Council Directive 96/98/EC of 20 December 1996 on marine equipment (repealed)

COUNCIL DIRECTIVE 96/98/EC

of 20 December 1996

on marine equipment (repealed)

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;
- (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⁽⁴⁾ 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;
- (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⁽⁵⁾;
- (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:

i or the purposes or t	
(a) 'conformity- assessment procedures'	shall mean the procedures set out in Article 10 and Annex B;
(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;
$[^{F1}(c)]$	shall mean equipment required by Chapter IV of the 1974 SOLAS
'radiocommunications equipment'	Convention, [^{F2} 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;]
(d) 'international	shall mean:
conventions'	— [^{X1} the 1966 International Convention] on Load Lines (LL66),
conventions	 — The 1900 International Convention on Load Enles (EE00), — 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 [^{F2} 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
(A) ((IMO), and the relevant international testing standards;
(f) 'mark'(g) 'notified body'	shall mean the symbol referred to in Article 11 and set out in Annex D; shall mean an organization designated by the competent national
(g) notified body	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	shall mean the certificates issued by or on behalf of Member States in
certificates' (j) 'ship'	accordance with international conventions; shall mean a ship falling within the scope of international conventions; warships shall not be covered;
	1

(k) 'Community ship'(l) 'new ship'	of Memb not inclu ship at th shall mea construct For the p	an a ship for which safety certificates are issued by or on behalf ber States under international conventions. This definition shall de a Member State administration's issuing a certificate for a he request of a third country's administration; an a ship the keel of which is laid or which is at a similar stage of tion on or after the date of the entry into force of this Directive. urposes of this definition, 'a similar stage of construction' shall e 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 mea	an the standards set by the International Maritime Organization (IMO),					
Staritatias	_	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)					
(o) 'type-	the relevent the resolution only in the relevent the relevent to the resolution only in the relevant to the re	ir up-to-date version], and established in accordance with vant international conventions and with the relevant IMO ns and circulars to define testing methods and test results, but he form referred to in Annex A; ean the procedures for evaluating equipment produced in					
approval'	accordan	ce with the appropriate testing standards and the issue of the ate certificate.					

Editorial Information

X1 Substituted by Corrigendum to Council Directive 96/98/EC of 20 December 1996 on marine equipment (Official Journal of the European Communities L 46 of 17 February 1997).

Textual Amendments

- **F1** Substituted by Commission Directive 98/85/EC of 11 November 1998 amending Council Directive 96/98/EC on marine equipment (Text with EEA relevance).
- **F2** Substituted by Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002 amending the Directives on maritime safety and the prevention of pollution from ships (Text with EEA relevance).

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

or

where such equipment was not previously carried on board

 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⁽⁶⁾ and 89/686/EEC of 21 December 1989 on the approximation of the laws of the Member States relating to personal protective equipment⁽⁷⁾, 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.

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⁽⁸⁾, 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.

 $[^{F3}5]$ 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.;]

Textual Amendments

F3 Substituted by Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Four.

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.

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.

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 productioncontrol 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[^{x2} 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:

- 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:

- I^{F3}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);]
- 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.

Editorial Information

X2 Substituted by Corrigendum to Council Directive 96/98/EC of 20 December 1996 on marine equipment (Official Journal of the European Communities L 46 of 17 February 1997).

Textual Amendments

F3 Substituted by Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Four.

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.

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.

 $[^{F3}5$ 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).]

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.

Textual Amendments

F3 Substituted by Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Four.

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:

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.

[^{F2}Article 17

[^{F3}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).;]

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)⁽⁹⁾.]

Textual Amendments

- **F2** Substituted by Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002 amending the Directives on maritime safety and the prevention of pollution from ships (Text with EEA relevance).
- F3 Substituted by Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny Part Four.

[^{F3}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⁽¹⁰⁾.

2 Where reference is made to this paragraph, Articles 5 and 7 of Council Decision 1999/468/EC⁽¹¹⁾ 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.]

Textual Amendments

F3 Substituted by Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Four.

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.

[^{F4}ANNEX A

Textual Amendments

F4 Substituted by Commission Directive 2013/52/EU of 30 October 2013 amending Council Directive 96/98/EC on marine equipment (Text with EEA relevance).

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, Life saving appliance.

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

MEPC, Marine Environment Protection Committee.

MSC, Maritime Safety Committee.

NOx, Nitrogen Oxides.

O₂/HC systems: Oxygen Hydro Carbon systems.

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

SO_x, Sulphur Oxides.

Reg., Regulation.

Res., Resolution.

ANNEX A.1 detail ed testing stand

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 2011/75/EU⁽¹²⁾ may apply (7th Amendment of MED Annex A).
- c) Column 1: Article 2 of Commission Directive 2012/32/EU⁽¹³⁾ may apply (8th 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 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

		1		
A.1/1.1	Lifebuoys —	Reg. — III/4, Reg. —	Reg. III/7, — Reg.	IMO B + D B + E B + F MSC 81(70).
		X/3.	III/34, IMO	Wibe.01(70).
			Res.	
			MSC.36(63)-	
			(1994	
			HSC	
			Code) 8,	
			IMO	
			Res.	
			MSC 48(66)-	
			(LSA Code)	
			I, II,	
			IMÓ	
			Res.	
			MSC 97(73)-	
			(2000 HSC	
			Code)	
			8.	
A.1/1.2	Position- —	Reg. —	Reg.	B + D
	indicating	III/4,	III/7, —	$\begin{array}{c c} \text{IMO} & B + E \\ \text{Res.} & B + E \\ \end{array}$
	lights for — life-saving	Reg. — X/3.	Reg. III/22,	$\begin{array}{c c} \text{Res.} & \mathbf{B} + \mathbf{F} \\ \text{MSC} & 81(70). \end{array}$
	appliances:	A/J.	Reg.	
	(a) for		III/26,	
	survival	<u> </u>	Reg	
	craft		III/32,	
	and rescue		Reg. III/34,	
	boats,	_	IMO	
	(b) for		Res.	
	lifebuoys,		MSC 36(63)-	
	(c) for lifejackets.		(1994 HSC	
	mojuckets.		Code)	
			8,	
		<u> </u>	IMO	
			Res. MSC 48(66)-	
			(LSA	
			Code)	
			II,	
			IV,	
			IMO Res.	
			1.05.	
			MSC 97(73)-	

				HSC Code) 8.	
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)	IMO B + D B + E B + E B + F MSC 81(70).
				8, IMO Res. MSC 48(66) (LSA Code)	-
			_	I, II, IMO Res. MSC 97(73) (2000 HSC Code) 8.	-
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.81(70). B + D B + E B + F MSC.81(70).
				8, IMO Res. MSC 48(66) (LSA Code)	-
			_	I, II, IMO Res. MSC 97(73) (2000 HSC	-

A.1/1.5	Immersion suits and anti- exposure suits not classified as lifejackets: — Insula or not insula	Reg. III/4, Reg. X/3.	Code) 8, IMO MSC/ Circ.922, IMO MSC.1/ Circ.1304. Reg. III/7, — Reg. III/22, Reg. III/32, Reg. III/32, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8, IMO Res. MSC.48(66)- (LSA Code) 1, II, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 Code) 8, IMO Res. MSC.97(73)- (2000 Code) 8, IMO Res. MSC.97(73)- (2000 Code) 8, IMO Res. MSC.97(73)- (2000 Code) 8, IMO Res. MSC/ Code) 8, IMO Res. MSC.97(73)- (2000 Code) 8, IMO MSC/ Circ.1046.	IMO Res. MSC	B + D B + E B + F 81(70).
A.1/1.6	Immersion suits and anti- exposure suits classified as lifejackets: — Insula or non- insula	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	IMO Res. MSC	B + D B + E B + F .81(70).

			 Code) 8, IMO Res. MSC.48(66)- (LSA Code) I, II, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO MSC/ Circ.1046.		
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	B + D B + E B + F 81(70).
			 IMO Res. MSC,97(73)- (2000 HSC Code) 8, IMO MSC/ Circ.1046.		
A.1/1.8	Rocket parachute flares (pyrotechnics)	 Reg. III/4, Reg. X/3.	 Reg. III/6, — Reg. III/34,	IMO Res. MSC	B + D B + E B + F 81(70).

			 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.		
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	B + D B + E B + F 81(70).
A.1/1.10	Buoyant smoke signals (pyrotechnics)	 Reg. III/4, Reg. X/3.	 Reg. III/34, IMO Res. MSC 48(66)- (LSA Code)	IMO Res. MSC	B + D B + E B + F 81(70).

			I, III.		
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	B + D B + E B + F 81(70).
A.1/1.12	Inflatable liferafts	Reg. III/4, Reg. X/3.	Reg. III/13, Reg. III/21, Reg. III/26, Reg. III/31, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8, IMO Res. MSC.48(66)- (LSA Code) I, IV,	IMO Res. MSC	B + D B + E B + F .81(70).

			_	IMO Res. MSC 97(73)- (2000 HSC Code) 8, IMO MSC/ Circ.811.	
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.48(66)- (LSA Code) I, IV, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO Res. MSC.97(73)- (2000 HSC CODE) 8, IMO Res. MSC.97(73)- (2000 HSC CODE) 8, IMO Res. MSC.97(73)- (2000 HSC CODE) 8, IMO Res. MSC.97(73)- (2000 HSC CODE) 8, IMO Res. MSC.97(73)- (2000 HSC CODE) 8, IMO RES. MSC.97(73)- (2000 HSC CODE) 8, IMO RES. NSC.97(73)- (2000 HSC CODE) 8, IMO RES. NSC.97(73)- (2000 HSC CC ROS. NSC/ SC/ CODE) 8, IMO RES. NSC/ SC/ CODE] 8, IMO RES. NSC/ SC/ CODE] 8, IMO RES. 8, I I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 8, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. 1, I RES. I	IMO B + D Res. B + E MSC 81 (7 7), IMO MSC/ Circ. 1006.
A.1/1.14	Automatically self-righting liferafts	 Reg. III/4, Reg. X/3.		Reg. III/26, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC	IMO B + D B + E B + F MSC. 81(70).

				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.		
A.1/1.15	Canopied reversible liferafts	 Reg. III/4, Reg. X/3.		Reg. III/26, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code)	IMO Res. MSC	B + D B + E B + F 81(70).
				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.	
A.1/1.16	Float-free arrangements for liferafts (hydrostatic release units)	— Reg. III/4, — Reg. X/3.	 Reg. III/13, Reg. III/26, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8,	IMO Res. $B + E$ B + F MSC 81(70).
			 IMO Res. MSC.48(66)- (LSA Code) I, IV, IMO Res. MSC.97(73)- (2000 HSC Code) 8,	
			 IMO MSC/ Circ.811.	
A.1/1.17	Lifeboats: (a) Davin launc lifebo 	hed Reg. ats: X/3. partially enclosed, totally enclosed.	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)	IMO B + D Res. B + F MSC & (70), IMO MSC/ Circ. 1006.

			 I, IV, IMO Res. MSC.97(73)- (2000 HSC Code) 8, IMO MSC.1/ Circ.1423.	
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.48(66)- (LSA Code) I, V, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	IMO B + D Res. B + F MSC &1(70), IMO MSC/ Circ.1006.
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 B + D Res. B + F MSC \$1(70), ISO 15372 (2000).

				 IMO Res. MSC.48(66)- (LSA Code) I, V, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	
A.1/1.20	Fast rescue boats: (a) inflat (b) rigid (c) rigid- inflat	ed I	Reg. II/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 B + D Res. B + F MSC \$1(70), IMO MSC/ Circ.1006, ISO 15372 (2000).
A.1/1.21	Launching appliances using falls (davits)	I	Reg. II/4, Reg. ζ/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)-	IMO Res. MSC. (70) .

A.1/1.22	Float free	Moved to A	A 2/1 3	(2000 HSC Code) 8.	
11.1/1.22	launching appliances for survival craft		1.2/1.5		
A.1/1.23	Launching appliances for free-fall lifeboats	– II – R	eg. — I/4, eg. — /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.97(73)- (2000 S.	IMO Res. MSC. $\mathbb{B} + \mathbb{E}$ $\mathbb{B} + \mathbb{F}$ \mathbb{H} (70).
A.1/1.24	Liferaft launching appliances (Davits)	— II — R	eg. — I/4, eg. — /3. — —	Reg. III/12, Reg. III/16, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8,	IMO Res. MSC. (70) .

				IMO Res. MSC.48(66)- (LSA Code) I, VI, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	
A.1/1.25	Fast rescue boat launching appliances (Davits)		Reg II/4	Reg. III/26, Reg. III/34, IMO Res. MSC 48(66)- (LSA Code) I, VI.	IMO Res. MSC. $ B + E B + F (70). $
A.1/1.26	Release mechanism for (a) Lifeb and rescu boats (laun by a fall or falls) (b) Lifer (laun by a fall or falls)	II oats X e ched afts ched	Reg. — [I]/4, Reg. — [/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,	$\begin{array}{c} IMO\\Res.\\MSC \end{array} \stackrel{B+D}{B+E}\\B+F\\81(70). \end{array}$

					IMO MSC 1/ Circ. 1419.	
A.1/1.27	Marine evacuation systems		Reg. III/4, Reg. X/3.		Reg. III/15,	IMO Res. MSC 81(70).
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 B + D Res. B + F MSC.81(70), IMO MSC/ Circ.810.
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 B + D Res. B + F MSC 81(70), ISO 5489 (2008).

