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COUNCIL DIRECTIVE 96/98/EC

of 20 December 1996

on marine equipment

(OJ L 46, 17.2.1997, p. 25)

Amended by:

		Official Journal		
		No	page	date
►**M1**	Commission Directive 98/85/EC of 11 November 1998	L 315	14	25.11.1998
►**M2**	Commission Directive 2001/53/EC of 10 July 2001	L 204	1	28.7.2001
►**M3**	Commission Directive 2002/75/EC of 2 September 2002	L 254	1	23.9.2002
►**M4**	Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002	L 324	53	29.11.2002
►**M5**	Commission Directive 2008/67/EC of 30 June 2008	L 171	16	1.7.2008
►**M6**	Commission Directive 2009/26/EC of 6 April 2009	L 113	1	6.5.2009
►**M7**	Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009	L 188	14	18.7.2009
►**M8**	Commission Directive 2010/68/EU of 22 October 2010	L 305	1	20.11.2010
►**M9**	Commission Directive 2011/75/EU of 2 September 2011	L 239	1	15.9.2011
►**M10**	Commission Directive 2012/32/EU of 25 October 2012	L 312	1	10.11.2012
►**M11**	Commission Directive 2013/52/EU of 30 October 2013	L 304	1	14.11.2013
►**M12**	Commission Directive 2014/93/EU of 18 July 2014	L 220	1	25.7.2014

Corrected by:

►**C1** Corrigendum, OJ L 246, 10.9.1997, p. 7 (96/98/EC)

►**C2** Corrigendum, OJ L 241, 29.8.1998, p. 27 (96/98/EC)

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COUNCIL DIRECTIVE 96/98/EC

of 20 December 1996

on marine equipment

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 84 (2) thereof,

Having regard to the proposal from the Commission ([1]),

Having regard to the opinion of the Economic and Social Committee ([2]),

Acting in accordance with the procedure laid down in Article 189c of the Treaty ([3]),

(1) Whereas within the framework of the common transport policy further measures must be adopted to ensure safety in maritime transport;

(2) Whereas shipping accidents are a matter of serious concern to the Community, in particular those that cause loss of human life and pollution of the Member States' seas and coastlines;

(3) Whereas the risk of shipping accidents can be effectively reduced by means of common standards that ensure high safety levels in the performance of the equipment carried on board ships; whereas testing standards and testing methods can have great influence on the future performance of equipment;

(4) Whereas international conventions require flag States to ensure that the equipment carried on board ships complies with certain safety requirements and to issue the relevant certificates; whereas to that end testing standards for certain types of marine equipment have been developed by the international standardization bodies and by the International Maritime Organization (IMO); whereas the national testing standards implementing the international standards leave a margin of discretion certification authorities, which themselves have different levels of qualifications and experience; whereas that leads to varying levels of safety for products which the competent national authorities have certified as complying with the relevant international safety standards and to great reluctance on the part of Member States to accept that without further verification ships flying their flags carry equipment approved by other Member States;

([1]) OJ No C 218, 23.8.1995, p. 9.
([2]) OJ No C 101, 3.4.1996, p. 3.
([3]) European Parliament opinion of 29 November 1995 (OJ No C 339, 18.12.1995, p. 21), Council common position of 18 June 1996 (OJ No C 248, 26.8.1996, p. 10) and European Parliament Decision of 24 October 1996 (OJ No C 347, 18.11.1996).

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(5) Whereas common rules must be laid down to eliminate differences in the implementation of international standards; whereas such common rules will result in the elimination of unnecessary costs and administrative procedures relating to the approval of equipment, the improvement of operating conditions and of the competitive position of Community shipping and the elimination of technical barriers to trade by means of the mark of conformity affixed to equipment;

(6) Whereas in its resolution of 8 June 1993 on a common policy on safe seas [1] the Council urged the Commission to submit proposals for harmonizing the implementation of IMO standards and the procedures for the approval of marine equipment;

(7) Whereas action at Community level is the only possible way of achieving such harmonization, since Member States acting independently or through international organizations cannot establish the same level of safety performance in equipment;

(8) Whereas a Council Directive is the appropriate legal instrument as it provides a framework for uniform and compulsory application of the international testing standards by Member States;

(9) Whereas it is appropriate in the first place to address equipment the carriage of which on board ship and the approval of which by national administrations in accordance with safety standards laid down in international conventions or resolutions is mandatory under the main international conventions;

(10) Whereas there are various Directives that ensure the free movement of certain products which could be used *inter alia*, as equipment on board ships but which do not concern the Member States' certification of equipment in accordance with the relevant international conventions; whereas equipment to be placed on board ships must therefore be regulated exclusively by new common rules;

(11) Whereas new testing standards must be laid down, preferably at international level, for equipment for which such standards do not already exist or are not sufficiently detailed;

(12) Whereas Member States should ensure that the notified bodies that assess the compliance of equipment with testing standards are independent, efficient and professionally competent to carry out their tasks;

[1] OJ No C 271, 7.10.1993, p. 1.

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(13) Whereas compliance with international testing standards can best be demonstrated by means of conformity-assessment procedures such as those laid down in Council Decision 93/465/EEC of 22 July 1993 concerning the modules for the various phases of the conformity-assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonization Directives [1];

(14) Whereas nothing in this Directive restricts the right granted to a flag State administration by international conventions to carry out operational-performance tests on board a ship for which it has issued a safety certificate, provided such tests do not duplicate the conformity-assessment procedures;

(15) Whereas equipment covered by this Directive should, as a general rule, bear a mark to indicate its compliance with the requirement of this Directive;

(16) Whereas Member States may in certain cases take provisional measures to limit or prohibit the use of equipment bearing the mark of conformity;

(17) Whereas the use of equipment not bearing the mark of conformity may be allowed in exceptional circumstances;

(18) Whereas a simplified procedure involving a regulatory committee must be followed for the amendment of this Directive,

HAS ADOPTED THIS DIRECTIVE:

Article 1

The purpose of this Directive shall be to enhance safety at sea and the prevention of marine pollution through the uniform application of the relevant international instruments relating to equipment listed in Annex A to be placed on board ships for which safety certificates are issued by or on behalf of Member States pursuant to international conventions and to ensure the free movement of such equipment within the Community.

Article 2

For the purposes of this Directive:

(a) ‘conformity-assessment procedures’ shall mean the procedures set out in Article 10 and Annex B;

[1] OJ No C 220, 30.8.1993, p. 23.

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(b) ‘equipment’ shall mean items listed in Annexes A.1 and A.2 which must be placed on board a ship for use in order to comply with international instruments or are voluntarily placed on board for use, and for which the approval of the flag State administration is required according to international instruments;

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(c) ‘radiocommunications equipment’ shall mean equipment required by Chapter IV of the 1974 SOLAS Convention, ►M4 in its up-to-date version ◄, and survival craft two-way VHF radiotelephone apparatus required by Regulation III/6.2.1 of the same Convention;

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(d) ‘international conventions’ shall mean:

— ►C2 the 1966 International Convention ◄ on Load Lines (LL66),

— the 1972 Convention on the International Regulations for Preventing Collisions at Sea (Colreg),

— the 1973 International Convention for the Prevention of Pollution from Ships (Marpol) and

— the 1974 International Convention for the Safety of Life at Sea (Solas),

together with their Protocols and the amendments thereto ►M4 in their up-to-date version ◄;

(e) ‘international instruments’ shall mean the relevant international conventions, the relevant resolutions and circulars of the International Maritime Organization (IMO), and the relevant international testing standards;

(f) ‘mark’ shall mean the symbol referred to in Article 11 and set out in Annex D;

(g) ‘notified body’ shall mean an organization designated by the competent national administration of a Member State in accordance with Article 9;

(h) ‘placed on board’ shall mean installed or placed on board a ship;

(i) ‘safety certificates’ shall mean the certificates issued by or on behalf of Member States in accordance with international conventions;

(j) ‘ship’ shall mean a ship falling within the scope of international conventions; warships shall not be covered;

(k) ‘Community ship’ shall mean a ship for which safety certificates are issued by or on behalf of Member States under international conventions. This definition shall not include a Member State administration's issuing a certificate for a ship at the request of a third country's administration;

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(l) ‘new ship’ shall mean a ship the keel of which is laid or which is at a similar stage of construction on or after the date of the entry into force of this Directive. For the purposes of this definition, ‘a similar stage of construction’ shall mean the stage at which:

(i) construction identifiable with a specific ship begins

and

(ii) assembly of that ship has commenced, comprising at least 50 tonnes or 1 % of the estimated mass of all structural material, whichever is less;

(m) ‘existing ship’ shall mean a ship which is not a new ship;

(n) ‘testing standards’ shall mean the standards set by

— the International Maritime Organization (IMO),

— the International Organization for Standardization (ISO),

— the International Electrotechnical Commission (IEC),

— the European Committee for Standardization (CEN),

— the European Committee for Electrotechnical Standardization (Cenelec)

and

— the European Telecommunication Standards Institute (ETSI)

►M4 in their up-to-date version ◄, and established in accordance with the relevant international conventions and with the relevant IMO resolutions and circulars to define testing methods and test results, but only in the form referred to in Annex A;

(o) ‘type-approval’ shall mean the procedures for evaluating equipment produced in accordance with the appropriate testing standards and the issue of the appropriate certificate.

Article 3

1. This Directive shall apply to equipment for use on board:

(a) a new Community ship whether or not the ship is situated within the Community at the time of construction;

(b) an existing Community ship

— where such equipment was not previously carried on board

or

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— where equipment which was previously carried on board the ship is replaced, except where international conventions permit otherwise,

whether or not the ship is situated within the Community when the equipment is placed on board.

2. This Directive shall not apply to equipment which on the date of the entry into force of this Directive has already been placed on board a ship.

3. Notwithstanding the fact that the equipment referred to in paragraph 1 may fall within the scope of Directives other than this Directive for the purpose of free movement, and in particular Council Directives 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility [1] and 89/686/EEC of 21 December 1989 on the approximation of the laws of the Member States relating to personal protective equipment [2], that equipment shall be subject only to this Directive, to the exclusion of all others for those purposes.

