certificates of conformity at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.
- 5.4 If a lot is rejected, the notified body or the competent authority shall take appropriate measures to prevent that lot being placed on the market. In the event of the frequent rejection of lots, the notified body may suspend the statistical verification and take appropriate measures.
6. *Conformity marking and declaration of conformity*
- 6.1 The manufacturer shall affix the wheel mark referred to in Article 9, and, under the responsibility of the notified body referred to in point 3, the latter's identification number to each individual product that is in conformity with the approved type described in the EC type-examination certificate and that satisfies the applicable requirements of the international instruments.
- 6.2 The manufacturer shall draw up a written declaration of conformity for each product model and keep it at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned. The declaration of conformity shall identify the marine equipment model for which it has been drawn up.
- A copy of the declaration of conformity shall be made available to the relevant authorities upon request.
7. If the notified body agrees and under its responsibility, the manufacturer may affix the notified body's identification number to the products during the manufacturing process.

8. *Authorised representative*

The manufacturer's obligations may be fulfilled by its authorised representative, on its behalf and under its responsibility, provided that they are specified in the mandate. An authorised representative may not fulfil the manufacturer's obligations set out in points 2 and 5.1.

V. Module G: Conformity based on unit verification

1. Conformity based on unit verification is the conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 3 and 5 and ensures and declares on its sole responsibility that the product concerned, which has been subject to the provisions of point 4, is in conformity with the requirements of the international instruments that apply to it.

2. *Technical documentation*

The manufacturer shall draw up the technical documentation and make it available to the notified body referred to in point 4. The documentation shall make it possible to assess the product's conformity with the relevant requirements, and shall include an adequate analysis and assessment of the risk(s). The technical documentation shall specify the applicable requirements and shall cover, as far as relevant for the assessment, the design, manufacture and operation of the product. The technical documentation shall, wherever applicable, contain at least the following elements:

- a general description of the product;
- conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
- descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the product;
- a list of the requirements and testing standards which are applicable to the marine equipment concerned in accordance with this Directive, together with a description of the solutions adopted to meet those requirements,
- results of design calculations made, examinations carried out; and
- test reports.

The manufacturer shall keep the technical documentation at the disposal of the relevant national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.

3. *Manufacturing*

The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured product with the applicable requirements of the international instruments.

4. *Verification*

A notified body chosen by the manufacturer shall carry out appropriate examinations and tests in accordance with this Directive, in order to check the conformity of the product with the applicable requirements of the international instruments.

The notified body shall issue a certificate of conformity in respect of the examinations and tests carried out and shall affix its identification number to the approved product, or have it affixed under its responsibility.

The manufacturer shall keep the certificates of conformity at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.

5. *Conformity marking and declaration of conformity*

5.1 The manufacturer shall affix the wheel mark referred to in Article 9 and, under the responsibility of the notified body referred to in point 4, the latter's identification number to each product that satisfies the applicable requirements of the international instruments.

5.2 The manufacturer shall draw up a written declaration of conformity and keep it at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned. The declaration of conformity shall identify the product for which it has been drawn up.

A copy of the declaration of conformity shall be made available to the relevant authorities upon request.

6. *Authorised representative*

The manufacturer's obligations set out in points 2 and 5 may be fulfilled by its authorised representative, on its behalf and under its responsibility, provided that they are specified in the mandate.

Appendix III

EC DECLARATION OF CONFORMITY

1. No . . . (unique identification of the product):
2. Name and address of the manufacturer or his authorised representative:
3. This declaration of conformity is issued under the sole responsibility of the manufacturer (or installer):
4. Object of the declaration (identification of product allowing traceability. It may include a photograph, where appropriate):
5. The object of the declaration described above is in conformity with the relevant Community harmonisation legislation:
6. References to the relevant harmonised standards used or references to the specifications in relation to which conformity is declared:
7. Where applicable, the notified body . . . (name, number) . . . performed . . . (description of intervention) ... and issued the certificate: . . .
8. Additional information:
Signed for and on behalf of:
(place and date of issue):
(name, function) (signature):

Appendix IV

Where indicated in the table, equipment within the applicable equipment group shall be wheel-marked, when such equipment is placed on board vessels as referred to in the left column

<i>X = Equipment within the relevant category shall be wheel-marked</i>	<i>Date of placement on board</i>	I. Life-saving appliances	II. Marine pollution prevention (see separate table below)	III. Fire protection equipment	IV. Navigation equipment	V. Radio-communication equipment	VI. Navigation light equipment	VII. Water level detecting equipment
Ships with international safety certificate	On or after 1 January 1999	X		X	X	X	X	<p>Equipment in group VII shall be wheel-marked when placed on board:</p> <ul style="list-style-type: none"> * Bulk carriers of ≥500 gross tonnage engaged on foreign voyages * Single hold cargo ships of ≥500 gross tonnage engaged on foreign voyages * Cargo ships engaged on foreign voyages, of ≥500 gross tonnage and of ≥80 metres in length (L) or of ≥100 metres in length (L) if constructed before 1 July 1998, having one single hold below the freeboard deck or cargo holds below the freeboard deck which do not have at least one watertight bulkhead up to the freeboard deck. * Passenger ships certified for >36 pax, engaged on foreign voyages
Cargo ships without international safety certificate	On or after 1 January 2005	X		X	X * Does not apply to equipment voluntarily placed on board	X * Equipment voluntarily placed on board may as an alternative be CE-marked	X	

Where indicated in the table, equipment within the applicable equipment group shall be wheel-marked, when such equipment is placed on board vessels as referred to in the left column

<i>X = Equipment within the relevant category shall be wheel-marked</i>	<i>Date of placement on board</i>	I. Life-saving appliances	II. Marine pollution prevention (see separate table below)	III. Fire protection equipment	IV. Navigation equipment	V. Radio-communication equipment	VI. Navigation light equipment	VII. Water level detecting equipment
Passenger ships with passenger certificate	On or after 1 January	X		X	X	X	X	
Passenger ships with Passenger Ship Safety Certificate (EU)	On or after 1 January 2004	X		X	X	X	X	
All high-speed craft	On or after 1 January 1999			X	X	X		
Addition for high-speed craft engaged on domestic voyages	On or after 3 July 2009	X						
All mobile offshore units	On or after 1 January 1999					X	X	
Addition for mobile offshore units	On or after 1 July 2003				X			
Fishing vessels of 15 metres in overall length and upwards	On or after 1 April 2001				X * Does not apply to equipment voluntarily placed on board	X * Equipment voluntarily placed on board may as an alternative be CE-marked	X	
Fishing vessels of 15 metres in overall length and upwards	On or after 1 January 2003	X						

Ships and mobile offshore units shall have wheel-marked marine equipment for marine pollution prevention as indicated in the table

II. Marine pollution prevention

	Equipment A/2.1-2.5	Equipment A/2.6	Equipment A/2.7-2.10
All ships		X	X
Ships, GT≥400	X	X	
Oil tankers, GT≥150	X		
Ships cert. for >15 persons		X	
Mobile offshore units	X	X	X