				IMO Res. MSC.48(66)- (LSA Code), IMO Res. MSC.97(73)- (2000 HSC Code), IMO MSC.1/ Circ.1285.	
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. B + E B + F A.658(16).
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. MSC. 36 (63)- (1994 HSC	EN B + D ISO B + E 8729 B + F (1998), EN 60945 (2002)

<u>A.1/1.34</u>	Compass for	Moved to A.1/2		(LSA Code) I, IV, V, IMO Res. (2000 HSC Code) 8, IMO Res.	48(66)- 97(73)-	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 (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), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008). Or, ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008). Or, ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008). Or, ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008). Or, ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008). Or, ISO 8729-1 (2010), IEC 60945 (2002) including IEC 60945 (2008). (2008) (
A.1/1.34	lifeboats and rescue boats	WIOVED 10 A.1/2	+.23			
A.1/1.35	Portable fire extinguishing equipment for	Moved to A.1/3	3.38			

	lifeboats and rescue boats				
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.	[MO] B + D B + E Res. B + F MSC 81(70).
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 B + D B + E Res. B + F MSC 81(70).
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, MO	IMO B + D B + E Res. B + F MSC 81(70).
				IMO Res. MSC.97(73)- (2000 HSC Code) 8.	
A.1/1.39	Open reversible liferafts		Reg. — III/4, Reg. X/3.	IMO — Res. MSC.36(63)- (1994 HSC Code) 8,	IMO B + D Res. B + F MSC 36(63)- (1994 HSC Code) Annex 10,

				Annex	IMO Res. MSC (2000 HSC Code Anne 11.)
A.1/1.40	Mechanical pilot hoist	Moved to A.1/	4.48			I
A.1/1.41	Winches for survival craft and rescue boats (a) davit launc lifebo (b) free- fall lifebo (c) lifera (d) rescu boats (e) fast rescu boats	hed pats, fts, e , e		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	B + D B + E B + F G (70).
A.1/1.42	Pilot ladder	Moved to A.1/	4.49	1		

		1				
A.1/1.43	Rigid/inflated	—	Reg.	—	Reg. —	IMO B + D
	rescue boats		III/4,		III/21,	Res. $\mathbf{B} + \mathbf{F}$
		—	Reg.	—	Reg.	MSC & (70),
			X/3.		III/31,—	IMO
					Reg.	MSC/
					III/34,	Circ.1006,
					IMO —	ISO
					Res.	15372
					MSC 36(63)-	(2000).
					(1994	
					HSC	
					Code)	
					8,	
					IMO	
					Res.	
					MSC 48(66)-	
					(LSA	
					Code)	
					I, V,	
					IMO	
					Res.	
					MSC.97(73)-	
					(2000	
					HSC	
					Code)	
					8.	
					0.	

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.)	— Anne I, Reg 14.	Annex I, Reg. ^x 14, — IMO MEP Circ.(Res. MEP C .1 / IMO	

A.1/2.2	Oil/water interface detectors		Annex— I, Reg. 32.	Annex— I, Reg. 32.	$ \begin{array}{c} \text{IMO} \\ \text{Res.} \\ \text{MEPC.5}(\text{XIII}). \end{array} $
A.1/2.3	Oil-content meters		Annex I, I, Reg. 14.	Reg. — IMO MEPC .1 / Circ.643.	IMO $B + D$ Res. $B + E$ MEP(B1 θ 7(49), IMO MEPC.1/ Circ.643.
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.)	Deliberat	ely left blank		
A.1/2.5	Oil discharge monitoring and control system for oil tankers	_	Annex— I, Reg. 31.	Annex— I, Reg. 31.	$ \begin{array}{c} \text{IMO} \\ \text{Res.} \\ \text{MEPC.108(49).} \end{array} \\ \begin{array}{c} \text{B} + \text{D} \\ \text{B} + \text{E} \\ \text{B} + \text{F} \\ \text{MEPC.108(49).} \end{array} $
A.1/2.6	Sewage systems		Annex— IV, Reg. 9.	Annex— IV, Reg. 9.	$\begin{array}{c} \text{IMO} \\ \text{Res.} \\ \text{Res.} \\ \text{B} + F \\ \text{MEPC.} 159(55). \end{array}$
A.1/2.7	Shipboard incinerators		Annex— VI, Reg. 16.	Annex— VI, Reg.16.	$ \begin{array}{c} \text{IMO} \\ \text{Res.} \\ \text{MEPC} \\ \text{G76(40).} \end{array} \end{array} \\ \begin{array}{c} \text{B} + \text{D} \\ \text{B} + \text{E} \\ \text{B} + \text{F} \\ \text{MEPC} \\ \text{G76(40).} \end{array} $
A.1/2.8	NOx analyser of Chemilumines detector (CLD) or heated chemilumines 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.	IMO $B + D$ Res. $B + E$ MEPCB177(58) - G (NOx Technical code 2008), EN 60945 (2002) including

				MEPC.177(58) NOx Fechnical 2008), MO Res. MEPC.198(62) MO MEPC.1/ Circ.638.	IEC 60945 Corrigendum 1 (2008). Or, IMO Res. ,MEPC.177(58) - (NOx Technical code 2008), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).
A.1/2.9	Equipment using other technological methods to limit SO _x emissions	Moved to A.2/	2.4		
A.1/2.10 Refer to note b) of this Annex A.1	On board exhaust gas cleaning systems	- (Rev MAF Anne VI, Reg. 4), IMO Res.	— I C.176(58) F ised - POL (x A V F	MO — Res. MEPC.176(58) Revised MARPOL Annex VI, Reg. I).	$[MO] B + D \\ B + E \\ Res. B + F \\ MEPC_{G} 184(59).]$

3. **Fire protection equipment**

No	Item designation	Regulation SOLAS 74, as amended, where 'type	Regulations of SOLAS 74, as amended, and the relevant	Testing standards	Modules for conformity assessment
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		approval' is required	resolution and circular of the IMO, as applical	s 5		
1	2	3	4	5		6
A.1/3.1	Primary decks covering	— Reg. II-2/4 — Reg. II-2/0 — Reg. X/3.	4, 6,	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.	(201) FTP - Code	B + F B + F 307(88)- 0
A.1/3.2	Portable fire extinguishers	 Reg. II-2/ Reg. X/3, IMO Res. MSC (FSS Code 4. 	10, — — 2. 98 (73)-	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	inclu A.1 (200 EN 3-8 (200 inclu AC (200 EN 3-9 (200 EN 3-10 (200	7), 6) ding 7), 6) ding 7),

					Code 7, IMO Res. MSC (FSS Code 4, IMO MSC Circ. IMO MSC Circ.	.98(73)-) 1239,	
A.1/3.3	Fire-fighter's outfit: protective clothing (close proximity clothing)	_	Reg. II-2/10 Reg. X/3, IMO Res. MSC. (FSS Code) 3.	<u> </u>	IMO Res. MSC (1994 HSC Code 7, IMO Res. MSC (2000 HSC Code 7, IMO Res.	 Colothing for fire fighting: EN 36(63)-469 (200) inclu A1 (200) and AC 97(73)-(2000) Protective clothing for offire fighting Reflective clothing for specialised The fighting: EN 	ding 6) 6). 7). 8 1)
A.1/3.4	Fire-fighter's outfit: boots	_	Reg. II-2/10 Reg. X/3,		Reg. II-2/1 IMO Res.	o EN	B + D $B + E$ $0B + F$ 2).

		IMO Res. MSC (FSS Code 3.	.98(73)-	MSC 36(63)- (1994 HSC Code) 7, IMO Res. MSC 97(73)- (2000 HSC Code) 7, IMO Res. MSC 98(73)- (FSS Code) 3.		
A.1/3.5	Fire-fighter's outfit: gloves	Reg. II-2/1 Reg. X/3, IMO Res. MSC (FSS Code 3.	.98(73)-	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.97(73)- (2000 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 3.	EN 659 (2003 includ A1 (2008 and AC (2009	ding 3)
A.1/3.6	Fire-fighter's outfit: helmet	 Reg. II-2/1 Reg. X/3, IMO Res. MSC (FSS Code 3.	.98(73)-	Reg. II-2/10, IMO Res. MSC 36(63)- (1994 HSC Code) 7, IMO Res. MSC 97(73)-	EN 443 (2008	B + D B + E B + F D).

A.1/3.8	Compressed air line	_	Reg. X/3,	_	IMO Res.	-		B + D B + E B + F
A 1/2 0			D		Res. MSC (IGC Code 14.	.5(48)-)		
				_	Code 14, IMO	>		
					Res. MSC (IBC	.4(48)-		
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	type mask is required.				HSC Code		go: ISO	
	pressure				· ·	accidents		
	positive				MSC	.97(78)450	e in	
	dangerous goods a		3.		IMO Res.	And when the appar		
	involving		Code		7,		(2006).
	in accidents		(FSS		Code		137	
	apparatus <i>Note</i> : For use		Res.	.98(73)-	(1994 HSC		(2003 EN	s),
	breathing		IMO		MSC	.36(63)-	AC	_
	compressed- air-operated	_	Reg. X/3,	-	IMO Res.		(1998 inclu	B + F ding
	contained		II-2/1		II-2/1	0,	136	B + E
A.1/3.7	Self-		Reg.		Reg.		EN	B + D
					Code 3.)		
					(FSS			
					Res. MSC	98(73)-		
					IMO Pag			
					7,	ĺ		
					Code			
					(2000 HSC			

	breathing apparatus	nt is nigh ft er s of	MSC 36(63)- (1994 HSC Code) 7.	EN 14593-2 (2005) including AC (2005), EN 14594 (2005) including AC (2005).
A.1/3.9	Sprinkler systems components for accommodatio spaces, service spaces and control stations equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited to nozzles and their performance). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	 Reg. — II-2/7, Reg. — II-2/10, Reg. — X/3, IMO — Res. MSC 98(73)- (FSS Code) 8. — — — —	Reg. II-2/7,- Reg. II-2/9, Reg. II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.44(65), IMO Res. MSC.44(65), IMO Res. MSC.97(73)- (2000 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7, IMO Res. MSC.98(73)- (FSS Code) 8, IMO MSC/ Circ.912.	IMO B + D B + E B + F A.800(19).
A.1/3.10	Nozzles for fixed pressure water spraying fire extinguishing	 Reg. — II-2/10, Reg. — X/3,	Reg. II-2/10,- IMO Res. MSC.36(63)-	IMO B + D B + E MSC/B + F Circ. 1165,

	systems for machinery spaces and cargo pump- rooms	R M (F	ISC.98(73)- FSS ode)—	(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.	Appendix A.
A.1/3.11	'A' & 'B' Class divisions fire integrity (a) 'A' class divisi (b) 'B' class divisi	II 'B' Class: — R II ons,	eg. -2/3.2A' Class eg. -2/3.4 . 	Reg. II-2/3.2. IMO MSC/ Circ.1120 IMO MSC.1/ Circ.1435	$[MO] B + D \\ B + E \\ B + F \\ MSC.307(88) - (2010 \\ FTP \\ Code). $
A.1/3.12	Devices to prevent the passage of flame into the cargo tanks in tankers	— II — R		Reg — II-2/4, Reg II-2/16 —	EN For ISO equipment 16852other than (2010) y alves: ISO B + 15364 D (2007), B + IMO E MSC/B + Circ.677. F For valves: B + F
A.1/3.13	Non- combustible materials	— II — R	eg. — -2/3, eg. — /3.	Reg. II-2/3, Reg. II-2/5,	$[A] B + D \\ B + E \\ B + E \\ B + F \\ MSC.307(88) - \\ (2010)$

				Reg. II-2/9, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	FTP Code).
A.1/3.14	Materials other than steel for pipes penetrating 'A' or 'B' Class division	Item included i	n A.1/3.20	6 and A.1/3.27		
A.1/3.15	Materials other than steel for pipes conveying oil or fuel oil (a) plastic pipes and fittings (b) valves (c) flexibl pipe assemil (d) metallin pipe compo with resilien and elastor seals.	s, , e blies, ic onents nt		Reg. Pipes ar II-2/4,fittings: IMO — Res. MSC.36(63)- (1994 Valves: HSC — Code) 7, 10, Flexible IMO assembl Res. — MSC 97(73)- (2000 HSC Code)— 7, 10, IMO MSC/Metallic Circ. 1¢âthpon with resilient elastom seals. —	IMO Res. A.75: ISO 1049' (2010 pipe ies: EN ISO 1554 (2001 EN ISO 1554 (2001 c pipe ents	3(18). 7)).) 1).