Article 4

Each Member State or the organizations acting on its behalf shall ensure, when issuing or renewing the relevant safety certificates, that the equipment on board Community ships for which it issues safety certificates complies with the requirements of this Directive.

Article 5

1. Equipment listed in Annex A.1 that is placed on board a Community ship on or after the date referred to in the second subparagraph of Article 20 (1) shall meet the applicable requirements of the international instruments referred to in that Annex.

2. The compliance of equipment with the applicable requirements of the international conventions and of the relevant resolutions and circulars of the International Maritime Organization shall be demonstrated solely in accordance with the relevant testing standards and the conformity-assessment procedures referred to in Annex A.1. For items listed in Annex A.1, where both IEC and ETSI testing standards are given, those standards shall be alternatives and a manufacturer or his authorized representative established within the Community may determine which of them is to be used.

(1) OJ No L 139, 23.5.1989, p. 19. Directive as last amended by Directive 93/68/EEC (OJ No L 220, 31.8.1993, p. 1).
(2) OJ No L 399, 30.12.1989, p. 18. Directive as last amended by Directive 93/95/EEC (OJ No L 276, 9.11.1993, p. 11).

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3. Equipment listed in Annex A.1 and manufactured before the date referred to in paragraph 1 may also be placed on the market and on board a Community ship the certificates of which were issued by or on behalf of a Member State in accordance with international conventions during the two years following that date if it was manufactured in accordance with procedures for type-approval already in force within the territory of that Member State before the date of the adoption of this Directive.

Article 6

1. No Member State shall prohibit the placing on the market or the placing on board a Community ship of equipment referred to in Annex A.1 which bears the mark or for other reasons complies with this Directive or refuse to issue or renew the safety certificates relating thereto.

2. A radio licence shall be issued in accordance with the international radio regulations by the competent authority before the relevant safety certificate is issued.

Article 7

1. After the date of the entry into force of this Directive, the Community shall submit a request to the IMO or to the European standardization organizations, as appropriate, for the establishment of standards, including detailed testing standards, for the equipment listed in Annex A.2.

2. The request referred to in paragraph 1 shall be made:

— by the Presidency of the Council and by the Commission, when it is submitted to the IMO,

— by the Commission, in accordance with Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations ([1]), when it is submitted to the European standardization organizations. The mandates issued by the Commission shall aim for the development of international standards through procedures for cooperation between the European bodies and their counterparts at international level.

3. Member States shall do their utmost to ensure that the international organizations, including the IMO, develop those standards expeditiously.

4. The Commission shall monitor the development of the testing standards on a regular basis.

([1]) OJ No L 109, 26.4.1983, p. 8. Directive as last amended by the 1994 Act of Accession.

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5. Should the international organisations, including the IMO, fail or refuse to adopt appropriate testing standards for a specific item of equipment within a reasonable time, standards based on the work of the European standardisation organisations may be adopted. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).

6. When the testing standards referred to in paragraphs 1 or 5 are adopted or enter into force, as appropriate, for a specific item of equipment, that equipment may be transferred from Annex A.2 to Annex A.1. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).

Article 5 shall apply to that equipment from the date of that transfer.;

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Article 8

1. In the case of a new ship which, irrespective of its flag, is not registered in a Member State but is to be transferred to the register of a Member State, such a ship shall, on transfer, be subject to inspection by the receiving Member State to verify that the actual condition of its equipment corresponds to its safety certificates and either complies with this Directive and bears the mark or is equivalent, to the satisfaction of that Member State's administration, to equipment type-approval in accordance with this Directive.

2. Unless the equipment either bears the mark or that administration considers it to be equivalent, it shall be replaced.

3. Equipment which is considered equivalent pursuant to this Article shall be given a certificate by the Member State which shall at all times be carried with the equipment and which gives the flag Member State's permission for the equipment to be placed on board the ship and imposes any restrictions or lays down any provisions relating to the use of the equipment.

4. In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

Article 9

1. Member States shall notify the Commission and the other Member States of the bodies which they have designated to carry out the procedures for in Article 10 together with the specific tasks which those notified bodies have been designated to carry out and the identification numbers assigned to them beforehand by the Commission. Each organization shall submit to the Member State which intends to designate it complete information concerning, and evidence of compliance with the criteria laid down in Annex C.

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2. At least once every two years each Member State shall cause an audit of the duties its notified bodies are undertaking on its behalf to be carried out by the administration or by an impartial external organization appointed by the administration. That audit shall ensure that each notified body continues to comply with the criteria laid down in Annex C.

3. A Member State which has designated a body shall withdraw its designation if it finds that that body no longer complies with the criteria laid down in Annex C. It shall immediately inform the Commission and the other Member States accordingly.

Article 10

1. The conformity-assessment procedure, details of which are listed in Annex B, shall be:

(i) EC type-examination (module B) and, before equipment is placed on the market and according to the choice made by the manufacturer or his authorized representative established within the Community from the possibilities indicated in Annex A.1, all equipment shall be subject to:

(a) the EC declaration of conformity to type (module C);

(b) the EC declaration of conformity to type (production-quality assurance) (module D);

(c) the EC declaration of conformity to type (product-quality assurance) (module E);

(d) the EC declaration of conformity to type (product verification) (module F); or

(ii) EC full-quality assurance (module H).

2. The declaration of conformity to type shall be in written form and shall give the information specified in Annex B.

3. Where sets of equipment are produced individually or in small quantities and not in series or in mass, the conformity-assessment procedure may be the EC unit verification (module G).

4. The Commission shall keep an up-to-date list of approved equipment and applications withdrawn or refused and shall make it available to interested parties.

Article 11

1. Equipment referred to in Annex A.1 which complies with the relevant international instruments and is manufactured in accordance with the conformity-assessment procedures shall have the mark affixed to it by the manufacturer or his authorized representative established within the Community.

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2. The mark shall be followed by the identification number of the notified body which has performed the conformity-assessment procedure, if that body is involved in the production-control phase, and by the last two digits of the number of the year in which the mark is affixed. The identification number of the notified body shall be affixed under its responsibility either by the body itself or by the manufacturer or his authorized representative established within the Community.

3. The form of the mark to be used shall be as set out in Annex D.

4. The mark shall be affixed to the equipment or to its data plate so as to be visible, legible and indelible throughout the anticipated useful life of the equipment. However, where that is not possible or not warranted on account of the nature of the piece of equipment, it shall be affixed to the packaging of the product, to a label or to a leaflet.

5. No marks or inscriptions which are likely to mislead third parties with regard to the meaning or the graphics of the mark referred to in this Directive shall be affixed.

6. The mark shall be affixed at the end of the production phase.

Article 12

1. Notwithstanding Article 6, each Member State may take the measures necessary to ensure that sample checks are carried out on equipment bearing the mark which is on its market and which has not yet been placed on board, in order to ensure that it complies with this Directive. Sample checks which are not provided for in the modules for conformity assessment in Annex B shall be carried out at the expense of the Member State.

2. Notwithstanding Article 6, after the installation of equipment which complies with this Directive on board a Community ship, evaluation by that ship's flag State administration of that equipment shall be permitted when operational on-board performance tests are required by international instruments for safety and/or pollution-prevention purposes, provided that they do not duplicate the conformity-assessment procedures already carried out. The flag State administration may require the manufacturer of the equipment, his authorized representative established within the Community or the person responsible for marketing the equipment within the Community to provide the inspection/testing reports.

Article 13

1. Where a Member State ascertains by inspection or otherwise that, notwithstanding the fact that it bears the mark, a piece of equipment referred to in Annex A.1, when correctly installed, maintained and used for its intended purpose, may compromise the health and/or safety of the crew, the passengers or, where applicable, other persons, or adversely ►C1 affect the marine environment, it shall take all appropriate interim measures to withdraw that piece of equipment from the market ◄ or prohibit or restrict its being placed on the market or being used on board a ship for which it issues the safety certificates. The Member State shall immediately inform the other Member States and the Commission of that measure and indicate the reasons for its decision and, in particular, whether non-compliance with this Directive is due to:

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(a) failure to comply with Article 5 (1) and (2);

(b) incorrect application of the testing standards referred to in Article 5 (1) and (2); or

(c) shortcomings in the testing standards themselves.

2. The Commission shall enter into consultation with the parties concerned as soon as possible. Where, after such consultation, the Commission finds that:

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— the measures are justified, it shall immediately so inform the Member State which took the initiative and the other Member States; where the decision referred to in paragraph 1 is attributed to shortcomings in the testing standards, the Commission shall, after consulting the parties concerned, bring the matter before the Committee referred to in Article 18(1) within two months if the Member State which has taken the decision intends to maintain it, and shall initiate the regulatory procedure referred to in Article 18(2);

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— the measures are unjustified, it shall immediately so inform the Member State which took the initiative and the manufacturer or his authorized representative established within the Community.

3. Where a non-complying piece of equipment bears the mark, the appropriate measures shall be taken by the Member State which has authority over whomsoever affixed the mark; that Member State shall inform the Commission and the other Member States of the measures it has taken.

4. The Commission shall ensure that the Member States are kept informed of the progress and outcome of this procedure.

Article 14

1. Notwithstanding the provisions of Article 5, in exceptional circumstances of technical innovation, the flag State administration may permit equipment which does not comply with the conformity-assessment procedures to be placed on board a Community ship if it is established by trial or otherwise to the satisfaction of the flag State administration that such equipment is at least as effective as equipment which does comply with the conformity-assessment procedures.

In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

2. Such trial procedures shall in no way discriminate between equipment produced in the flag Member State and equipment produced in other States.

3. Equipment covered by this Article shall be given a certificate by the flag Member State which shall at all times be carried with the equipment and which gives the flag Member State's permission for the equipment to be placed on board the ship and imposes any restrictions or lays down any provisions relating to the use of the equipment.

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4. Where a Member State allows equipment covered by this Article to be placed on board a Community ship, that Member State shall forthwith communicate the particulars thereof together with the reports of all relevant trials, assessments and conformity-assessment procedures to the Commission and the other Member States.