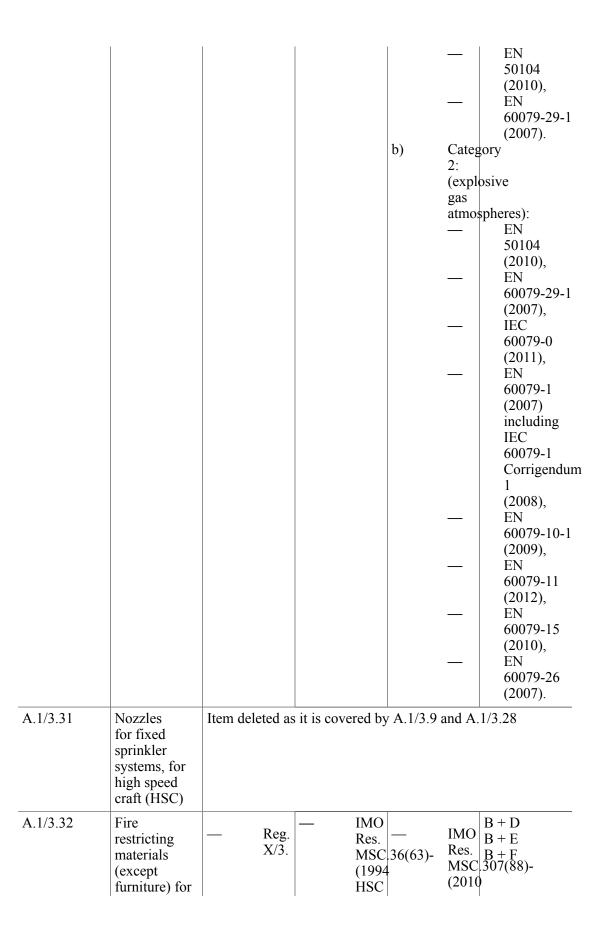
				19	SO 9922 9005).
A.1/3.16	Fire Doors	- Reg. II-2/9	— Reg. . II-2/9	P. R M (2 F C - M M	$\begin{array}{c} MO & B + D \\ es. & B + E \\ ISC. 307(88)- \\ 010 \\ \GammaP \\ ode). \\ MO \\ ISC. 1/ \\ irc. 1319. \end{array}$
A.1/3.17	Fire door control systems components. <i>Note</i> : When the term 'system components' is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international requirements are fulfilled.	- Reg. II-2/9 Reg. X/3.	— IMO Res.	, R M .97(73)- (2 F C	$\begin{array}{c} B + D \\ B + E \\ B + F \\ ISC.307(88) - 0010 \\ TP \\ ode). \end{array}$
A.1/3.18	Surface — materials and floor — coverings with low — flame-spread characteristics (a) decorative veneers, (b) paint systems, (c) floor covering (d) pipe insulatio covers,	(b), (c) Reg. II-2/9 s, for (e),	 Reg. II-2/5 Reg. II-2/6 Reg. II-2/9 II-2/9 II-2/9 MO Res. MSC 	, R M (2 , F , C , C	$\begin{array}{c} B + D \\ B + E \\ es. \\ B + F \\ ISC.307(88)- \\ 010 \\ \GammaP \\ ode). \end{array}$

	of 'A', 'B' & 'C' class divis (f) comb ducts	ions,	Reg. - X/3.	(20 HS Co 7, IM MS	s. 6C,97(73)- 00 C de) O	
A.1/3.19	Draperies, curtains and other suspended textile materials and films		Reg. – II-2/3, Reg. – II-2/9, Reg. – X/3.	(19 HS Co 7, – IM Res	2/3, - g, 2/9, 0 SC, 36(63) - 94 C de) O s, - SC, 97(73) - 00 C	$ \begin{array}{c} IMO\\ Res.\\ MSC\\ (2010\\ FTP\\ Code \end{array} \right). \end{array} \begin{array}{c} B+D\\ B+E\\ B+F\\ (307(88)-\\ (2010\\ FTP\\ Code \end{array} \right). $
A.1/3.20	Upholstered furniture		Reg. – II-2/3, Reg. – II-2/5, Reg. – II-2/9, Reg.X/	- Reg II-2 3. IM Reg MS (19 HS Co 7, - IM Reg	2/3, g, 2/5, g, 2/9, O s, SC, 36(63)- 194 C de) O s, SC, 97(73)- 100	$[MO] B + D \\ B + E \\ B + F \\ MSC 307(88) - (2010 \\ FTP \\ Code). $

A.1/3.21	Bedding components	Reg II-2/3, Reg II-2/9, Reg X/3.	Code) 7. Reg. II-2/3,- Reg. II-2/9, II-2/9, IMO Res. MSC.36(((1994 HSC Code) 7, IMO Res. MSC.97(((2000 HSC Code) 7.	
A.1/3.22	Fire dampers	— Reg II-2/9.	— Reg. — II-2/9.	$[A] IMO \\ Res. \\ B + E \\ B + F \\ MSC. 307(88) - (2010 \\ FTP \\ Code),$
A.1/3.23	Non- combustible duct penetrations through 'A' class divisions	Moved to A.1/3.	26	
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	$\begin{array}{c c} & B + D \\ B + E \\ B + F \\ MSC 307(88) - \\ (2010 \\ FTP \\ Code). \end{array}$
A.1/3.26	Penetrations through 'A' class divisions	— Reg. II-2/9.	— Reg. II-2/9,— — IMO MSC.1/	[MO] B + D B + E B + F MSC 307(88)-(2010)

	 (a) electric cable transi (b) pipe, duct, trunk etc. p 	ts,	15.		Circ.1276. (only applicable to (b))	FTP Code).
A.1/3.27	Penetrations through 'B' class divisions (a) electric cable transi (b) pipe, duct, trunk etc. p	ts,	Reg. II-2/9).	Reg. — II-2/9.	IMO Res. B + E B + F MSC.307(88)- (2010 FTP Code).
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-2/1 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.97(73)- (2000 HSC Code) 7, IMO Res. MSC.98(73)- (FSS Code) 8, IMO MSC/ Circ.912.	ISO $B + D$ 6182+B + E (2004)B + F Or, EN 12259-1 (1999) including A1 (2001), A2 (2004) and A3 (2006).
A.1/3.29	Fire hoses		Reg. II-2/1	0,	Reg. II-2/10,	$ \begin{array}{c} B + D \\ B + E \\ 14540 \\ B + F \\ (2004) \end{array} $

		Reg. X/3.	 (1994 HSC Code 7, IMO Res.	.36(63)-	including A.1 (2007).
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 (FSS Code 15.	.98(73)-	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008) or IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60992-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), IEC 60533 (1999), le to: Category 1: (safe area);



	high speed craft		 Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	FTP Code).
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. B + E B + F MSC 307(88)- (2010 FTP Code).
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. B + E B + F MSC 307(88)- (2010 FTP Code).
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. B + E B + F MSC 307(88)- (2010 FTP Code).

A.1/3.36	Fire dampers on high speed craft	— Reg. X/3.		IMO Res. — MSC 36(63)- (1994 HSC Code) 7,	IMO Res. $B + D$ B + E B + F MSC 307(88)- (2010 FTP Code).
			_	IMO Res. MSC 97(73)- (2000 HSC Code) 7.	
A.1/3.37	Penetrations through fire resisting divisions on high speed craft (a) electr cable transi (b) pipe, duct, trunk etc. p			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).
A.1/3.38	Portable fire- extinguishing equipment for lifeboats and rescue boats	 Reg. III/4, Reg. X/3, IMO Res. MSC (FSS Code 4. 	.98(73)-	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)-	EN B + D 3-7 B + E (2004)B + F including A1 (2007), EN 3-8 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-9 (2007), EN 3-10 (2009).

					(2000 HSC Code) 8, IMO Res. MSC.98(73)- (FSS Code) 4, IMO MSC.1/ Circ.1313.	
A.1/3.39	Nozzles for equivalent water- mist fire extinguishing systems for machinery spaces and cargo pump rooms		Reg. II-2/1 Reg. X/3.	10,	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 Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO MSC.1/ Circ.1313.	IMO B + D B + E MSC/B + F Circ. 1165.
A.1/3.40	Low-location lighting systems (components only)		Reg. II-2/1 IMO Res. MSC (FSS Code 11.	13, 	Reg. — II-2/13, IMO Res. A.752(18), IMO Res. MSC.98(73)- (FSS Code) 11.	IMO B + D Res. B + E A.752(18)F Or, ISO 15370 (2010).
A.1/3.41	Emergency escape	_	Reg. II-2/1	— 3.	Reg. — II-2/13,	ISO B + D 23269E + E

breathing devices (EEBD)		IMO Res. MSC. (FSS Code) 3, IMO MSC/ Circ.8	(2008)B + F and alternatively: For self- contained: open — circuit compressed air breathing apparatus with full mask
			 or mouthed piece assembly for escape: EN 402(2003). For self- contained: open — circuit compressed air breathing apparatus with a hood for escape: EN
			 1146(2005). For self- contained: closed — circuit compressed air breathing apparatus: EN 13794(2002).

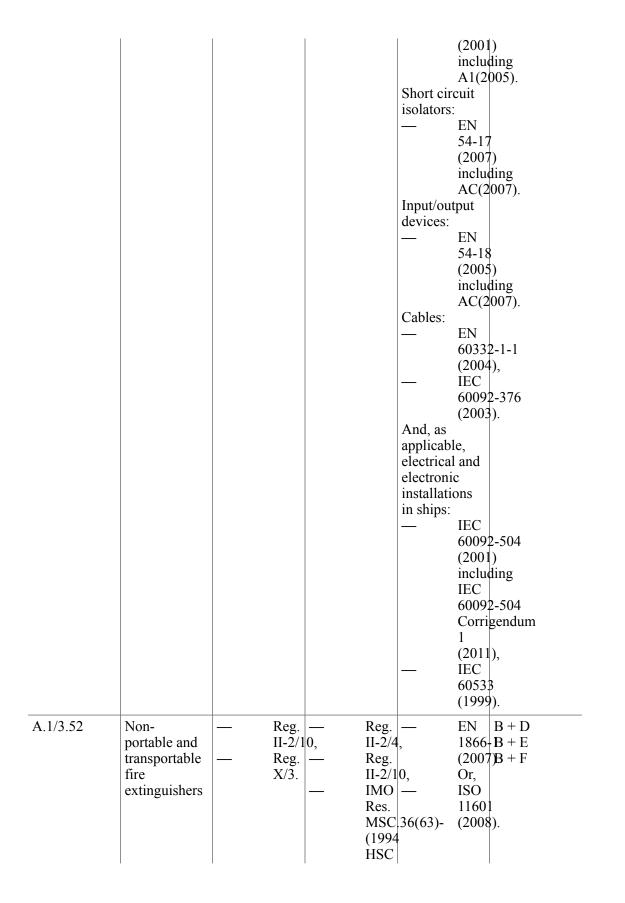
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A.1/3.42	Inert gas systems components		Reg. II-2/4	Reg. II-2/ IMO Res.	4,—	IMO MSC Circ.3	B + D B + E B + F 353
			_		57(14),		0
				Res. MSC	C.98(73)-		
				(FSS Code			
			_	15, IMO			
				MSC Circ	.353,		
			-	IMO MSC			
			_	Circ. IMO			
				MSC Circ	.731,		
				IMO MSC Circ			
A.1/3.43	Nozzles for deep fat cooking		Reg. — II-2/1, Reg. —	Reg. II-2/ Reg.	1,	ISO 1537	
	equipment fire		II-2/10, Reg. —	II-2/ IMO	10,	(2009)).
	extinguishing systems		X/3.	Res. MSC	2.97(73)-		
	(automatic or manual type).			(200 HSC			
				Code 7.	e)		
A.1/3.44	Fire-fighters outfit —		Reg. — II-2/10,	Reg. II-2/			B + D B + E
	lifeline		Reg. — X/3, —	IMO Res.		MSC (FSS	. 9 8(†7₿)-
			IMO Res.	(199		Code 3,)
			MSC 980 (FSS	Code		IMO Res.	
			Code) 3. —	7, IMO)	(2010	.307(88)-
					2.97(73)-	FTP Code).
				(200 HSC			
				Code 7,	e)		

				IMO Res. MSC 98(73)- (FSS Code) 3.	
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-2/1 Reg. X/3, IMO Res. MSC (FSS Code 5.	.98(73)-	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/ Circ.1313, IMO MSC 1/ Circ.1316.	IMO B + D MSC/B + E Circ.8#83+ F IMO MSC.1/ Circ.1316.
A.1/3.46	Equivalent fixed gas fire extinguishing systems for machinery spaces (aerosol systems)	 Reg. II-2/1 Reg. X/3, IMO Res. MSC (FSS Code 5.	.98(73)-	Reg. II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC	IMO B + D B + E MSC B + F Circ.1270 including Corrigendum 1.