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5. Equipment such as is referred to in paragraph 1 shall be added to Annex A.2. That measure, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).

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6. Where a ship with equipment on board which is covered by paragraph 1 is transferred to another Member State, the receiving flag Member State may undertake the measures necessary, which may include tests and practical demonstrations, to ensure that the equipment is at least as effective as equipment which does comply with the conformity-assessment procedures.

Article 15

1. Notwithstanding Article 5, a flag State administration may permit equipment which does not comply with the conformity-assessment procedures or is not covered by Article 14 to be placed on board a Community ship for reasons of testing or evaluation, but only when the following conditions are complied with:

(a) the equipment must be given a certificate by the flag Member State which must at all times be carried with the equipment and which gives the flag Member State permission for the equipment to be placed on board the Community ship and imposes any restrictions or lays down any provisions relating to the use of the equipment;

(b) the permission must be limited to a short period of time;

(c) the equipment must not be relied on in place of equipment which meets the requirements of this Directive and must not replace such equipment, which must remain on board the Community ship in working and ready for immediate use.

2. In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

Article 16

1. Where equipment needs to be replaced in a port outwith the Community and in exceptional circumstances which shall be duly justified to the flag State administration where it is not practicable in terms of reasonable time, delay and cost to place on board equipment which is EC type-approved, other equipment may be placed on board in accordance with the following procedure:

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(a) the equipment shall be accompanied by documentation issued by a recognized organization equivalent to a notified body, where an agreement has been concluded between the Community and the third country concerned on the mutual recognition of such organizations;

(b) should it prove impossible to comply with (a), equipment accompanied by documentation issued by a Member State of the IMO which is a party to the relevant conventions, certifying compliance with the relevant IMO requirements, may be placed on board, subject to paragraphs 2 and 3.

2. The flag State administration shall be informed at once of the nature and characteristics of such other equipment.

3. The flag State administration shall, at the earliest opportunity, ensure that the equipment referred to in paragraph 1, along with its testing documentation, complies with the relevant requirements of the international instruments and of this Directive.

4. In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

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Article 17

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This Directive may be amended in order:

(a) to apply subsequent amendments of international instruments for the purposes of this Directive;

(b) to update Annex A, both by introducing new equipment and by transferring equipment from Annex A.2 to Annex A.1 and vice versa;

(c) to add the possibility of using modules B + C and module H for equipment listed in Annex A.1, and by amending the columns for the conformity assessment modules;

(d) to include other standardisation organisations in the definition of ‘testing standards’ in Article 2.

Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).;

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The conventions and testing standards referred to in points (c), (d) and (n) of Article 2 shall be understood without prejudice to any measures taken in application of Article 5 of Regulation (EC) No 2099/2002 of the European Parliament and of the Council of 5 November 2002, establishing a Committee on Safe Seas and the Prevention of Pollution from Ships (COSS) ([1]).

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Article 18

1. The Commission shall be assisted by the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS) created by Article 3 of Regulation (EC) No 2099/2002 of the European Parliament and of the Council ([2]).

2. Where reference is made to this paragraph, Articles 5 and 7 of Council Decision 1999/468/EC ([3]) shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at two months.

3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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Article 19

The Member States shall offer each other mutual assistance with a view to the effective implementation and enforcement of this Directive.

Article 20

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive no later than 30 June 1998.

They shall apply those measures from 1 January 1999.

When Member States adopt the measures referred to in the first subparagraph, these shall contain references to this Directive or shall be accompanied by such references on their official publication. The methods of making such references shall be laid down by the Member States.

2. The Member States shall immediately communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive. The Commission shall inform the other Member States thereof.

Article 21

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

Article 22

This Directive is addressed to the Member States.

([1]) OJ L 324, 29.11.2002, p. 1.
([2]) OJ L 324, 29.11.2002, p. 1.
([3]) OJ L 184, 17.7.1999, p. 23.

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ANNEX A

General note for Annex A: SOLAS Regulations refer to SOLAS consolidated version 2009.

General note for Annex 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 dotted lined from each other. For certification purpose only the relevant product variant shall be chosen, as appropriate (Example: A.1/3.3).

List of acronyms used

A.1, Amendment 1 concerning Standard Documents other than IMO.

A.2, Amendment 2 concerning Standard Documents other than IMO.

AC, Amending Corrigendum concerning Standard Documents other than IMO.

CAT, Category for radar equipment as defined in section 1.3 of IEC 62388 (2007).

Circ., Circular.

COLREG, International Regulations for Preventing Collisions at Sea.

COMSAR, IMO's Sub-Committee on Radiocommunications and Search and Rescue.

EN, European Standard.

ETSI, European Telecommunication Standardisation Institute.

FSS, International Code for Fire Safety Systems.

FTP, International Code for Application of Fire Test Procedures.

HSC, High Speed Craft Code.

IBC, International Bulk Chemical Code.

ICAO, International Civil Aviation Organization.

IEC, International Electro-technical Commission.

IGC, International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk.

IMO, International Maritime Organization.

ISO, International Standardisation Organisation.

ITU, International Telecommunication Union.

LSA, Lifesaving appliance.

MARPOL, International Convention for the Prevention of Pollution from Ships.

MEPC, Marine Environment Protection Committee.

MSC, Maritime Safety Committee.

NOx, Nitrogen Oxides.

O_2/HC systems: Oxygen Hydro Carbon systems.

SOLAS, International Convention for the Safety of Life at Sea.

SOx, Sulphur Oxides.

Reg., Regulation.

Res., Resolution.

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ANNEX A.1

EQUIPMENT FOR WHICH DETAILED TESTING STANDARDS ALREADY EXIST IN INTERNATIONAL INSTRUMENTS

Notes applicable to the whole of Annex A.1

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 Annex B, are to be found in the applicable requirements of the international conventions and the relevant resolutions and circulars of the IMO.

b) Column 1: Article 2 of Commission Directive 2012/32/EU ([1]) may apply. (8th Amendment of MED Annex A).

c) Column 1: Article 2 of Commission Directive 2013/52/EU ([2]) may apply. (9th Amendment of MED Annex A).

d) Column 5: Where IMO Resolutions 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 apply in their up-to-date version. For the purpose of identifying correctly the relevant standards, test reports, certificates of conformity and declarations of conformity shall identify the specific testing standard applied and its version.

f) Column 5: Where two sets of identifying 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 annex shall be without prejudice to carriage requirements in the international conventions

1. **Life-saving appliances**

Column 4: IMO MSC/Circular 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.1/1.1	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

([1]) OJ L 312, 10.11.2012, p. 1.
([2]) OJ L 304, 14.11.2013, p. 1.

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1	2	3	4	5	6
A.1/1.2	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.1/1.3	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.1/1.4	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 Res. MSC.81(70).	B + D B + E B + F
A.1/1.5	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 suits	— 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

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1	2	3	4	5	6
A.1/1.6	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 suits	— 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.1/1.7	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.1/1.8	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.1/1.9	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.1/1.10	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.1/1.11	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

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1	2	3	4	5	6
A.1/1.12	Inflatable life-rafts	— 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 Res. MSC.81(70).	B + D B + E B + F
A.1/1.13	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.1/1.14	Automatically self-righting life-rafts	— 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 Res. MSC.81(70).	B + D B + E B + F
A.1/1.15	Canopied reversible life-rafts	— 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 Res. MSC.81(70).	B + D B + E B + F
A.1/1.16	Float-free arrangements for liferafts (hydro-static 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

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1	2	3	4	5	6
A.1/1.17	Lifeboats: (a) Davit-launched lifeboats: — partially enclosed, — totally enclosed. (b) Free-fall lifeboats.	— 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.1/1.18	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.1/1.19	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.1/1.20	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.1/1.21	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

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1	2	3	4	5	6
A.1/1.22	Float free launching appliances for survival craft	Moved to A.2/1.3			
A.1/1.23	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.1/1.24	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.1/1.25	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.1/1.26	Release mechanism for (a) Lifeboats and rescue boats (launched by a fall or falls) (b) Liferafts (launched by a fall or falls)	— 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.1/1.27	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

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1	2	3	4	5	6
A.1/1.28	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), — IMO MSC/Circ.810.	B + D B + F
A.1/1.29	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.1/1.30	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.1/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A.1/5.17 and A.1/5.18			
A.1/1.32	9 GHz SAR transponder (SART)	Moved to A.1/4.18			
A.1/1.33	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

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1	2	3	4	5	6
A.1/1.34	Compass for lifeboats and rescue boats	Moved to A.1/4.23			
A.1/1.35	Portable fire — extinguishing equipment for lifeboats and rescue boats	Moved to A.1/3.38			
A.1/1.36	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.1/1.37	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.1/1.38	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.1/1.39	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 Res. MSC.36 (63)-(1994 HSC Code) Annex 10, — IMO Res. MSC.97 (73)-(2000 HSC Code) Annex 11.	B + D B + F
A.1/1.40	Mechanical pilot hoist	Moved to A.1/4.48			
A.1/1.41	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.1/1.42	Pilot ladder	Moved to A.1/4.49			

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1	2	3	4	5	6
A.1/1.43	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.1/2.1	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.1/2.2	Oil/water interface detectors	— Annex I, Reg. 32.	— Annex I, Reg. 32.	— IMO Res. MEPC. 5(XIII).	B + D B + E B + F
A.1/2.3	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.1/2.4	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.1/2.5	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

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1	2	3	4	5	6
A.1/2.6	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.1/2.7	Shipboard incinerators	— Annex VI, Reg. 16.	— Annex VI, Reg.16, — IMO MEPC.1/Circ.793	— IMO Res. MEPC. 76(40).	B + D B + E B + F G
A.1/2.8	NOx analyser of Chemiluminescent detector (CLD) or heated Chemiluminescent detector (HCLD) type for use in on board direct measurement	— 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), — IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011.	B + D B + E B + F G
A.1/2.9	Equipment using other technological methods to limit SOx emissions	Moved to A.2/2.4			
A.1/2.10	On board exhaust gas cleaning systems	— IMO Res. MEPC.176 (58) - (Revised MARPOL Annex VI, Reg. 4), — IMO Res. MEPC.184(-59).	— IMO Res. MEPC.176 (58) - (Revised MARPOL Annex VI, Reg. 4).	— IMO Res. MEPC. 184(59).	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.1/3.1	Primary decks covering	— 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

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1	2	3	4	5	6
A.1/3.2	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.1/3.3	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.1/3.4	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.1/3.5	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.1/3.6	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

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1	2	3	4	5	6
A.1/3.7	Self-contained compressed-air-operated breathing apparatus *Note*: 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.1/3.8	Compressed air line breathing apparatus	— Reg. X/3. — IMO Res. MSC.36 (63)-(1994 HSC Code) 7. — *Note*: This equipment is only for high speed craft built 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.1/3.9	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 perform-ance). (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

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1	2	3	4	5	6
A.1/3.10	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.1/Circ.1313.	— IMO MSC/Circ.1165, Appendix A.	B + D B + E B + F
A.1/3.11	‘A’ & ‘B’ Class divisions fire integrity (a) ‘A’ class divisions, (b) ‘B’ class divisions.	‘A’ Class: — Reg. I I-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	B + D B + E B + F
A.1/3.12	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 ISO 16852 (2010), — ISO 15364 (2007), — IMO MSC/Circ.677.	For equipme-nt other than valves: B + D B + E B + F For valves: B + F
A.1/3.13	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.1/3.14	Materials other than steel for pipes penetrating ‘A’ or ‘B’ Class division	Item included in A.1/3.26 and A.1/3.27			

▼**M12**

1	2	3	4	5	6
A.1/3.15	Materials other than steel for pipes conveying oil or fuel oil (a) plastic pipes and fittings, (b) valves, (c) flexible pipe assemblies and compensators, (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). Valves: — EN ISO 10497 (2010). Flexible pipe assemblies: — EN ISO 15540 (2001) — EN ISO 15541 (2001). Metallic pipe components with resilient and elastomeric seals. — ISO 19921 (2005), — ISO 19922 (2005).	B + D B + E B + F
A.1/3.16	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.1/3.17	Fire door control systems components. *Note*: 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.1/3.18	Surface materials and floor coverings with low flame-spread characteristics	— 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 Res. MSC.307 (88)-(2010 FTP Code).	B + D B + E B + F

▼**M12**

1	2	3	4	5	6
	(a) decorative veneers (b) paint systems, (c) floor coverings, (d) pipe insulation covers, (e) adhesives used in the construction of 'A', 'B' & 'C' class divisions, (f) combustible ducts membrane		— IMO MSC/Circ.1120.		
A.1/3.19	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).	B + D B + E B + F
A.1/3.20	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.1/3.21	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.1/3.22	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.1/3.23	Non-combustible duct penetrations through 'A' class divisions	Moved to A.1/3.26			

▼**M12**

1	2	3	4	5	6
A.1/3.24	Electric Cable Transits through 'A' class divisions	Moved to A.1/3.26(a)			
A.1/3.25	'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.1/3.26	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.1/3.27	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.1/3.28	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 (2004). Or, EN 12259-1 (1999) including A1 (2001), A2 (2004) and A3 (2006).	B + D B + E B + F
A.1/3.29	Fire hoses	— 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

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1	2	3	4	5	6
A.1/3.30	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), — EN 60079-0 (2012), — EN 60079-1 (2007) including IEC 60079-1 Corrigendum 1 (2008), — EN 60079-10-1 (2009), — EN 60079-11 (2012), — EN 60079-15 (2010), — EN 60079-26 (2007).	B + D B + E B + F
A.1/3.31	Nozzles for fixed sprinkler systems, for high speed craft (HSC)	Item deleted as it is covered by A.1/3.9 and A.1/3.28			
A.1/3.32	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 Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.33	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

▼**M12**

1	2	3	4	5	6
A.1/3.34	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.307 (88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.35	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.1/3.36	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.1/3.37	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.1/3.38	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.1/3.39	Nozzles for equivalent water-mist fire extinguishing systems for machinery spaces and cargo pump rooms	— 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 Res. MSC.98(73)-(FSS Code) 7, — IMO MSC.1/Circ.1313.	— IMO MSC/Circ.1165.	B + D B + E B + F

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1	2	3	4	5	6
A.1/3.40	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.1/3.41	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:	B + D B + E B + F
				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).	
A.1/3.42	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.1/3.43	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.1/3.44	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

▼**M12**

1	2	3	4	5	6
A.1/3.45	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.1/3.46	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.1/3.47	Concentrate for Fixed High Expansion Foam Fire Extinguishing Systems for Machinery Spaces and Cargo Pump Rooms. *Note*: 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	— 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

▼**M12**

1	2	3	4	5	6
	concentrate to the satisfaction of the Administration.				
A.1/3.48	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.1/3.49	Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces	— 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. And the additional design requirements for: — Prescriptive-based systems as per Circ. 1430 Clause 4: — Performance-based systems as per Circ. 1430 Clause 5.	B + D B + E B + F
A.1/3.50	Protective clothing resistant to chemical attack	Moved to A.2/3.9			
A.1/3.51	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces	— 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).	B + D B + E B + F

▼**M12**

1	2	3	4	5	6
				Smoke detectors — Point detectors using scattered light, transmitted light or ionization: — 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 60332-1-2 (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).	
A.1/3.52	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.1/3.53	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.1313.	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

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1	2	3	4	5	6
A.1/3.54	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 (2012), — EN 60079-29-1 (2007). For combined O_2/HC systems additionally:, — IMO MSC.1/Circ.1370.	B + D B + E B + F
A.1/3.55	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 branchpipes for fire service use – Combination branchpipes PN 16: — EN 15182-1 (2007) including A1(2009), — EN 15182-2 (2007) including A1(2009). Hand-held branchpipes for fire service use – Smooth bore jet and/or one fixed spray jet angle branchpipes PN 16: — EN 15182-1 (2007) including A1(2009).	B + D B + E B + F
A.1/3.56	Fire hoses (reel 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.	— EN 671-1 (2012)	B + D B + E B + F
A.1/3.57	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

▼**M12**

1	2	3	4	5	6
A.1/3.58	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.1/3.59	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.1/3.60	Nozzles for fixed pressure water-spraying fire-extinguishing systems for cabin balconies	— Reg. II-2/10.	— 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.1/3.61	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.	— 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

▼**M12**

1	2	3	4	5	6
	Note: 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				
A.1/3.62	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.1/3.63 Refer to note b) of this Annex A.1	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:	B + D B + E B + F
				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).	

▼**M12**

1	2	3	4	5	6
A.1/3.64 Refer to note b) of this Annex A.1	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.1/3.65 Refer to note b) of this Annex A.1	Fixed hydro-carbon 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). — 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.1/3.66 Refer to note b) of this Annex A.1	Evacuation guidance systems used as an alter-native 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.1/3.67 Refer to note c) of this Annex A.1	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

4. **Navigation equipment**

Notes applicable to section 4: Navigation equipment.

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 ed1.1 Consol. with am1 (2010-11) - Part 3: Serial data instrument network

— IEC 61162-3 ed1.0 (2008-05) - Part 3: Serial data instrument network

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— IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 — 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

— 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	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/4.1	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 60945 Corrigendum 1 (2008).	B + D B + E B + F G
A.1/4.2	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 (2004), including Corrigendum 2005, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series. — ISO 22090-2 (2004), including Corrigendum 2005, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.3	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, — EN 62288 (2008). Or, — ISO 8728 (1997), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.4	Radar equipment	Moved to A.1/4.34, A.1/4.35 and A.1/4.36			
A.1/4.5	Automatic radar plotting aid (ARPA)	Moved to A.1/4.34			
A.1/4.6	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, — EN 62288 (2008). 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.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.7	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.96(72), — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61023 (2007), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61023 (2007), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.8	Rudder angle, rpm, pitch indicator	Moved to A.1/4.20, A.1/4.21 and A.1/4.22			
A.1/4.9	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), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — ISO 20672 (2007), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.10	Direction finder	Deliberately left blank			
A.1/4.11	Loran-C 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. A.818(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 1 (2008), — EN 61075 (1993), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61075 (1991), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.12	Chayka 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. A.818 (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 1 (2008), — EN 61075 (1993), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61075 (1991), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.13	Decca navigator equipment	Deliberately left blank			
A.1/4.14	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, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-1 (2003), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.15	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, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-2 (1998), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.16	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, — EN 62288 (2008). Or, — ISO 11674 (2006), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.17	Mechanical pilot hoist	Moved to A.1/1.40			
A.1/4.18	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. 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.1/4.19	Radar equipment for high-speed craft	Moved to A.1/4.37			
A.1/4.20	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), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — ISO 20673 (2007), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.21	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), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — ISO 22554 (2007), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.22	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), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — ISO 22555 (2007), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.23	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.1/4.24	Automatic radar plotting aid (ARPA) for high-speed craft	Moved to A.1/4.37			

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1	2	3	4	5	6
A.1/4.25	Automatic tracking aid (ATA)	Moved to A.1/4.35			
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved to A.1/4.38			
A.1/4.27	Electronic plotting aid (EPA)	Moved to A.1/4.36			
A.1/4.28	Integrated bridge system	Moved to A.2/4.30			
A.1/4.29	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).	— IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 61996-1 (2013-05). — IEC 62288 Ed.1.0(2008)	B + D B + E B + F G
A.1/4.30	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)	— 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.232(82), — IMO SN.1/Circ.266. [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].	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — EN 61174 (2008), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 61174 (2008), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.31	Gyro compass 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.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).	— ISO 16328 (2001), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — EN 62288 (2008). Or, — ISO 16328 (2001), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.32	Universal automatic identification system equipment (AIS)	— 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.74(69), — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.191(79), — ITU-R M. 1371-4(2010). *Note*: ITU-R M. 1371-4(2010) shall only be applicable in accordance with requirements of IMO Res.MSC.74(69).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — EN 61993-2 (2013), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 61993-2 (2012), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.33	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)	— Reg. V/18.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.74(69), — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — EN 62065 (2002), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62065 (2002), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.34	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, — EN 62288 (2008), — EN 62388 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008). — IEC 62388 Ed.1.0(2007).	B + D B + E B + F G
A.1/4.35	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, — EN 62288 (2008), — EN 62388 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008). — IEC 62388 Ed.1.0(2007).	B + D B + E B + F G
A.1/4.36	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, — EN 62288 (2008), — EN 62388 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008). — IEC 62388 Ed.1.0(2007).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.37	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, — EN 62288 (2008), — EN 62388 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008). — IEC 62388 Ed.1.0(2007).	B + D B + E B + F G
A.1/4.38	Radar equipment approved with a chart option, namely: a) CAT 1C b) CAT 2C, c) CAT 1HC for HSC d) CAT 2HC 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, — EN 62288 (2008), — EN 62388 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008), — IEC 62388 Ed.1.0(2007).	B + D B + E B + F G
A.1/4.39	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