				Code 7, IMO Res. MSC (FSS Code 5, IMO MSC Circ. IMO MSC Circ.	.98(73)-) 1/ 1270, 1/		
A.1/3.47	Concentrate for Fixed High Expansion Foam Fire Extinguishing Systems for Machinery Spaces and Cargo Pump Rooms. <i>Note</i> : The fixed high expansion foam fire extinguishing system (including those systems which use inside air from their working spaces for their intended performance), for machinery spaces and cargo pump rooms must still be tested with the approved concentrate to the satisfaction of the Administration	Reg. II-2/1	<u>0.</u>	Reg. II-2/1 IMO Res. MSC (FSS Code 6.	.98(73)-	IMO MSC Circ.0	B + F

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/ — Reg. X/3.	10,	Reg. II-2/10,- IMO Res. MSC 36(63)- (1994 HSC Code) 7, IMO Res. MSC 97(73)- (2000 HSC Code) 7.	IMO MSC Circ.	B + D B + E B + F 1387.
A.1/3.49	Fixed water- based fire- fighting systems for ro-ro spaces and special category spaces equivalent to that referred to in resolution A.123(V)	Reg. II-2/ Reg. II-2/2 Reg. X/3.	19, 20, 	Reg. II-2/19, Reg. II-2/20, IMO Res. A.123(V), IMO Res. MSC 36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	IMO MSC Circ.	B + D B + E B + F 1430.
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,	Reg. II-2/ Reg. X/3, IMO Res. MSC (FSS	7, 	Reg. Control II-2/7, indicatir IMO equipme Res. Electrica MSC 36(63) ati (1994 in ships: HSC — Code) 7,	ng ent. al ions	B + D $B + E$ $B + F$

accom	modation	Code)—	IMO	including
spaces		9.	Res.	AC(1999)
balcon			MSC 97(73)-	
machir			(2000	A1(2006).
spaces			HSC Power	r(2000).
			Code la construction	suppry
unatter			Code)equipm	
machir	nery		7,	EN
spaces		<u> </u>	IMO	54-4
(a)	Control		Res.	(1997)
	and		MSC 98(73)-	including
	indicating		(FSS	AC(1999),
	equipment		Code)	A1(2002)
(b)	Power		9,	and
			IMO	A2(2006).
	supply		MSC. Heat	A2(2000).
(-)	equipment			
(c)	Heat		Circ. 1242ecto	rs —
	detectors —		Point	
	Point		detecto	
	detectors		<u> </u>	EN
(d)	Smoke			54-5
	detectors:			(2000)
	Point			including
	detectors			A1(2002).
	using		Smoke	
	scattered		detecto	rs —
	light,		Point	
	transmitted		detecto	rs
	light		using	
	or		scattere	be
	ionization		light,	
(e)	Flame		transmi	itted
	detectors:		light or	
	Point		ionisati	
	detectors		iomsau	EN
(f)				54-7
(f)	Manual			
	call			(2000)
	points			including
(g)	Short			A1(2002)
	circuit			and
	isolators			A2(2006).
(h)	Input/		Flame	
	output		detecto	rs —
	devices		Point	
(i)	Cables		detecto	rs:
			<u> </u>	EN
				54-10
				(2002)
				including
				A1(2005).
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				EN
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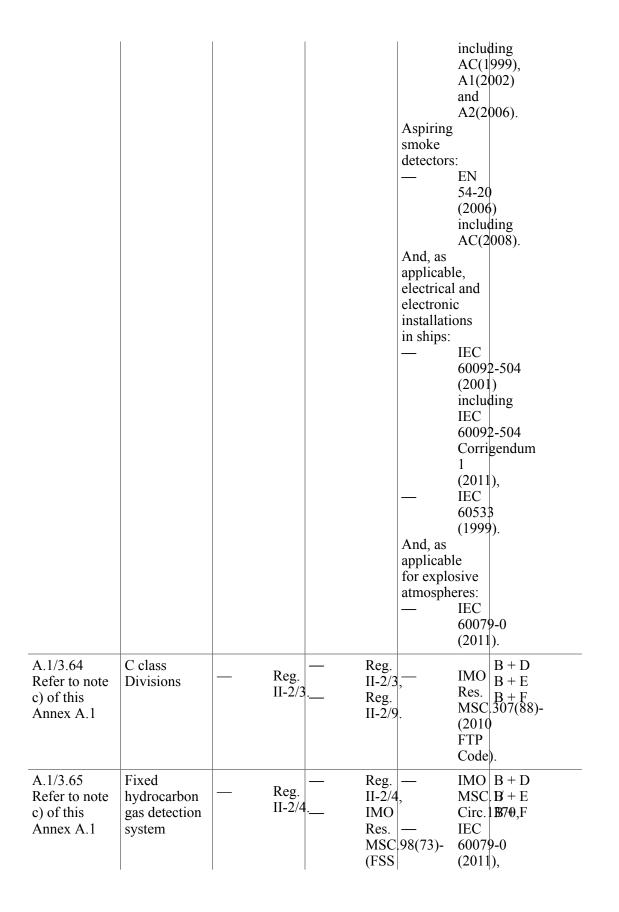
A.1/3.53	Fire alarm devices — Sounders	- Reg II-2 - Reg X/3 - IMC Res MS (FS Coc 9.	(200 HSC Cod 7. Reg. 7, II-2/ - IMC , Res. 0 MSC (199 C.98(73)- HSC S Cod e) 7, - IMC Res. MSC (200 HSC Cod 7, - IMC Res. MSC (200 HSC Cod (200 (199 (200 HSC Cod (200 HSC Cod (200 HSC Cod (200 HSC Cod (200 HSC ($\begin{array}{c} & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $	1) 1) 2002) 2006), 22-504 1) 1) 22-504 igendum 1), 33
A.1/3.54	Fixed oxygen analysis and gas detection equipment	— Reg II-2 — Reg VI/	$\begin{array}{cccc} & & \operatorname{Reg.} \\ & & \operatorname{Reg.} \\ & & \operatorname{VI/3} \\ & - & \operatorname{IMC} \\ & & \operatorname{Res.} \\ & & \operatorname{MSC} \\ & & & (FSS \\ & & & Cod \\ & & & 15. \\ & & & & Cod \\ & & & & 15. \\ & & & & & & Cod \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & & \\$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	9), gory

A.1/3.55 Dual purpose type nozzles (spray/jet type) — Reg. — Reg. — Reg. Hand-held NSC I/ Circ 1370. B + D B + E B + F A.1/3.55 Dual purpose type nozzles (spray/jet type) — Reg. — Reg. Hand-held B + D HSC I/ Circ 1370. B + D B + E B + F MO MSC I/ Circ 1370. B + D B + F B + D B + F MO MSC I/ Circ 1370. B + F MSC Stationally: (1994 branchpipes HSC PN 16: Code) — EN HSC 15182-1 (2007). B + D B + F MO (2010), Circ 1370. B + F MO MSC Stationally: (1994 branchpipes HSC PN 16: Code) — EN HSC 15182-2 Code B + D B + F MAC 2007). For combined O/2/HC Circ 1370. MAC 1/2009), (2007). For combined D/2/HC B + D MSC Stationally: (1994 branchpipes HSC PN 16: Code) — EN HSC 1/ Circ 1370. B + D MAC 2007). For combined Stationally: (2007). For combined B + F MAC 2007). For combined Circ 1370. For combined B + F MSC 97(73). A1(2009), (2000 — EN HSC 15182-2 Code Smooth bore jet and/or one fixed spray jet angle branchpipes MAC 1/2009. For combined Circ 15182-2 Code NSC 97(73). For combined Circ 15182-1 NSC 1/ Circ 15182-1									
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A.1/3.55 Dual purpose type nozzles (spray/jet type) — Reg. — Reg. Hand-held II-2/10, X/3. B + D II-2/10,									
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A.1/3.55 Dual purpose type nozzles (spray/jet type) — Reg. Reg. X/3. — Reg. II-2/10, I									
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			_	IMO Res.	97(73)-		
Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers		Reg. II-2/1		IMO Res. MSC. (FSS Code) 14, IMO MSC. Circ.1 IMO	98(73)- 1/ 239,	IMO MSC. Cire.	B + D B + E B + F 798.
Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck Protection.		Reg. II-2/1		Circ.1 Reg. II-2/10 IMO Res. MSC.9 (FSS Code) 6, 14, IMO MSC. Circ.1	276. 	MSC	.1/ 312/
	Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck	Expansion — Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers Fixed Low Expansion — Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck	X/3.Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for TankersFixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck	X/3. Medium Expansion Foam Fire Extinguishing Systems components Fixed Deck Foam for Tankers Fixed Low Expansion Foam Fire Extinguishing Systems Components Reg. II-2/10. Extinguishing Systems components for Machinery Spaces and Tanker Deck	X/3.Res. MSC. (1994 HSC Code) 7,Medium Expansion Foam Fire Extinguishing Systems components Fixed Deck Foam for Tankers—Reg. meg.	X/3.Res. MSC 36(63)- (1994 HSC Code) 7, IMO Res. MSC 97(73)- (2000 HSC Code) 7.Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers—Reg. II-2/10_ II-2/10_ II-2/10_ II-2/10_ II-2/10_ IMO Res. MSC 98(73)- (FSS Code) IA HA II-2/10_ II-2/10_ Res. MSC 98(73)- (FSS Code) IA II-2/10_ III-2/10_ III-2/10_ III-2/10_ III-2/10_ III-2/10_ IIIO_ IIIO IIIO IIIO_ IIIO IIIO IIIO IIIO IIIO IIIO IIIO_ IIIO I	$X/3.$ Res. (2001 $X/3.$ Res. (2002 $MSC_36(63)-$ incluation (1994) AC (1994) AC (2002) (1994) (2002) (2002) (1994) (2002) (2002) (1994) (2002) (2002) (1994) (2002) (2002) (1994) (2002) (2002) (1904) (192) (1904) (1904) $Systems$ $(1-2/10)$ $MSC_1/$ $(1-2/10, MSC_1/$ $(1-2/10, MSC_1/)$ $(1-2/10$

			— IMO MSC Circ.		
A.1/3.59	Expansion – Foam for Fixed Fire – Extinguishing Systems for Chemical Tankers	- Reg. II-2/1 - IMO Res. MSC. (IBC Code)	MSC (IBC 4(48)- Code — IMO	.4(48)- Circ. — IMO), MSC Circ. (Corr.	1312/
A.1/3.60	Nozzles for fixed pressure — water- spraying fire- extinguishing systems for cabin balconies	– Reg. II-2/1	Res. MSC (FSS Code 7, — IMO MSC	.98(73)-)	B + D B + E B + F 1268.
A.1/3.61	 a) Inside air high expansit foam systems for the protection of machine spaces and cargo pump rooms. b) Outside air high expansit foam systems 	on ery on 5 on	— Reg. 0. II-2/1	— IMO 0. MSC Circ.	B + D B + E ·B + F 1384.

	cargo pump room <i>Note</i> : Inside 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	s.				
A.1/3.62 Refer to note b) of this Annex A.1	Dry chemical powder extinguishing systems	— Reg. II-2/	1	Reg. II-2/1,— IMO Res. MSC.5(48)- (IGC Code).	IMO $B + D$ MSC: $B + F$ Circ. 1315.	
A.1/3.63 Refer to note c) of this Annex A.1	Sample extraction smoke detection systems components	Reg. II-2/ Reg. II-2/ Reg. II-2/	7, 19, 20. 	Reg. — II-2/7, Reg. II-2/19, Reg. II-2/20, IMO and fo Res. Contro MSC 98(73a) (FSS equipr Code)Electri 10. install in ship —	bl and ting nent. ical ations bs: EN 54-2 (1997) including AC(1999) and A1(2006).	