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1	2	3	4	5	6
A.1/4.40	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, — EN 62288 (2008). Or, — ISO 16329 (2003), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.41	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 (2004) including ISO Corrigendum 1 (2005), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — EN 62288 (2008). Or, — ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.42	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

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1	2	3	4	5	6
A.1/4.43	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), — EN 62288 (2008). Or, — ISO 16273 (2003), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.44	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.1/4.45	Chart facilities for shipborne radar	Item deleted, as it is covered by A.1/4.38			
A.1/4.46	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 (2002) including Corr.1 (2005), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — EN 62288 (2008). Or, — ISO 22090-1 (2002) including Corr.1 (2005), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1./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), — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 61996-2 (2007), — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.48	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.1/4.49	Pilot ladder	— Reg. V/23, — Reg. X/3.	— Reg. V/23, — IMO Res.A.1045(27), — IMO MSC/Circ.773.	— IMO Res.A.1045(27), — ISO 799 (2004).	B + D B + E B + F G
A.1/4.50	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.694 (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, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-1 (2003), — IEC 61108-4 (2004), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.51	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.113(73), — IMO Res. MSC.114(73), — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61108-2 (1998), — EN 61108-4 (2004), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-2 (1998), — IEC 61108-4 (2004), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.52	Daylight signalling lamp	— 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.95(72), — IMO Res. MSC.97(73)-(2000 HSC Code).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ISO 25861 (2007). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ISO 25861 (2007).	B + D B + E B + F
A.1/4.53	Radar target enhancer	— Reg. V/18, — 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, — IMO Res. MSC.164(78), — ITU-R M 1176-1 (02/13)	— ISO 8729-2 (2009), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), Or, — ISO 8729-2 (2009), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.54	Bearing Device	— Reg. V/18.	— Reg. V/19.	— ISO 25862 (2009), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), Or, — ISO 25862 (2009), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F G
A.1/4.55	AIS SART equipment	— Reg. III/4, — Reg. IV/14.	— Reg. III/6, — Reg. IV/7, — IMO Res. MSC.246(83), — IMO Res. MSC.247(83), — IMO Res. MSC.256(84), — ITU-R M. 1371-4(2010).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61097-14 (2010). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-14 (2010).	B + D B + E B + F G
A.1/4.56	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, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-3 (2010), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G

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1	2	3	4	5	6
A.1/4.57	Bridge Navigational Watch Alarm System (BNWAS)	— Reg. V/18.	— 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, — EN 62288 (2008), Or, — IEC 62616(2010) including IEC 62616 Corrigendum 1 (2012). — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed.1.0(2008), — IEC 62616(2010) including IEC 62616 Corrigendum 1 (2012).	B + D B + E B + F G
A.1/4.58 Refer to note c) of this Annex A.1	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 (2008), — ISO 14859 (2012). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008), — ISO 14859 (2012).	B + D B + E B + F G
A.1/4.59 Ex A.2/4.15	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 (2008), — IEC 61924-2 (2012). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 1.0 (2008), — IEC 61924-2 (2012).	B + D B + E B + F G

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5. **Radiocommunication equipment**

Notes applicable to section 5: Radiocommunication 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 ed1.1 Consol. with am1 (2010-11) - 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 61162-450 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

— EN 61162-450 (2011) - Part 450: Multiple talkers and multiple listeners — Ethernet interconnection

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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.1/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	— 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/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 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.689-2 (09/94).	— 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 301925 V1.3.1 (2010-09). Or, — IMO MSC/Circ.862, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-7 (1996), — IEC 61162 series.	B + D B + E B + F
A.1/5.2	VHF DSC watch-keeping receiver	— 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/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).	— 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 301033 V1.3.1 (2010-09), — ETSI EN 301 843-2 V1.2.1 (2004-06), Or, — 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

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1	2	3	4	5	6
A.1/5.3	NAVTEX receiver	— 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/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.625-3 (10/95).	— 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), Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-6 (2005-12).	B + D B + E B + F
A.1/5.4	EGC receiver	— 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/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.	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ETSI ETS 300460 Ed.1 (1996-05), — ETSI ETS 300 460/A1 (1997-11), — ETSI EN 300829 V1.1.1 (1998-03), — ETSI EN 301 843-1 V1.3.1 (2012-08), Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-4 (2007).	B + D B + E B + F
A.1/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	— 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/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 COMSAR Circ.32, — ITU-R M.491-1 (07/86), — ITU-R M.492-6 (10/95), — ITU-R M.540-2 (06/90), — ITU-R M.625-3 (10/95), — ITU-R M.688 (06/90).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — ETSI ETS 300067 Ed.1 (1990-11), — ETSI ETS 300 067/A1 Ed.1 (1993-10). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — ETSI ETS 300067 Ed.1 (1990-11), — ETSI ETS 300 067/A1 Ed.1 (1993-10).	B + D B + E B + F

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1	2	3	4	5	6
A.1/5.6	406 MHz EPIRB (COSPAS-SARSAT)	— 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/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.633-3 (05/04), — ITU-R M.690-1 (10/95).	— IMO MSC/Circ.862, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ETSI EN 300066 V 1.3.1 (2001-01). Or, — IMO MSC/Circ.862, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-2 (2008), *Note*: IMO MSC/Circ. 862 is applicable only to the optional remote activation device, not to the EPIRB itself.	B + D B + E B + F
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left blank			
A.1/5.8	2182 kHz watch receiver	Deliberately left blank			
A.1/5.9	Two-tone alarm generator	Deliberately left blank			
A.1/5.10	MF radio capable of transmitting and receiving DSC and radio-telephony *Note*: 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	— 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/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).	— 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 300 373-1 V1.3.1 (2011-01), — ETSI EN 301 843-5 V1.1.1 (2004-06), Or, — IMO MSC/Circ.862, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-9 (1997), — IEC 61162 series.	B + D B + E B + F

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1	2	3	4	5	6
A.1/5.11	MF DSC watch-keeping receiver	— 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/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 (10/95).	— 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 301033 V1.2.1 (2010-09), — ETSI EN 301 843-5 V1.1.1 (2004-06), Or, — 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.1/5.12	Inmarsat-B SES *Note*: The service will be discontinued on and after 31 December 2014.	— 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, — 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.	— IMO MSC/Circ 862, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — IMO MSC/Circ 862, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F
A.1/5.13	Inmarsat-C SES	— 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, — 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 MSC/Circ.862, — IMO COMSAR Circ.32.	— IMO MSC/Circ.862, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — ETSI ETS 300460 Ed.1 (1996-05), — ETSI ETS 300 460/A1 (1997-11), — ETSI EN 300829 V1.1.1 (1998-03), — ETSI EN 301 843-1 V1.3.1 (2012-08), Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-4 (2007), — IEC 61162 series.	B + D B + E B + F

▼**M12**

1	2	3	4	5	6
A.1/5.14	MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony *Note*: 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.	— 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, — 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 COMSAR Circ.32, — ITU-R M.476-5 (10/95), — ITU-R M.491-1 (07/86), — ITU-R M.492-6 (10/95), — ITU-R M.493-13 (10/09), — ITU-R M.541-9 (05/04), — ITU-R M.625-3 (10/95), — ITU-R M.1173 (10/95).	— IMO MSC/Circ.862, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — ETSI ETS 300067 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 V1.3.1 (2011-01), — ETSI EN 301 843-5 V1.1.1 (2004-06), Or, — IMO MSC/Circ.862, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-9 (1997), — IEC 61162 series.	B + D B + E B + F
A.1/5.15	MF/HF DSC scanning watch keeping receiver	— 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, — 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).	— 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 301033 V1.3.1 (2010-09), — ETSI EN 301 843-5 V1.1.1 (2004-06). Or, — 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.1/5.16	Aeronautical two way VHF radio telephone apparatus	Moved to A.2/5.8			

▼**M12**

1	2	3	4	5	6
A.1/5.17	Portable survival craft two-way VHF radio-telephone apparatus	— 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. 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).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ETSI EN 300225 V1.4.1 (2004-12), — ETSI EN 301 843-2 V1.2.1 (2004-06). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-12 (1996).	B + D B + E B + F
A.1/5.18	Fixed survival craft two-way VHF radio-telephone apparatus	— 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. 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).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ETSI EN 301466 V1.1.1 (2000-10), Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-12 (1996).	B + D B + E B + F
A1/5.19	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

▼M12

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.1/6.1	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 Annex A.1.

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

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.1/8.1	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).	— IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), — IEC 60529 (2001) including: Corrigendum 1 (2003), Corrigendum 2 (2007), Corrigendum 3 (2009), — IMO Res. MSC.188(79), — IMO MSC.1/Circ. 1291.	B + D B + E B + F

▼M12

ANNEX A.2

EQUIPMENT FOR WHICH NO DETAILED TESTING STANDARDS EXIST IN INTERNATIONAL INSTRUMENTS

1. **Life-saving appliances**

Column 4: IMO MSC/Circular 980 should 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.2/1.1	Radar reflector for liferafts	— Reg. III/4, — Reg. III/34, — Reg. X/3.	— IMO Res. MSC.48(66)-(LSA Code).		
A.2/1.2	Immersion suit materials	Deliberately left blank			
A.2/1.3	Float-free launching appliances for survival craft	— Reg. III/4, — Reg. III/34.	— Reg. III/13, — Reg. III/16, — Reg. III/26, — 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.		
A.2/1.4	Embarkation ladders	Moved to A.1/1.29			
A.2/1.5	Public address & general emergency alarm system (when used as fire alarm device item A.1/3.53 shall apply)	— Reg. III/6.	— IMO Res. A.1021(26), — 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/Circ.808.		

▼**M12**

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, applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/2.1	NOx analyser of Chemilunescent detector (CLD) or heated chemi-nulescent detector type (HCLD) type for use in on board direct measurement	Moved to A.1/2.8			
A.2/2.2	On board exhaust gas cleaning systems	Moved to A.1/2.10			
A.2/2.3	Equipment using other equivalent methods to reduce on board NOx emissions	— Annex VI, Reg. 4.	— Annex VI, Reg. 4		
A.2/2.4	Equipment using other technological methods to limit SOx emissions	— IMO Res. MEPC.176 (58) - (Revised MARPOL Annex VI, Reg. 4), — IMO Res. MEPC. 184(59).	— IMO Res. MEPC.176 (58) - (Revised MARPOL Annex VI, Reg. 4).		
A.2/2.5 (new item)	On board NOx analysers using a measurement method other than the Direct Measurement and Monitoring Method of the NOx Technical Code 2008	— IMO Res. MEPC.176 (58) - (Revised MARPOL Annex VI, Reg. 4)	— IMO Res. MEPC.176 (58) - (Revised MARPOL Annex VI, Reg. 4)		

▼M12

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.2/3.1	Non-portable and transportable extinguishers	Moved to A.1/3.52			
A.2/3.2	Nozzles for fixed pressure water-spraying fire-extinguishing systems for special category spaces, ro-ro cargo spaces, ro-ro spaces and vehicle spaces	Moved to A.1/3.49			
A.2/3.3	Cold-weather starting of generator sets (starting devices)	Moved to A.2/8.1			
A.2/3.4	Dual purpose type nozzles (spray/jet type)	Moved to A.1/3.55			
A.2/3.5	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, machinery spaces and unattended machinery spaces	Moved to A.1/3.51			
A.2/3.6	Smoke detectors	Moved to A.1/3.51			
A.2/3.7	Heat detectors	Moved to A.1/3.51			

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1	2	3	4	5	6
A.2/3.8	Electric safety lamp	— 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.	— IEC 60079 series.	
A.2/3.9	Protective clothing resistant to chemical attack	— Reg. II-2/19.	— Reg. II-2/19, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— EN 943-1 (2002) including AC (2005), — EN 943-2 (2002), — EN ISO 6529 (2001), — EN ISO 6530 (2005), — EN 14605 (2005) including A1(2009), — IMO MSC/Circ.1120.	
A.2/3.10	Low-location lighting systems	Moved to A.1/3.40			
A.2/3.11	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces	Moved to A.1/3.10			
A.2/3.12	Equivalent fixed gas fire extinguishing systems for machinery spaces and cargo pump rooms	Moved to A.1/3.45			
A.2/3.13	Compressed airline breathing apparatus (High Speed Craft)	Item deleted			
A.2/3.14	Fire hoses (reel type)	Moved to A.1/3.56			
A.2/3.15	Sample extraction smoke detection systems components	Moved to A.1/3.63			
A.2/3.16	Flame detectors	Moved to A.1/3.51			

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1	2	3	4	5	6
A.2/3.17	Manual call points	Moved to A.1/3.51			
A.2/3.18	Alarm devices	Moved to A.1/3.53			
A.2/3.19	Fixed water based local application fire fighting systems components for use in category ‘A’ machinery spaces.	Moved to A.1/3.48			
A.2/3.20	Upholstered furniture	Moved to A.1/3.20			
A.2/3.21	Paint lockers and flammable liquid lockers fire extinguishing systems components	— Reg. II-2/10.	— Reg. II-2/10, — IMO MSC.1/Circ.1239.		
A.2/3.22	Galley Exhaust Duct Fixed Fire Extinguishing Systems components	— Reg. II-2/9.	— Reg. II-2/9.		
A.2/3.23	Helicopter Deck Fire Extin-guishing Systems components	Moved to A.1/3.67			
A.2/3.24	Portable Foam Applicator Units	— Reg. II-2/10, — Reg. II-2/20, — Reg. X/3.	— Reg. II-2/10, — 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) 4, — IMO MSC.1/Circ.1239, — IMO MSC.1/Circ.1313.		
A.2/3.25	C class Divisions	Moved to A.1/3.64			

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1	2	3	4	5	6
A.2/3.26	Gaseous Fuel Systems Used for Domestic Purposes (components)	— Reg. II-2/4.	— Reg. II-2/4, — IMO MSC.1/Circ.1276.		
A.2/3.27	Fixed Gas Fire Extinguishing Systems (CO_2) components.	— Reg. II-2/10, — Reg. X/3.	— Reg. II-2/10, — 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) 5, — IMO MSC.1/Circ.1313, — IMO MSC.1/Circ.1318.	Electrical automatic control and delay devices: — EN 12094-1 (2003).	
				Non-electrical automatic control and delay devices: — EN 12094-2 (2003).	
				Manual triggering and stop devices: — EN 12094-3 (2003).	
				Container valve assemblies and their actuators: — EN 12094-4 (2004).	
				High and low pressure selector valves and their actuators: — EN 12094-5 (2006).	
				Non-electrical disable devices: — EN 12094-6 (2006).	
				Nozzles for CO_2 systems: — EN 12094-7 (2000) including A1 (2005).	
				Connectors: — EN 12094-8 (2006).	
				Pressure gauges and pressure switches: — EN 12094-10 (2003).	
				Mechanical weighing devices: — EN 12094-11 (2003).	
				Check valves and non-return valves: — EN 12094-13 (2001) including AC (2002).	
				Odorizing devices for CO_2 low pressure systems: — EN 12094-16 (2003).	
A.2/3.28	Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers	Moved to A.1/3.57			

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1	2	3	4	5	6
A.2/3.29	Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck Protection.	Moved to A.1/3.58			
A.2/3.30	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	Moved to A.1/3.59			
A.2/3.31	Water Spraying Hand Operated System	— Reg. II-2/10, — Reg. II-2/19.	— Reg. II-2/10, — Reg. II-2/19.		
A.2/3.32	Dry chemical powder extinguishing systems	Moved to A.1/3.62			
A.2/3.33 New item	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.		

4. **Navigation equipment**

Notes applicable to section 4: Navigation equipment

Columns 3 and 4: References to SOLAS Chapter V are to SOLAS 1974 as amended by MSC 73 and entering into force on 1 July 2002.

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 ed1.1 Consol. with am1 (2010-11) - 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

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— 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

— 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	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/4.1	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.2	Heading control system for high speed craft (formerly auto-pilot)	Moved to A.1/4.40			
A.2/4.3	Transmitting heading device THD (GNSS method)	Moved to A.1/4.41			
A.2/4.4	Daylight signalling lamp	Moved to A.1/4.52			
A.2/4.5	Searchlight for high speed craft	Moved to A.1/4.42			
A.2/4.6	Night vision equipment for high speed craft	Moved to A.1/4.43			
A.2/4.7	Track control system	Moved to A.1/4.33			

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1	2	3	4	5	6
A.2/4.8	Electronic Chart Display and Information System (ECDIS).	Moved to A.1/4.30			
A.2/4.9	Electronic Chart Display and Information System (ECDIS) backup	Moved to A.1/4.30			
A.2/4.10	Raster Chart Display System (RCDS)	Moved to A.1/4.30			
A.2/4.11	Combined GPS/ GLONASS equipment	— 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.97(73)-(2000 HSC Code), — IMO Res. MSC.115(73), — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61108-1 (2003), — EN 61108-2 (1998), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-1 (2003), — IEC 61108-2 (1998), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	
A.2/4.12	DGPS, DGLONASS equipment	Moved to A.1/4.44, A.1/4.50 and A.1/4.51			
A.2/4.13	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.14	Voyage data recorder (VDR)	Moved to A.1/4.29			
A.2/4.15	Integrated navigation system	Moved to A.1/4.59			
A.2/4.16	Bridge equipment system	Deliberately left blank			
A.2/4.17	Radar target enhancer	Moved to A.1/4.53			

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1	2	3	4	5	6
A.2/4.18	Sound reception system	Moved to A.1/4.58			
A.2/4.19	Magnetic compass for high speed craft	— Reg. X/3, — IMO Res. MSC.36 (63)-(1994 HSC Code), — IMO Res. MSC.97 (73)-(2000 HSC Code).	— IMO Res. A.382(X), — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— 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 60945 Corrigendum 1 (2008).	
A.2/4.20	Track control system for — high-speed craft	— Reg. X/3, — IMO Res. MSC.36 (63)-(1994 HSC Code), — IMO Res. MSC.97 (73)-(2000 HSC Code).	— IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — 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 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 1.0 (2008).	
A.2/4.21	Chart facilities for shipborne radar	Moved to A.1/4.45			
A.2/4.22	Transmitting heading device THD (Gyro-scopic method)	Moved to A.1/4.46			
A.2/4.23	Transmitting heading device THD (Magnetic method)	Moved to A.1/4.2			

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1	2	3	4	5	6
A.2/4.24	Thrust indicator	— 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.97(73)-(2000 HSC Code), — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 1.0 (2008).	
A.2/4.25	Lateral thrust, pitch and mode indicators	— 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.97(73)-(2000 HSC Code), — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 1.0 (2008).	
A.2/4.26	Rate-of-turn indicator	Moved to A.1/4.9			
A.2/4.27	Rudder angle indicator	Moved to A.1/4.20			
A.2/4.28	Propeller revolution indicator	Moved to A.1/4.21			
A.2/4.29	Pitch indicator	Moved to A.1/4.22			
A.2/4.30	Bridge equipment 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) 15, — IMO Res. MSC.97(73)-(2000 HSC Code) 15, — IMO Res. MSC.191(79), — IMO SN.1/Circ.288.	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — EN 62288 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed. 1.0 (2008).	