			Code 16, IMO MSC Circ.1	60 (20 1370. 60 (20 1370. 60 (20 1E ¹ 60 Co 1 (20 - IE ¹ 60	079-29-1 007), C 092-504 001) Eluding C 092-504 rrigendum 011),
A.1/3.66 Refer to note c) of this Annex A.1	Evacuation guidance systems used as an alternative to low-location lighting systems	Reg. II-2/1 <u>3.</u>	Reg. II-2/1 IMO MSC. Circ.1	.1/ Ci	$\begin{array}{c} B + D \\ B + E \\ SC B + F \\ rc. 1168. \end{array}$
A.1/3.67 Ex A.2/3.23	Helicopter facility foam fire-fighting appliances	Reg. — II-2/1 <u>8.</u>	Reg. II-2/1 IMO MSC. Circ.1	13 1/ (20 1431. inc A1	565B + F 003) cluding

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:

- 1. IEC 61162-1 ed4.0 (2010-11) Part 1: Single talker and multiple listeners
- 2. IEC 61162-2 ed1.0 (1998-09) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. 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
- 4. IEC 61162-400 ed1.0 (2001-11) Part 400: Multiple talkers and multiple listeners Ship systems interconnection — Introduction and general principles

- IEC 61162-401 ed1.0 (2001-11) Part 401: Multiple talkers and multiple listeners Ship systems interconnection Application profile
- IEC 61162-402 ed1.0 (2005-09) Part 402: Multiple talkers and multiple listeners — Ship systems interconnection — Documentation and test requirements
- IEC 61162-410 ed1.0 (2001-11) Part 410: Multiple talkers and multiple listeners — Ship systems interconnection — Transport profile requirements and basic transport profile
- IEC 61162-420 ed1.0 (2001-11) Part 420: Multiple talkers and multiple listeners Ship systems interconnection Companion standard requirements and basic companion standards
- 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:

- 1. EN 61162-1 (2011) Part 1: Single talker and multiple listeners
- 2. EN 61162-2 (1998) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. EN 61162-3 (2008) Part 3: Serial data instrument network
 - EN 61162-3-am1 (2010) Amendment 1 Part 3: Serial data instrument network
- 4. EN 61162-400 (2002) Part 400: Multiple talkers and multiple listeners Ship systems interconnection Introduction and general principles
 - EN 61162-401 (2002) Part 401: Multiple talkers and multiple listeners —
 Ship systems interconnection Application profile
 - EN 61162-402 (2005) Part 402: Multiple talkers and multiple listeners —
 Ship systems interconnection Documentation and test requirements
 - EN 61162-410 (2002) Part 410: Multiple talkers and multiple listeners —
 Ship systems interconnection Transport profile requirements and basic transport profile
 - EN 61162-420 (2002) Part 420: Multiple talkers and multiple listeners —
 Ship systems interconnection Companion standard requirements and basic companion standards
 - 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
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1	2	3		4		5		6
A.1/4.1	Magnetic compass (a) Class A for ships (b) Class B for lifebd and rescu boats	oats	Reg. V/18		Reg. V/19, IMO Res. A.382 IMO Res. A.694		(1973) ISO 25863 (2009) EN 60943 (2002) includ IEC 60944 (2008) Or, ISO 1069 (1973) ISO 25863 (2009) IEC 60944 (2002) includ IEC 60944), 5 ding 5 gendum 3). 3), 2), 5 4) 5 gendum
A.1/4.2	Transmitting heading device THD (magnetic method)		(1994 HSC Code 13, IMO Res.		IMO Res. MSC (1994 HSC Code 13, IMO Res.	4(17), .36(63)- 	(2002 includ IEC 6094 Corri 1 (2008 EN 61162 series ISO 22090 (2004 includ	5 gendum 3), 2 ,),), ding gendum

		Code 13.) 	IMO Res.	 Or, IEC 6094: (2002 includ IEC 6094: Corri 1 (2008 IEC 61162 series ISO 22090 (2004 includ Corri 2005, IEC 62288	 a). b). c). <lic).< li=""> <lic).< th=""></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<></lic).<>
A.1/4.3	Gyro compass	Reg. V/18.		Reg. V/19, IMO Res. A.424 IMO Res. MSC	EN ISO 8728 (1998 EN 6094: (2002 includ IEC 6094:	B + D B + E B + F B)G 5 (2) (1) (2) (3) (2) (3) (3) (4) (4) (5) (5) (4) (5) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7

A 1/4 4	Deder				IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed.1.0(2008).
A.1/4.4	Radar equipment	Moved to A.1/	4.34, A.1/	/4.35 and A.1/4.	
A.1/4.5	Automatic radar plotting aid (ARPA)	Moved to A.1/	4.34		
A.1/4.6	Echo — sounding equipment	(1994 HSC Code 13, IMO Res.	, .36(63)- 4 .97(73)- 0	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.97(73)- (2000 HSC Code) 13, — IMO Res. MSC.191(79).	EN $B + D$ ISO $B + E$ 9875 $B + F$ (2001) G including ISO Technical Corrigendum 1: 2006, EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, EN 61288 (2008). Or, ISO 9875 (2000) including ISO 76 (2000) including ISO 76 (2000) including ISO 76 (2000) including ISO 76 (2000) including ISO 76 (2000) including ISO 76 (2000) including ISO 76 (2000) including ISO 76 (2000) ISO 76 (2000) (2006) (2007) (2006) (2007) (20

					_	IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed.1.0(2008).
A.1/4.7	Speed and distance measuring equipment (SDME)	(1994 HSC Code 13, IMO Res.	 _36(63)- _97(73)- 	(1994 HSC Code 13, IMO Res. MSC IMO Res. MSC (2000 HSC Code 13, IMO Res.	4(17), 4(19), 	$\begin{array}{llllllllllllllllllllllllllllllllllll$

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	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
A.1/4.10	Direction finder	Deliberately left blank
A.1/4.11	Loran-C equipment	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

		Code)— 13, IMO Res. MSC.97(73)- (2000 HSC Code)— 13.	IMO — Res. MSC.36(63)- (1994 — HSC Code) 13, — IMO Res. MSC.97(73)- (2000 — HSC Code) 13, IMO Res. MSC.191(79). — — —	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).
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,	EN B + D 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61075 (1993), EN 61162 series, EN 62288 (2008). Or, IEC 60945 (2002) including IEC

A.1/4.13	Decca navigator	Delibera	tely left b		. 191(79). — —	60945 Corrigend 1 (2008), IEC 61075 (1991), IEC 61162 series, IEC 62288 Ed.1.0(200	
A 1/A 1 A	equipment		Dag	Dat			
A.1/4.14	GPS equipment		Reg. — V/18, Reg. — X/3, IMO Res. — MSC.366 (1994 HSC Code) 13, IMO — Res. MSC.977 (2000 HSC Code) 13. —	(63)- IMO (63)- Res. MSC (199- HSC Code IMO Res. (73)- MSC (200 HSC Code IMO Res. MSC IMO Res.	4(17), 4(17), 2.36(63)-4 2.97(73)-0 2.97(73)-6 2.97(73)-6 	EN B + 60945B + (2002)B + including IEC 60945 Corrigendi 1 (2008), EN 61108-1 (2003), EN 61162 series, EN 62288 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendi 1 (2008), IEC 60945 Corrigendi 1 (2003), IEC 61108-1 (2003), IEC 61162 Series,	E F um

						IEC 62288 Ed.1.0(2008).
A.1/4.15	GLONASS equipment	(1994 HSC Code 13, IMO Res.	 _36(63)- _97(73)-	(1994 HSC Code) 13, IMO Res. MSC. (2000 HSC Code) 13, IMO Res. MSC. IMO Res.	36(63)- 97(73)-	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61108-2 (1998), EN 61162 series, EN 61288 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 6108-2 (1998), IEC 61108-2 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998), IEC 61108-2 (1998),
A.1/4.16	Heading control system (HCS)	Reg. V/18.		Reg. V/19, IMO Res. A.342 IMO Res. A.694 IMO Res. MSC.		$\begin{array}{c c} ISO & B + D \\ 11674B + E \\ (2006)B + F \\ EN & G \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \end{array}$

				Annex— 3, IMO Res. — MSC 191(79). — — — —	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).
A.1/4.17	Mechanical pilot hoist	Moved to	o 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.694(17), IMO Res. A.694(17), IMO Res. MSC 36(63)- (1994 HSC Code) 8, 14, IMO Res. – MSC 97(73)- (2000	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61097-1 (2007). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), 1 (2007).

A.1/4.19	Radar equipment for high-speed craft	Moved to	o A.1/4.37	Code) 8, 14, ITU- R M.628-3(11/93	
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.97(73)- (2000 — HSC Code) 13, IMO — Res. MSC.191(79).	EN $B + D$ 60945B + E (2002)B + F includfing 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 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 20673 (2007), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 20673 (2007), IEC 61162 series, ISO 20673 (2007), IEC 61162 series, ISO 20673 (2007), IEC 61162 series, ISO 20673 (2007), IEC 61162 series, ISO 20673 (2007), IEC 61162 series, ISO 20673 (2007), IEC 61162 series, ISO 20673 (2007), IEC 61288 Ed. 1.0(2008).
A.1/4.21	Propeller revolution indicator		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. —	IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994	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 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 22554 (2007), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 22554 (2007), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 22554 (2007), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 22554 (2007), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 61162 series, ISO 22554 (2007), IEC 62288 Ed.1.0(2008).
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	EN B + D 60945B + E (2002)B + F includfing IEC 60945 Corrigendum 1 (2008), EN 61162 series, ISO 22555 (2007), EN 62288 (2008).

A.1/4.23	Compass for lifeboats and rescue boats		Reg. III/4, Reg.		Code 13, IMO Res. MSC Res. III/34 IMO		IEC 6094: Corri 1 (2008 IEC 61162 series ISO 2255: (2007 IEC 62283 Ed.1. ISO 25862	2) ding 5 gendum 3), 2 3, 5 7), 8 0(2008). B + D B + E 2B + F
			X/3, IMO Res. MSC. (1994 HSC Code) 13, IMO Res.	97(73)-	Res. MSC (LSA Code IV, V, IMO Res. MSC (1994 HSC Code 8, 13, IMO Res.	.36(63)-) .97(73)-	(2009	
A.1/4.24	Automatic radar plotting aid (ARPA) for high- speed craft	Moved t	o A.1/4	1.37				·

A.1/4.25	Automatic tracking aid (ATA)	Moved to A.1/4	4.35								
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved to A.1/4	Moved to A.1/4.38								
A.1/4.27	Electronic plotting aid (EPA)	Moved to A.1/4	Moved to A.1/4.36								
A.1/4.28	Integrated bridge system	Moved to A.2/4	4.30								
A.1/4.29	Voyage data recorder (VDR)	(1994 HSC Code 13, IMO Res.	— I F A ((F 36(63)- M (1 F 36(63)- M (1 F 97(73)- M (1 F 97(73)- M 1 F 97(73)- M 1 F 97(73)- M 1 F 97(73)- M 1 F F 1 F F 1 F F 1 F F 1 F F 1 F F 1 F F 1 F F F 1 F F F F F F F F F F F F F	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						

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A.1/4.30	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)		(1994 HSC Code 13, IMO Res.	 .36(63)-	CDS le — s ality ed in — IS. ule cate icate these	EN $B + D$ 60945B + E (2002)B + F 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 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, IEC 61162 Series, IEC 61162 Series, IEC 61162 Series, IEC 61174 (2008), IEC 61174 (2008), IEC 61174 (2008), IEC 61174 (2008), IEC 61174 (2008), IEC 61174 (2008), IEC 61174 (2008), IEC 61174 (2008), IEC 61288 Ed. 1.0 (2008).
A.1/4.31	Gyro compass for high-speed craft	 	Reg. X/3, IMO Res. MSC (1994 HSC Code 13,		IMO — Res. A.694(17), IMO — Res. A.821(19), IMO Res. MSC 36(63)- (1994	ISO $B + D$ 16328 $B + E$ (2001) $B + F$ EN G 60945 (2002) including IEC 60945 Corrigendum

		IMO Res. MSC 97(73)- (2000 — HSC Code) 13. —	HSC Code) 13, — IMO Res. MSC 97(73)- (2000 HSC Code) 13, — IMO Res. MSC 191(79).	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 61162 Series, IEC 62288 Ed.1.0(2008).
A.1/4.32	Universal automatic identification system equipment (AIS)	Reg. — V/18, Reg. — X/3, IMO Res. MSC 3 6 (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,	$\begin{array}{llllllllllllllllllllllllllllllllllll$

				<i>Note:</i> ITU-R M 1371-4(2 shall only applicabl accordan with requirem of IMO Res.MSC	ITU- R M. 1371- f. 2010) y be le in icce	. <u>191(79),</u> — -4 (2 010). —	Corrigendum 1 (2008), IEC 61162 Series, IEC 61993-2 (2001), IEC 62288 Ed.1.0(2008).	
A.1/4.33	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)	I	Reg. V/18.	Res.MSC	Reg. V/19, IMO Res. A.694 IMO Res. MSC IMO Res.		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
							IEC 62065 (2002),	

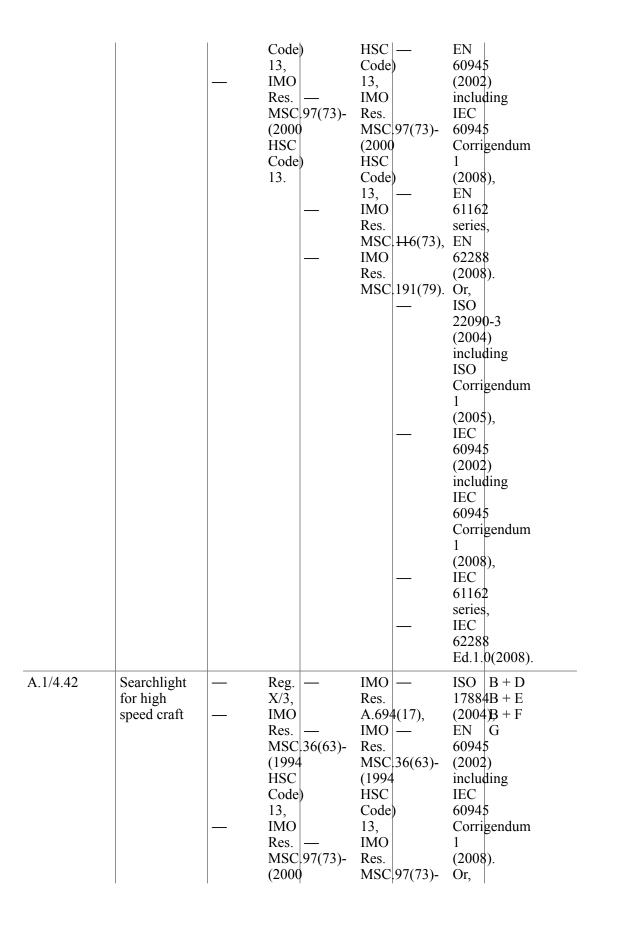
						IEC 62288 Ed.1.0(2008).
A.1/4.34	Radar equipment CAT 1	Reg. V/18.		IMO Res. A.694 IMO Res. MSC IMO Res. MSC ITU- R M. 1177-		(2008), EN 62388 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, IEC 62288 Ed.1.0(2008), IEC 62388 Ed.1.0(2007).
A.1/4.35	Radar equipment CAT 2	Reg. V/18.	_ _ _	IMO Res. A.694 IMO Res.	— 8(VIII), 4(17), — 191(79),	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 Series,