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1	2	3	4	5	6
A.2/4.31	Bearing Device	Moved to A.1/4.54			
A.2/4.32	Bridge Navigational Watch Alarm System (BNWAS)	Moved to A.1/4.57			
A.2/4.33	Track control system (working at ship's speed from 30 knots and above)	Deliberately left blank			
A.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	— Reg. V/19-1.	— Reg. V/19-1, — IMO Res. A.694(17), — IMO Res. A.813(19), — IMO Res. MSC.202(81), — IMO Res. MSC.211(81), — IMO Res. MSC.263(84), — IMO MSC.1/Circ.1307.	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series. Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series.	
A.2/4.35	Galileo Receiver	Moved to A.1/4.56			
A.2/4.36	AIS SART equipment	Moved to A.1/4.55			

5. **Radiocommunication equipment**

Notes applicable to section 5: Radiocommunication equipment.

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 ed1.1 Consol. with am1 (2010-11) - 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 61162-450 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:

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— 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

— 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	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/5.1	VHF EPIRB	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— Reg.IV/8, — IMO Res. A.662(16), — IMO Res. A.694(17), — IMO Res. A.805(19), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — ITU-R M.489-2 (10/95), — ITU-R M.693 (06/90).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	
A.2/5.2	Radio reserve source of energy	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36 (63)-(1994 HSC Code), — IMO Res. MSC.97 (73)-(2000 HSC Code).	— Reg. IV/13, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO COMSAR Circ.16, — IMO COMSAR Circ.32.	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	
A.2/5.3	Inmarsat-F SES	Moved to A.1/5.19.			
A.2/5.4	Distress panel	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— Reg. IV/6, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO MSC/Circ. 862, — IMO COMSAR Circ.32.	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	

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1	2	3	4	5	6
A.2/5.5	Distress alarm or alert panel	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36 (63)-(1994 HSC Code), — IMO Res. MSC.97 (73)-(2000 HSC Code).	— Reg. IV/6, — IMO Res.A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO MSC/Circ.862, — IMO COMSAR Circ.32.	— EN 60945 (2002) including IEC 60945 Corri-gendum 1 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	
A.2/5.6	L- band EPIRB (INMARSAT)	Deliberately left blank			
A.2/5.7	Ship security alert system		— Reg. XI-2/6, — IMO Res. A.694(17), — IMO Res. MSC.147(77), — IMO MSC/Circ.1072.	— EN 60945 (2002) including IEC 60945 Corri-gendum 1 (2008), — EN 61162 Series. Or, — IEC 60945 (2002) including IEC 60945 Corri-gendum 1 (2008), — IEC 61162 Series.	
A.2/5.8 Ex A.1/ 5.16	Aeronautical two way VHF radio telephone apparatus	— 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/7, — 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.80(70), — IMO COMSAR Circ.32, — ICAO Convention, Annex 10, Radio -Regulations.	— EN 60945 (2002) including IEC 60945 Corri-gendum 1 (2008). — ETSI EN 301 688 V1.1.1 (2000-07). Or, — IEC 60945 (2002) including IEC 60945 Corri-gendum 1 (2008). — ETSI EN 301 688 V1.1.1 (2000-07).	

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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.2/6.1	Navigation lights	Moved to A.1/6.1.			
A.2/6.2	Sound signal appliances	— COLREG 72 Annex III/3.	— COLREG 72 Annex III/3, — IMO Res. A.694(17).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — Whistles — COLREG 72 Annex III/1 (Performance), — Bells or Gongs — COLREG 72 Annex III/2 (Performance). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — Whistles — COLREG 72 Annex III/1 (Performance), — Bells or Gongs — COLREG 72 Annex III/2 (Performance).	

7. **Bulk carrier safety 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.2/7.1	Loading instrument	— Reg. XII/11, — 1997 SOLAS Conference Res. 5.	— Reg. XII/11, — 1997 SOLAS Conference Res. 5.	— IMO MSC.1/Circ 1229.	
A.2/7.2	Water level detectors on bulk carriers	Item deleted			

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8. **SOLAS Chapter II-1 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.2/8.1	Cold-weather starting of generator sets (starting devices)	— Reg. II-1/44, — Reg. X/3.	— Reg. II-1/44, — IMO Res. MSC.36(63)-(1994 HSC Code) 12, — IMO Res. MSC.97(73)-(2000 HSC Code) 12.		

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ANNEX B

Modules for conformity assessment

EC TYPE-EXAMINATION (MODULE B)

1. A notified body must ascertain and attest that a specimen, representative of the production envisaged, complies with the provisions of the international instruments that apply to it.

2. The application for the EC type-examination must be lodged by the manufacturer or his authorized representative established within the Community with a notified body of his choice.

   The application must include:

   — the name and address of the manufacturer and, if the application is lodged by the authorized representative, his name and address as well,

   — a written declaration that the same application has not been lodged simultaneously with any other notified body,

   — the technical documentation as described in point 3.

   The applicant must place at the disposal of the notified body a specimen, representative of the production envisaged and hereinafter called 'type' ([1]). The notified body may request further specimens if needed for the test programme.

3. The technical documentation must make it possible to assess the product's compliance with the requirements of the relevant international instruments. It must, as far as is relevant for such assessment, cover the design, the building standard, manufacture, installation and functioning of the product in accordance with the description of technical documentation set down in the Appendix to this Annex.

4. The notified body must:

4.1. examine the technical documentation and verify that the type has been manufactured in accordance with the technical documentation;

4.2. perform the appropriate examinations and necessary tests or have them performed to check whether the requirements of the relevant international instruments have actually been met;

4.3. agree with the applicant the location where the examinations and necessary tests will be carried out.

5. Where the type meets the provisions of the relevant international instruments, the notified body must issue an EC type-examination certificate to the applicant. The certificate must give the name and address of the manufacturer, details of the equipment, the conclusions of the examination, the conditions of its validity and the necessary data for identification of the approved type.

   A list of the relevant parts of the technical documentation must be annexed to the certificate and a copy kept by the notified body.

   If a manufacturer is refused a type-certification, the notified body must give detailed reasons for that refusal.

   Where a manufacturer reapplies for type-approval for equipment for which a type-certificate has been refused, his submission to the notified body must include all relevant documentation, including the original test reports, the detailed reasons for the previous refusal and details of all modifications made to the equipment.

([1]) A type may cover several versions of the product provided that the differences between the versions do not affect the level of safety or the other requirements concerning the performance of the product.

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6. The applicant must inform the notified body that holds the technical documentation concerning the EC type-examination certificate of all modifications to the approved product, which must receive additional approval where such changes may affect compliance with the requirements or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EC type-examination certificate.

7. Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the EC type-examination certificates and additions issued and withdrawn.

8. The other notified bodies may receive copies of the EC type-examination certificates and/or their additions. The Annexes to the certificates must be kept at the disposal of the other notified bodies.

9. The manufacturer or his authorized representative established within the Community must keep with the technical documentation copies of EC type-examination certificates and their additions for at least 10 years after the last product has been manufactured.

CONFORMITY TO TYPE (MODULE C)

1. A manufacturer or his authorized representative established within the Community must ensure and declare that the products concerned conform to type as described in the EC type-examination certificate and satisfy the requirements of the international instruments that apply to them. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity.

2. The manufacturer must take all measures necessary to ensure that the manufacturing process ensures that the manufactured products conform to type as described in the EC type-examination certificate and comply with the requirements of the international instruments that apply to them.

3. The manufacturer or his authorized representative established within the Community must keep a copy of the declaration of conformity for at least 10 years after the last product has been manufactured.

PRODUCTION-QUALITY ASSURANCE (MODULE D)

1. A manufacturer who satisfies the obligations of point 2 must ensure and declare that the products concerned conform to type as described in the EC type-examination certificate. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.

2. The manufacturer must operate an approved quality system for production, final-product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

3. **Quality system**

3.1. The manufacturer must lodge an application for assessment of his quality system with a notified body of his choice for the products concerned.

The application must include:

— all relevant information for the product category envisaged,

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— 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 must ensure that the products conform to type as described in the EC type-examination certificate.

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

It must, in particular, include an adequate description of:

— the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,

— the 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 of the personnel concerned, etc.,

— the means of monitoring the achievement of the required product quality and the effective operation of the quality system.

3.3. The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with those requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience of assessment in the product technology concerned. The assessment procedure must include a visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

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

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must assess the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decision. The notification must include 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.

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4.2. The manufacturer must allow the notified body access for inspection purposes to the locations of manufacture, inspection and testing and storage and must 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 of the personnel concerned, etc.

4.3. The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.

4.4. In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has taken place, with a test report.

5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:

— the documentation referred to in the second indent of the second paragraph of point 3.1,

— the updating referred to in the second paragraph of point 3.4,

— the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.

6. Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

PRODUCT-QUALITY ASSURANCE (MODULE E)

1. A manufacturer who satisfies the obligations of point 2 ensures and declares that the products concerned conform to type as described in the EC type-examination certificate. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.

2. The manufacturer must operate an approved quality system for final inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

3. **Quality system**

3.1. The manufacturer must lodge an application for assessment of his quality system for the products concerned with a notified body of his choice.

The application must include:

— all relevant information for the product category envisaged,

— documentation concerning the quality system,

— the technical documentation of the approved type and a copy of the EC type-examination certificate.

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3.2. Under the quality system, each product must be examined and appropriate tests must be carried out in order to ensure its compliance with the relevant requirements of the international instruments. All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. That quality-system documentation must ensure common understanding of the quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

— the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,

— the examinations and tests that will be carried out after manufacture,

— the means of monitoring the effective operation of the quality system,

— the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

3.3 The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with the requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising out of the quality system as approved and to maintain it in an appropriate and efficient manner.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decisions. The notification must include 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 must allow the notified body access for inspection purposes to the locations of inspection, testing and storage and must provide it with all necessary information, in particular:

— the quality-system documentation,

— the technical documentation,

— the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

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4.3. The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.