			 ITU- R M.	 EN 62388 (2008).
A.1/4.36	Radar equipment CAT 3	Reg. V/18.	 IMO Res. A.694 IMO Res. MSC. IMO Res. MSC. ITU- R M.	 Series, EN 62288 (2008), EN 62388

A.1/4.37	Radar equipment for high speed craft applications (CAT 1H and CAT 2H)		(1994 HSC Code 13, IMO Res.	.97(73)-	IMO Res. A.694 IMO Res.	.36(63)-	$ \begin{array}{c ccccc} 1 \\ (2008), \\ IEC \\ 61162 \\ Series, \\ IEC \\ 62288 \\ Ed.1.0(2008), \\ IEC \\ 62388 \\ Ed.1.0(2007). \\ EN B + D \\ 60945B + E \\ (2002)B + F \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ EN \\ 61162 \\ Series, \\ EN \\ 61 \end{array} $
			HSC Code 13.		IMO Res. MSC (2000 HSC Code 13, IMO		62288 (2008), EN 62388 (2008). Or, IEC 60945
					IMO Res. MSC ITU- R M.		(2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162
					11//-		Series, IEC 62288 Ed.1.0(2008), IEC 62388 Ed.1.0(2007).
A.1/4.38	Radar equipment approved with a chart	 	Reg. X/3, IMO Res.		IMO Res. A.278	— B(VIII),	$ \begin{array}{c c} EN & B + D \\ 60945B + E \\ (2002B + F \\ including \end{array} $

	option, namely: a) CAT 1C b) CAT 2C, c) CAT 1HC for HSC d) CAT 2HC for HSC	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.191(79), IMO Res. MSC.192(79), ITU- R M. 1177-3(06/03). —	60945 Corrigendum 1 (2008), IEC 61162
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).	$\begin{array}{llllllllllllllllllllllllllllllllllll$

						including IEC 60945 Corrigendum 1 (2008).
A.1/4.40	Heading control system for high speed craft		Reg. – X/3, IMO Res. – MSC 36 (1994 HSC – Code) 13, IMO Res. MSC 97 (2000 HSC – Code) 13.	 7(73)- 	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). — — —	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
A.1/4.41	Transmitting heading device THD (GNSS method)	 	Reg. – V/18, Reg. – X/3, IMO Res. – MSC.36 (1994 HSC	6(63)-	Reg. — V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994	ISO $B + D$ 22090 $B + E$ (2004) $B + F$ including ISO Corrigendum 1 (2005),



		HSC Code) 13.	(2000— HSC Code) 13. —	ISO 17884 (2004), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).
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 $B + D$ 16273B + E (2003)B + F EN G 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 62288 (2008). Or, ISO 16273 (2003), IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 62288 Ed.1.0(2008).
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	Reg. — V/19, IMO Res. A.694 (17), IMO Res. MSC.36(63)-	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008),

			Code) 13, IMO Res. MSC 97(73)- (2000 HSC Code) 13.	(1994— HSC Code) 13, — IMO Res. MSC.97(73)- (2000— HSC Code) 13, IMO Res. MSC.114(73). —	IEC 61108-4 (2004), EN 61162 series. Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61108-4 (2004), IEC 61162 series.
A.1/4.45	Chart facilities for shipborne radar	Item del	eted, as it is cov	rered by A.1/4.3	8
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.97(73)- (2000 HSC Code)— 13, IMO Res. MSC.146(73), IMO Res. MSC.191(79).	22090-1 (2002)

				_	Corr. (2002) IEC 6094 (2002) inclue IEC 6094 Corri 1 (2008) IEC 6116) series IEC 6228 Ed.1. (2008)	5), 5 2) ding 5 gendum 3), 2 3, 8 0
A.1./4.47	Simplified voyage data recorder (S- VDR)	Reg. V/20.	IMO Res.		(2002 inclui IEC 6094 Corri 1 (2008 EN 6199 (2008 EN 6228 (2008 Cr, IEC 6094 (2002 inclui	5 gendum 3), 2 3, 6-2 3), 8 3). 5 2) ding 5 gendum 3), 2 3, 6-2

A.1/4.48 A.1/4.49	Mechanical pilot hoist Pilot ladder	on 1 July 2 used') — R V — R X	2012, quotes: Reg. 7/23, Reg. X/3.	*Mechanical pilo Reg. — V/23, IMO — Res.A.1045(27 IMO MSC/ Circ.773.	(2004).
A.1/4.50	DGPS Equipment	R X II R M (1 H C 1 II R R M (2 H C	Reg. — 7/18, — Reg. — 7/3, MO Res. ASC. 36(63)-1994 ISC Code) 3, MO Res. ASC. 97(73)-2000 ISC Code) 3. — — — —	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.97(73)- (2000 HSC Code)— 13, IMO Res. MSC.142(73), IMO Res. MSC.114(73), IMO Res. MSC.191(79). — —	60945 (2002) including IEC 60945

							IEC
							61162
							series,
							IEC
							62288
							Ed.1.0
							(2008).
A.1/4.51	DGLONASS		Reg.		Reg.		EN B+D
11.1/7.01	Equipment		V/18,		V/19,		60945B + E
	Equipment		-				
		_	Reg.		IMO		(2002)B + F
			X/3,		Res.		including
		—	IMO		A.694	1	IEC
			Res.		(17),		60945
			MSC	. 36 (63)-	IMO		Corrigendum
			(1994		Res.		1
			HSC		MSC	.36(63)-	(2008),
			Code)	(1994		EN
			13,	/	HSC		61108-2
			IMO		Code	`	(1998),
			Res.		13,)	EN
				(77)			
				. 97 (73)-	IMO		61108-4
			(2000		Res.		(2004),
			HSC			. 97 (73)-	EN
			Code)	(2000)		61162
			13.		HSC		series,
					Code)—	EN
					13,		62288
					IMO		(2008).
					Res.		Or,
						.113(73),	IEC
					IMO	.115(75),	60945
					Res.	114(72)	(2002)
						.114(73),	including
				—	IMO		IEC
					Res.		60945
					MSC	.191(79).	Corrigendum
							1
							(2008),
							IEC
							61108-2
							(1998),
							IEC
							61108-4
							(2004),
							IEC
							61162
							series,
							IEC
							62288
							Ed.1.0
							(2008).
							(

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). —	$\begin{array}{c c} EN & B + D \\ 60945B + E \\ (2002)B + F \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ ISO \\ 25861 \\ (2007). \\ Or, \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ ISO \\ 25861 \\ (2007). \\ \end{array}$
A.1/4.53 Refer to note b) of this Annex A.1	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 (10/95).	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

A.1/4.54 Refer to note b) of this Annex A.1	Bearing Device	— Re V/	eg. — /18.	Reg. V/19.	 $\begin{array}{c c c} ISO & B + D \\ 25862B + E \\ (2009)B + F \\ EN & G \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008). \\ Or, \\ ISO \\ 25862 \\ (2009), \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008). \\ \end{array}$
A.1/4.55 Refer to note b) of this Annex A.1	AIS SART equipment	— Re	/4,	IMO Res. MSC IMO Res. MSC ITU- R M.	 1 (2008), EN 61097-14 (2010).

A.1/4.56 Refer to note b) of this Annex A.1 A.1/4.57	Galileo Receiver	(1994 HSC Code 13, IMO Res. MSC (2000 HSC Code 13.	 _36(63)- _97(73)-	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). — — — —	Corrigendum 1
A.1/4.57 Refer to note b) of this Annex A.1	Navigational Watch Alarm System (BNWAS)	 Reg. V/18.	_	IMO — Res. A.694(17), IMO Res. MSC.128(75), IMO Res. MSC.191(79).	60945B + E (2002)B + F including IEC 60945 Corrigendum 1

							EN
							62288
							(2008),
							IEC
						_	
							62616(2010)
							including
							IEC
							62616
							Corrigendum
							1
							(2012).
							Or,
						_	IEC
							60945
							(2002)
							including
							IEC
							60945
							Corrigendum
							1
							(2008),
							IEC
							61162
							Series,
							IEC
							62288
							Ed.1.0(2008),
						—	IEC
							62616(2010)
							including
							IEC
							62616
							Corrigendum
							1
							(2012).
							(2012).
A.1/4.58	Sound		Reg. –	_	Reg.		EN $B + D$
Ex A.2/4.18	reception		V/18,		V/19,		60945B + E
	system		Reg. –	_	IMO		(2002)B + F
	by sterin		X/3,		Res.		including
			IMO		A.694	1(17)	IEC
			Res. –		IMO	τ(1/),	60945
				-			
			MSC 30	5(05)-	Res.	2((2))	Corrigendum
			(1994			.36(63)-	1
			HSC		(1994	-	(2008),
			Code),		HSC	—	EN
			IMO		Code),	61162
			Res. –	_	IMO		series,
			MSC 9'	7(73)-	Res.	—	EN
			(2000		MSC	.86(70),	62288
			HSC –	_	IMO		(2008),
			Code).		Res.		
			ĺ			.97(73)-	
	I	1	I				1

		(2000 HSC Code) IMO Res. MSC.	, 191(79). 	(2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed.1.0(2008), ISO
				14859 (2012).

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:

- 1. IEC 61162-1 ed4.0 (2010-11) Part 1: Single talker and multiple listeners
- 2. IEC 61162-2 ed1.0 (1998-09) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. 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
- 4. IEC 61162-400 ed1.0 (2001-11) Part 400: Multiple talkers and multiple listeners Ship systems interconnection — Introduction and general principles
 - IEC 61162-401 ed1.0 (2001-11) Part 401: Multiple talkers and multiple listeners Ship systems interconnection Application profile
 - IEC 61162-402 ed1.0 (2005-09) Part 402: Multiple talkers and multiple listeners Ship systems interconnection Documentation and test requirements

- IEC 61162-410 ed1.0 (2001-11) Part 410: Multiple talkers and multiple listeners Ship systems interconnection Transport profile requirements and basic transport profile
- IEC 61162-420 ed1.0 (2001-11) Part 420: Multiple talkers and multiple listeners Ship systems interconnection Companion standard requirements and basic companion standards
- 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:

- 1. EN 61162-1 (2011) Part 1: Single talker and multiple listeners
- 2. EN 61162-2 (1998) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. EN 61162-3 (2008) Part 3: Serial data instrument network
 - EN 61162-3-am1 (2010) Amendment 1 Part 3: Serial data instrument network
- 4. EN 61162-400 (2002) Part 400: Multiple talkers and multiple listeners Ship systems interconnection Introduction and general principles
 - EN 61162-401 (2002) Part 401: Multiple talkers and multiple listeners —
 Ship systems interconnection Application profile
 - EN 61162-402 (2005) Part 402: Multiple talkers and multiple listeners Ship systems interconnection Documentation and test requirements
 - EN 61162-410 (2002) Part 410: Multiple talkers and multiple listeners —
 Ship systems interconnection Transport profile requirements and basic transport profile
 - EN 61162-420 (2002) Part 420: Multiple talkers and multiple listeners —
 Ship systems interconnection Companion standard requirements and basic companion standards
 - 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.1/5.1	VHF radio capable of transmitting	— Reg. IV/14		MSC	B + D /B + E 862;+ F

and receiving — DSC and	Reg. — X/3,	$\begin{array}{c c} \text{Reg.} \\ X/3, \end{array}$	EN 60945
radiotelephony —	IMO —	IMO	(2002)
	Res.	Res.	including
	MSC 36(63)-	A.38\$(X),	IEC
	(1994—	IMO	60945
	HSC	Res.	Corrigendum
	Code)	A.524(13),	1
	14, —	IMO	(2008),
	IMO	Res. —	EN
	Res.	A.694(17),	61162
	MSC 97(73)-	IMO	series,
	(2000)	Res. —	ETSI
	HSC	A.803(19),	EN
	Code)—	IMO	300
	14.	Res.	338-1 V1 2 1
		MSC 36(63)-	V1.3.1
		(1994	(2010-02),
		HSC –	ETSI
		Code)	EN
		14,	300
	—	IMO	338-2
		Res.	V1.3.1
		MSC 97(73)-	(2010-02),
		(2000—	ETSI
		HSC	EN
		Code)	301
		14,	843-2
	_	IMO	V1.2.1
		MSC/	(2004-06),
		Circ.8 62 ,	ÈTSI
	<u> </u>	IMO	EN
		COMSAR	301
		Circ.32,	925
		ITU-	V1.3.1
		R	(2010-09).
		M.489-2	Or,
		(10/95),	IMO
		ITU-	MSC/
		R	Circ.862,
		M.493-13	IEC
		(10/09), ITU-	60945
			(2002)
		R	including
		M.541-9	IEC
		(05/04),	60945
		ITU-	Corrigendum
		R	1
		M.689-2	(2008),
		(09/9 <mark>4)</mark>	IEC
			61097-3
			(1994),

— IEC	
61097-7	
(1996), IEC	
— IEC 61162	
series.	
A.1/5.2 VHF DSC — Reg. — Reg. — EN B + D	
watch- $IV/14$, $IV/7$, $60945B + E$	
keeping — Reg. — Reg. $(2002)B + F$	
receiver $X/3$, $X/3$, including $-$ IMO $-$ IMO IEC	
$\begin{array}{ c c c c c } \hline - & IMO & - & IMO & IEC \\ \hline Res. & Res. & 60945 \end{array}$	
MSC.36(63)- A.694(17), Corrigendum	
(1994— IMO 1	
HSC Res. (2008),	
Code) A.803(19), EN	
$ \begin{array}{c cccc} & 14, & - & IMO \\ - & IMO & Res. & series, \end{array} $	
$\begin{array}{c c} \hline \\ \hline $	
MSC 97(73)- (1994 EN	
(2000 HSC 300	
HSC Code) 338-1	
$\begin{array}{c cccc} Code & 14, & V1.3 \\ 14. & - & IMO & (2010-02), \end{array}$	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
MSC 97(73)- EN	
(2000 300	
HSC 338-2	
$\begin{array}{c c} Code \\ 14, \end{array} V1.3.1 \\ (2010-02), \end{array}$	
$\left - IMO \right - ETSI \right $	
COMSAR EN	
Circ.32, 301	
- ITU - 033	
R V1.3.1 M.489-2 (2010-09),	
(10/95), ETSI	
— ITU- EN	
R 301	
M.493-13 843-2 (10/09), V1.2.1	
$\begin{array}{c cccc} & (10/09), & V1.2.1 \\ - & ITU & (2004-06). \end{array}$	
$\begin{array}{c c} - & 110^{-} & (2001-00). \\ R & Or, \end{array}$	
M.541-9 IEC	
(05/04). 60945	
(2002)	
including IEC	
Corrigendum	
(2008),	

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. 		$\begin{array}{c c c c c c c c c c c c c c c c c c c $
		_	MSC 148(77),	60945
		_	Circ.32, ITU- R M.540-2	IEC 60945 Corrigendum 1
			(06/90), ITU- R M.625-3 (10/95).	(2008), IEC 61097-6 (2005-12).
A.1/5.4	EGC receiver	 Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36(63)- (1994	Reg. — IV/7, Reg. X/3, IMO Res. A.570(14),	$ \begin{array}{c c} EN & B + D \\ 60945B + E \\ (2002)B + F \\ including \\ IEC \\ 60945 \\ Corrigendum \end{array} $

		HSC Code) 14, IMO Res. MSC 97(73)- (2000 HSC Code) 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.	$\begin{array}{c cccc} 1 & & & \\ (2008), & & \\ ETSI \\ ETS \\ 300 \\ 460 \\ Ed.1 \\ (1996-05), & \\ ETSI \\ ETS \\ 300 \\ 460/ \\ A1 \\ (1997-11), & \\ ETSI \\ EN \\ 300 \\ 829 \\ V1.1.1 \\ (1998-03), & \\ ETSI \\ EN \\ 300 \\ 829 \\ V1.1.1 \\ (1998-03), & \\ ETSI \\ EN \\ 301 \\ 843-1 \\ V1.2.1 \\ (2004-06). & \\ Or, & \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), & \\ IEC \\ 61097-4 \\ (2007). & \\ \end{array}$
A.1/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	 Reg. $IV/14$, Reg. $X/3$, IMO IMO Res. MSC.36(63)- (1994 HSC Code) 14, IMO Res.	Reg. — IV/7, Reg. X/3, IMO Res. A.694(17), IMO Res. A.699(17), IMO Res. A.700(17),	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 Series,

			MSC (2000 HSC Code 14.		IMO — Res. A.806(19), IMO Res. MSC.36(63)- (1994 — HSC Code)	ETSI ETS 300 067 Ed.1 (1990-11), ETSI ETS 300
					14, 14, IMO Res. MSC 97(73)- (2000 HSC — Code) 14,	067/ A1 Ed.1 (1993-10). Or, IEC 60945 (2002)
				_	IMO COMSAR Circ.32, ITU- R	including IEC 60945 Corrigendum 1
				_	M.491-1 (07/86), ITU- R M.492 -6	1 (2008), IEC 61162 Series, ETSI
				_	(10/95), ITU- R M.540-2 (06/90),	ETS 300 067 Ed.1 (1990-11),
					ITU- R M.625-3 (10/95),	ETSI ETS 300 067/
					ITU- R M.688 (06/90).	A1 Ed.1 (1993-10).
A.1/5.6	406 MHz EPIRB (COSPAS- SARSAT)	 	Reg. IV/1 ² Reg. X/3, IMO Res. MSC (199 ² HSC Code 14,	 .36(63)-	Reg. — IV/7, Reg. X/3, — IMO Res. A.662(16), IMO Res. A.694(17),	IMO B + D MSC/B + E Circ.862+ F EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),

			IMO — ETSI Res. EN A.696(17), 300 IMO 066 Res. V A.810(19), 1.3.1 IMO (2001-01). Res. Or, MSC 36(63)- IMO (1994 MSC/ HSC Circ.862, Code) IEC 14, 60945 IMO (2002) Res. including MSC 97(73)- IEC (2000 60945 HSC Corrigendum Code) 1 14, (2008), IMO — Code) 1 14, (2008), IMO — Code) 1 14, (2008), IMO — Corrigendum Code) 14, (2008), IMO — Code, 1 14, (2008), IMO — IMO No
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left blank	
A.1/5.8	2 182 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 radiotelephony <i>Note</i> : In line with IMO	 Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36(63)- (1994 	Reg.IMO $B + D$ $IV/9$,MSC/B + EReg.Circ.862+ F $IV/10$,ENReg.60945 $X/3$,(2002)includingIEC

and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards	HSC Code) 14, IMO Res. MSC. (2000 HSC Code) 14.	A.694 IMO Res. 97(73)- A.804 IMO Res. MSC (1994 HSC Code 14, IMO Res.	Corr 4(17), 1 (200) EN 4(19), 6116 serie ETS .36(63)- EN .36(63)- EN .300 .338- (2010) ETS EN .97(73)- 300.338 - V1.3 (2010) ETS EN .97(73)- 300.338 - V1.3 (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS EN (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) ETS (2010) (2010) ETS (2010) (2010) ETS (2010) (2010) (2010) ETS (2010) (2010) (2010) (2010) (2010) (2010) (2000) (2000) (100) (2000) (2000) (2000) (100) (2000) (2000) (100) (2000) (100) (2000) (2000) (100) (2000) (2000) (100) (2000) (2000) (100) (2000) (100) (2000) (2000) (100) (200) (2000) (2000) (2000) (2000) (2000) (2000)	gendum 8), 2 5, 1 1, 1, 0-02), 1 1, 1, 0-02), 1 1, 1, 1-01), 5, 1, 1-01), 5, 1, 1-01), 5, 1, 1-01), 7, 862, 5, 1, 2, 1, 0-02), 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A.1/5.11	MF DSC		Reg. —	Reg. —	EN B+D
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		watch-		IV/14,		60945B + E
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		keeping	—	Reg. —	Reg.	(2002)B + F
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$		receiver		X/3,		including
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			—	IMO —	Reg.	IEC
$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$					X/3,	60945
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				MSC. 36 (63)-	IMO	Corrigendum
$ \begin{bmatrix} Code \\ 14, & Res. & 61162 \\ 14, & Res. & 61162 \\ 100 & A.804(19), series, \\ Res. & IMO \\ Res. & EN \\ (2000) & MSC 36(63)- 300 \\ HSC & (1994) & 338-1 \\ Code \\ 14, & Code \\ (2010-02), & 14, & ETSI \\ 14, & Code \\ Res. & 300 \\ MSC 97(73)- & 338-2 \\ (2000) & V1.311 \\ HSC & (2010-02), & Code \\ Res. & 300 \\ MSC 97(73)- & 338-2 \\ (2000) & V1.311 \\ HSC & (2010-02), & Code \\ Code \\ If U \\ $				(1994		1
$ \left \begin{array}{c c c c c c c c c c c c c c c c c c c $				HSC	A.694(17),	(2008),
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				Code)—	IMO —	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				14,		61162
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			—			
$ \left \begin{array}{cccc} (2000 & MSC.36(63)-& 300 \\ HSC & (1994 & 338.1 \\ Code) & HSC & (2010-02), \\ 14. & Code & (2010-02), \\ 14. & - & ETSI \\ - & IMO & EN \\ Res. & 300 \\ MSC.97(73)-& 338.2 \\ (2000 & V1.3.1 \\ HSC & (2010-02), \\ Code) & ETSI \\ 14. & EN \\ - & IMO & 301 \\ COMSAR & 033 \\ Circ.32, & V1.2.1 \\ - & ITU- & (2010-09), \\ R & - & ETSI \\ M.493-13 & EN \\ (1009), & 301 \\ - & ITU- & 843-5 \\ R & V1.11 \\ M.541-9 & (2004-06). \\ (05/04), & Or, \\ - & ITU- & IEC \\ R & 60945 \\ M.1173 & (2002) \\ (10/95). & including \\ IEC \\ 60945 \\ - & IEC \\ 60945 \\ - & IEC \\ 61097-8 \\ \end{array} \right) $						
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				14.		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						
$ \begin{array}{c} MSC 97(73) - 338-2 \\ (2000 & V1.3.1) \\ HSC & (2010-02), \\ Code) & ETSI \\ 14, & EN \\ 14, & 15 \\ 14, & 15 \\ 14, & 15 \\ 14, & 15 \\ 16, & 11, 11 \\ 16, 11, 11 \\ 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11, 11, 11 \\ 11$				<u> </u>		
$\begin{array}{c cccc} & (2000 & V1.3.1 \\ HSC & (2010-02), \\ Code) & & ETSI \\ 14, & EN \\ & & IMO & 301 \\ COMSAR & 033 \\ Circ.32, & V1.2.1 \\ & & ITU- & (2010-09), \\ R & & & ETSI \\ M.493-13 & EN \\ (10/09), & 301 \\ & & ITU- & 843-5 \\ R & V1.1.1 \\ M.541-9 & (2004-06). \\ (05/04), & Or, \\ & & ITU- & IEC \\ R & & 60945 \\ M.1173 & (2002) \\ (10/95). & including \\ IEC \\ & & 60945 \\ Corrigendum \\ 1 \\ (2008), \\ & & IEC \\ & & 61097-3 \\ (1994), \\ & & & IEC \\ & & & 61097-8 \\ \end{array}$						
$\begin{array}{c cccc} HSC & (2010-02), \\ Code) & & ETSI \\ 14, & & EN \\ - & IMO & 301 \\ COMSAR & 033 \\ Circ.32, & V1.2.1 \\ - & ITU- & (2010-09), \\ R & - & ETSI \\ M.493-13 & EN \\ (10/09), & 301 \\ - & ITU- & 843-5 \\ R & V1.1.1 \\ M.541-9 & (2004-06). \\ (05/04), & Or, \\ - & ITU- & IEC \\ R & 60945 \\ M.1173 & (2002) \\ (10/95). & including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ - & IEC \\ 61097-3 \\ (1994), \\ - & IEC \\ 61097-8 \end{array}$						
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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$						
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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$						
R 60945 M.1173 (2002) (10/95). including IEC 60945 Corrigendum 1 (2008), - IEC 61097-3 (1994), - IEC 61097-8						
M.1173 (2002) (10/95). including IEC 60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-8						
(10/95). including IEC 60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-8						
IEC 60945 Corrigendum 1 (2008), IEC 61097-3 (1994), IEC 61097-8						
60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-8					(10,50).	
Corrigendum 1 (2008), IEC 61097-3 (1994), IEC 61097-8						
- IEC (1994), - IEC (1994), - IEC (1997-3 (1994), - IEC (1997-8						
— IEC 61097-3 (1994), — IEC 61097-8						
— IEC 61097-3 (1994), — IEC 61097-8						(2008),
					<u> </u>	
— (1994), — IEC 61097-8						
61097-8					<u> </u>	
(1000)						
(1998),						(1998),