4.4. In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.

5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:

— the documentation referred to in the third indent of the second paragraph of point 3.1,

— the updating referred to in the second paragraph of point 3.4,

— the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.

6. Each notified body must on request provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

PRODUCT VERIFICATION (MODULE F)

1. A manufacturer or his authorized representative established within the Community must check and attest that the products subject to point 3 conform to the type as described in the EC type-examination certificate.

2. The manufacturer must take all measures necessary to ensure that the manufacturing process ensures that the products conform to type as described in the EC type-examination certificate. He must affix the mark to each product and must draw up a declaration of conformity.

3. The notified body must carry out the appropriate examinations and tests in order to check that the product complies with the requirements of the international instruments either by examination and testing of every product as specified in point 4 or by examination and testing of products on a statistical basis, as specified in point 5, at the choice of the manufacturer.

3a. The manufacturer or his authorized representative established within the Community must keep a copy of the declaration of conformity for at least 10 years after the last product has been manufactured.

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

4.1. All products must be individually examined and appropriate tests must be carried out in order to verify their conformity to type as described in the EC type-examination certificate.

4.2. The notified body must affix its identification symbol or cause it to be affixed to each approved product and draw up a written certificate of conformity relating to the tests carried out.

4.3. The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificate of conformity on request to the flag Member State administration.

5. **Statistical verification**

5.1. The manufacturer must present his products in the form of homogeneous lots and must take all measures necessary to ensure that the manufacturing process ensures the homogeneity of each lot produced.

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5.2. All products must be available for verification in the form of homogeneous lots. A random sample must be drawn from each lot. Products in a sample must be individually examined and appropriate tests must be carried out to ensure that they comply with the requirements of the international instruments which apply to them and to determine whether the lot is to be accepted or rejected.

5.3. In the case of accepted lots, the notified body must affix its identification symbol or cause it to be affixed to each product and must draw up a written certificate of conformity relating to the tests carried out. All products in the lot may be put on the market except those products from the sample which are found not to comply.

If a lot is rejected, the notified body or the competent authority must take appropriate measures to prevent that lot's being put on the market. In the event of frequent rejection of lots the notified body may suspend statistical verification.

The manufacturer may, under the responsibility of the notified body, affix the latter's identification symbol during the manufacturing process.

5.4. The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificates of conformity on request to the flag Member State administration.

UNIT VERIFICATION (MODULE G)

1. The manufacturer must ensure and declare that the product concerned, which has been issued with the certificate referred to in point 2, complies with the requirements of the international instruments that apply to it. The manufacturer or his authorized representative established within the Community must affix the mark to the product and draw up a declaration of conformity.

2. The notified body must examine the individual product and carry out appropriate tests to ensure that it complies with the relevant requirements of the international instruments.

The notified body must affix its identification number or cause it to be affixed to the approved product and must draw up a certificate of conformity concerning the tests carried out.

3. The aim of the technical documentation is to enable compliance with the requirements of the international instruments to be assessed and the design, manufacture and operation of the product to be understood.

FULL-QUALITY ASSURANCE (MODULE H)

1. A manufacturer who satisfies the obligations of paragraph 2 must ensure and declare that the products concerned comply with the requirements of the international instruments that apply to them. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.

2. The manufacturer must operate an approved quality system for design, manufacture, final-product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

3. **Quality system**

3.1. The manufacturer must lodge an application for assessment of his quality system with a notified body.

The application must include:

— all relevant information for the product category envisaged and

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— documentation concerning the quality system.

3.2. The quality system must ensure that the products comply with the requirements of the international instruments that apply to them.

All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality-system documentation must ensure common understanding of the quality policies and procedures such as quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

— the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,

— the technical design specifications, including standards, that will be applied and the assurance that the essential requirements of the international instruments that apply to the products will be met,

— the design-control and design-verification techniques, processes and systematic actions that will be used in the design of the products pertaining to the product category covered,

— 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 of the personnel concerned, etc.,

— the means of monitoring the achievement of the required design and product quality and the effective operation of the quality system.

3.3. The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with the requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising from the quality system as approved and to uphold it so that it remains adequate and efficient.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decisions. The notification must include the conclusions of the examination and the reasoned assessment decision.

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4. **EC 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 must allow the notified body access for inspection purposes to the locations of design, manufacture, inspection and testing and storage and must provide it with all necessary information, in particular:

— the quality-system documentation,

— the quality records as provided for in the design part of the quality system, such as the results of analyses, calculations, tests, etc.,

— the quality records as provided for in the manufacturing part of the quality system, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

4.3. The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.

4.4. In addition the notified body may pay unannounced visits to the manufacturer. During such visits, the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.

5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:

— the documentation referred to in the second indent of the second paragraph of point 3.1,

— the updating referred to in the second paragraph of point 3.4,

— the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.

6. Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

7. **Design examination**

7.1. The manufacturer must lodge an application for examination of the design with a single notified body.

7.2 The application must make it possible to understand the design, manufacture and operation of the product and to assess compliance with the requirements of international instruments.

It must include:

— the technical design specifications, including standards, that have been applied and

— the necessary supporting evidence for their adequacy, in particular where the standards specified in Article 5 have not been applied in full. Such supporting evidence must include the results of tests carried out by an appropriate laboratory of the manufacturer's or on his behalf.

7.3. The notified body must examine the application and where the design complies with those provisions of the international instruments that apply it must issue an EC design-examination certificate to the applicant. The certificate must include the conclusions of the examination, the conditions of its validity, the data necessary for identification of the approved design and, if relevant, a description of the product's functioning.

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7.4. The applicant must keep the notified body that has issued the EC design-examination certificate informed of any modification to the approved design. Modifications to the approved design must receive additional approval from the notified body that issued the EC design-examination certificate where such changes may affect compliance with the relevant requirements of the international instruments or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EC design-examination certificate.

7.5. The notified bodies must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning:

— the EC design-examination certificates and additions issued and

— the EC design-approvals and additional approvals withdrawn.

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Appendix to Annex B

Technical documentation to be supplied by the manufacturer to the notified body

The provisions set down in this Appendix apply to all modules of Annex B.

The technical documentation referred to in Annex B must comprise all relevant data and means used by the manufacturer to ensure that equipment complies with the essential requirements relating to it.

The technical documentation must make it possible to understand the design, manufacture and operation of the product, and must make it possible to assess compliance with the requirements of the relevant international instruments.

The documentation must, so far as they are relevant to assessment, include:

— a general description of the type,

— conceptual-design, build standard and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.,

— descriptions and explanations necessary for the understanding of those drawings and schemes, including the operation of the product,

— the results of design calculations made, impartial examinations carried out, etc.,

— impartial test reports,

— manuals for installation, use and maintenance.

Where appropriate, the design documentation must contain the following:

— attestations relating to the equipment incorporated in the appliance,

— attestations and certificates relating to the methods of manufacture and/or inspection and/or monitoring of the appliance,

— any other document that makes it possible for the notified body to improve its assessment.

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ANNEX C

Minimum criteria to be taken into account by Member States for the designation of bodies

1. Notified bodies must fulfil the requirements of the relevant EN 45000 series.

2. A notified body must be independent and must not be controlled by manufacturers or by suppliers.

3. A notified body must be established within the territory of the Community.

4. Where type-approvals are issued by a notified body on behalf of a Member State, the Member State must ensure that the qualifications, technical experience and staffing of the notified body are such as will enable it to issue type-approvals which comply with the requirements of this Directive and to guarantee a high level of safety.

5. A notified body must be in a position to provide maritime expertise.

A notified body is entitled to perform conformity-assessment procedures for any economic operator established within or outwith the Community.

A notified body may perform conformity-assessment procedures in any Member State or State outwith the Community using either its home-based means or the personnel of its branch office abroad.

If a subsidiary of a notified body performs conformity-assessment procedures, all documents relating to the conformity-assessment procedures must be issued by and in the name of the notified body and not in the name of the subsidiary.

A subsidiary of a notified body which is established in another Member State may, however, issue documents relating to conformity-assessment procedures if it is notified by that Member State.

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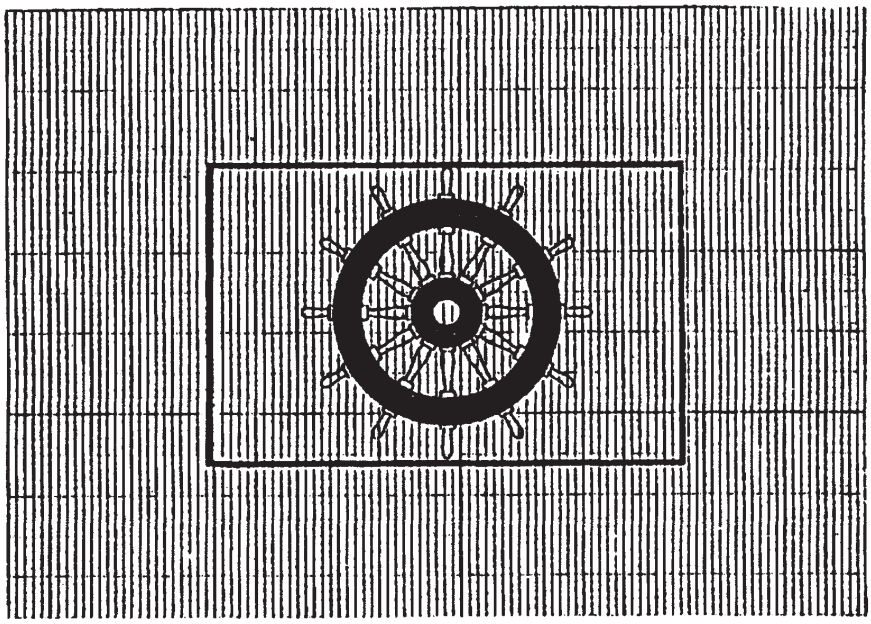
ANNEX D

Mark of conformity

The mark of conformity must take the following form:



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

The various components of the 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.