A.1/5.12	Inmarsat-B SES		Reg. — IV/14, Reg. — X/3, IMO — Res.	Reg. — IV/10, Reg. X/3, IMO — Res.	IEC 61162 series. IMO B + D MSC/B + E Circ B + F 862, EN 60945
		_	MSC.36(63)- (1994 — HSC Code) 14, — IMO Res. MSC.97(73)- (2000	IMO Res. A.694(17), IMO Res. A.808(19), IMO Res. —	(2002) including IEC 60945 Corrigendum 1 (2008). Or, IMO
			HSC Code) 14.	MSC.36(63)- (1994 HSC Code)	MSC/ Circ 862, IEC 60945 (2002) including IEC 60945 Corrigendum
			_	Code) 14, IMO MSC/ Circ.862, IMO COMSAR Circ.32.	1 (2008).
A.1/5.13	Inmarsat-C SES	_	Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36(63)- (1994 — HSC Code) 14,	Reg. — IV/10, Reg. X/3, — IMO Res. A.570(14), IMO Res. A.664 (16),	IMO $B + D$ MSC/ $B + E$ Circ.862 \pm F EN 60945 (2002) including IEC 60945 Corrigendum 1
			IH, IMO Res. MSC 97(73)- (2000 HSC	(applicable only —	(2008), EN 61162 series,

			Code)	C	ETSI
			14.		SES	ETS
					comprises	300
					EGĈ	460
					functions),	Ed.1
					IMO	(1996-05),
					Res. —	ÈTSI
					A.694(17),	ETS
					IMO	300
					Res.	460/
					A.807(19),	A1
					IMO	(1997-11),
					Res. —	ETSI
					MSC 36(63)-	EN
					(1994	300
					HSC	829
					Code)	V1.1.1
					14,	(1998-03),
					IMO —	ETSI
					Res.	EN
					MSC 97(73)-	301
					(2000	843-1
					HSC	V1.2.1
					Code)	(2004-06).
					14,	Or,
					IMO —	IEC
					MSC/	60945
					Circ.862,	(2002)
					IMO	including
					COMSAR	IEC
					Circ.32.	60945
						Corrigendum
						1
						(2008),
						IEC
						61097-4
						(2007),
						IEC
						61162
						series.
A.1/5.14	MF/HF radio		Dag		Dag	IMO B + D
A.1/J.14	capable of		Reg. IV/14		Reg. — IV/10,	MSC/B + E
	transmitting		Reg.	,	Reg.	Circ.862+ F
	and receiving		X/3,		X/3, —	EN
	DSC,		IMO		IMO	60945
	NBDP and		Res.		Res.	(2002)
	radiotelephony			.36(63)-	A.694(17),	including
	<i>Note</i> : In line		(1994		IMO	IEC
	with IMO		HSC		Res.	60945
	and ITU		Code		A.806(19),	Corrigendum
	decisions, the		14,	ĺ	IMO	
	requirements		т,		Res.	(2008),
	requirements	ļ		I		(-009),

for Two	— IMO		MSC 36 (63)-	EN
Tone Alarm	Res.		(1994	61162
generator and	MSC	97(73)-	HSC	series,
transmission	(2000)	Code)—	ETSI
on A3H are	HSC		14,	ETS
no longer	Code		IMO	300
applicable	14.	Í	Res.	067
in testing			MSC 97(73)-	Ed.1
standards.			(2000	(1990-11),
			HSC –	ETSI
			Code)	ETS
			14,	300
			IMO	067/
			MSC/	Al
			Circ.862,	Ed.1
			IMO	(1993-10),
			COMSAR	ETSI
			Circ.32,	EN
			ITU-	300
			R	338-1
			M.476-5	V1.3.1
			(10/95),	(2010-02),
			(10/95), ITU- —	(2010-02), ETSI
		<u> </u>	R	
				EN 200
			M.491-1	300
			(07/86),	338-2 V1 2 1
		_	ITU-	V1.3.1
			R	(2010-02),
			M.492-6	ETSI
			(10/95),	ETS
		—	ITU-	300
			R	373-1
			M.493-13	V1.3.1
			(10/09),	(2011-01),
		—	ITU-	ETSI
			R	EN
			M.541-9	301
			(05/04),	843-5
		—	ITU-	V1.1.1
			R	(2004-06).
			M.625-3	Or,
			(10/95),-	IMO
		—	ITU-	MSC
			R	Circ.862,
			M.117 3 -	IEC
			(10/95).	60945
				(2002)
				including
				IEC
				60945
				Corrigendum
				1
				(2008),

				IEC 61097-3 (1994), IEC 61097-9 (1997), IEC 61162 series.
A.1/5.15	MF/HF DSC scanning watch keeping receiver	Reg. IV/14, Reg. Reg. X/3, IMO IMO Res. MSC.36(63)-(1994 HSC Code) 14, IMO Res. MSC.97(73)-(2000 HSC Code) 14. IA.	Reg. — IV/10, Reg. $X/3$, IMO Res. $A.694(17)$, IMO Res. $A.806(19)$, IMO Res. $A.806(19)$, IMO Res. $MSC 36(63)$ -(1994) HSC Code) 14, IMO Res. — MSC 97(73)-(2000) HSC Code) 14, IMO Res. — MSC 97(73)-(2000) HSC Code) 14, IMO Res. — MSC 97(73)-(2000) HSC Code) 14, IMO Res. — MSC 97(73)-(2000) HSC Code) 14, IMO HSC COMSAR Circ. 32 , ITU- R M.493-13 (10/09)-, ITU- R M.541-9 (05/04).	EN $ B + D $ 60945B + E (2002)B + F 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 300 338-2 V1.3.1 (2010-02), ETSI EN 301 033 V1.3.1 (2010-09), ETSI EN 301 033 V1.3.1 (2010-09), ETSI EN 301 033 V1.3.1 (2010-09), ETSI EN 301 033 V1.3.1 (2010-09), ETSI EN 301 843-5 V1.1.1 (2004-06). Or, IEC 60945 (2002) including IEC 60945

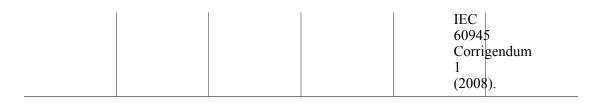
					-	_	Corrigendum 1 (2008), IEC 61097-3 (1994), IEC 61097-8 (1998), IEC 61162 series.
A.1/5.16	Aeronautical two way VHF radio telephone apparatus	Moved to	o A.2/5.	8			
A.1/5.17	Portable survival craft two- way VHF radiotelephone apparatus		Reg IV/14, Reg X/3, IMO Res MSC.3 (1994 HSC - Code) 14, IMO Res. MSC.9 (2000 HSC Code)- 14.	_	Reg III/6, IMO Res. A.694(IMO Res MSC.3 (1994 HSC Code) 8, 14, - IMO Res. MSC.9 (2000 HSC Code) 8, - 14, IMO Res. MSC.9 (2000 HSC Code) 8, - 14, IMO Res MSC.1 ITU- R M.489- (10/95) -	(19), - - - - - - - -	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), ETSI EN 300 225 V1.4.1 (2004-12), ETSI EN 301 843-2 V1.2.1 (2004-06). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61097-12 (1996).

A 1/5 10	D' 1		D	D	
A.1/5.18	Fixed		Reg. —	Reg. —	EN B + D
	survival		IV/14,	III/6,	60945B + E
	craft two-	_	Reg. $-$	IMO	$(2002)\mathbf{B} + \mathbf{F}$
	way VHF		X/3,	Res.	including
	radiotelephone apparatus		IMO Res. —	A.694(17), IMO	IEC 60945
	apparatus		MSC 36(63)-	Res.	Corrigendum
			(1994	A.809(19),	1
			HSC –	IMO	(2008),
			Code)	Res. —	ETSI
			14,	MSC 36(63)-	EN
		_	IMO	(1994	301
			Res.	HSC	466
			MSC 97(73)-	Code)	V1.1.1
			(2000	8,	(2000-10).
			HSC	14,	Or,
			Code)—	IMO —	IEC
			14.	Res.	60945
				MSC 97(73)-	(2002)
				(2000	including
				HSC	IEC
				Code)	60945
				8,	Corrigendum
				14,	1
				ITU-	(2008),
				R — M.489-2	IEC 61007 12
				(10/95).	61097-12 (1996).
				· /	
A1/5.19	Inmarsat-F77		Reg. —	Reg. —	IMO B + D
			IV/14,	IV/10,	MSC/B + E
			Reg. —	IMO	Circ.8 B 2+F
			X/3,	Res. —	EN CODAS
			IMO	A.570	60945
			Res. MSC 36 (63)-	(14), IMO	(2002) including
			(1994	Res.	IEC
			HSC	A.808	60945
			Code)	(19),	Corrigendum
			14, —	IMO	1
			IMO	Res.	(2008),
			Res.	A.694—	IEC
			MSC 97(73)-	(17),	61097-13
			(2000—	ÌMÔ	(2003).
			HSC	Res.	Or,
			Code)	MSC 36 (63)-	IMO
			14.	(1994	MSC
				HSC	Circ.862,
				Code)—	IEC
				14,	60945
				IMO	(2002)
				Res.	including
			I	MSC 97(73)-	IEC

	_	(2000 HSC Code) 14, IMO — MSC/ Circ.862, IMO COMSAR	60945 Corrigendum 1 (2008), IEC 61097-13 (2003).
		Circ.32.	

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	— COLI Anne I/14.	x I/14, — IMO Res. A.694 — IMO Res.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	45 2) iding 45 igendum 8). 44 5) iding 6), 45 2)



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

Νο	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLASTesting standards74, as amended, and the relevant resolutions and circulars of the IMO, as applicableTesting standards		Modules for conformity assessment
1 A.1/8.1	2 Water level detectors	3 — Reg. II-1/2 — Reg. II-1/2 — Reg. XII/1	22-1, II-1/2 — Reg. 25, XII/1 — IMO 2. Res.A — IMO Res.	5, 6009 (2001) 2, includ IEC 1021(26)6009 Corri 1 .188(79). (2011) — IEC 6052 (2001) includ Corri 1 (2003) Corri 2 (2007) Corri 3 (2009) — IMO Res.	2-504 gendum), 9)) ding: gendum 8), gendum 7), gendum



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 (LSA Code		
A.2/1.2	Immersion suit materials	Deliberately le	ft blank		
A.2/1.3	Float-free launching appliances for survival craft	— Reg. III/4, — Reg. III/34	 Reg. III/26 Reg. III/34 IMO Res. MSC (1994 HSC Code 8, IMO Res. 	, , , , , , , , , , , , , , , , , , ,	

A.2/1.4	Embarkation	Moved to A.1/		IV, VI, IMO Res. MSC 97(73)- (2000 HSC Code) 8.	
A.2/1.4	ladders	ivioved 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.48(66)- (LSA Code), IMO Res. MSC.97(73)- (2000 HSC Code), IMO MSC/ Circ.808.	ISO 27991 (2008).

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 Chemilunescer detector (CLD) or heated cheminulescen detector type (HCLD) type for use in on board direct measurement	
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 Annex VI, VI, Reg. Reg. 4. 4.
A.2/2.4	Equipment using other technological methods to limit SO _x emissions	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
A.2/2.5	On board NOx analysers using a measurement method other than the Direct Measurement and Monitoring Method of the NOx	 IMO – IMO Res. Res. MEPC.176(58) MEPC.176(58) (Revised (Revised MARPOL MARPOL Annex Annex VI, VI, Reg. Reg. 4) 4).

Technical		
Code 2008		

3. **Fire protection equipment**

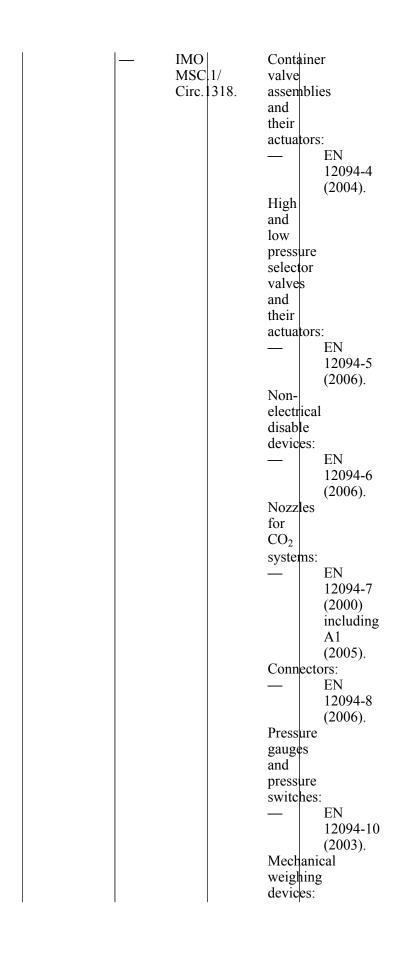
No	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/3.1	Non- portable and transportable extinguishers	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	Moved to A.1/	3.51		

	for control stations, service spaces, accommodatio spaces, machinery spaces and unattended machinery spaces	n	
A.2/3.6	Smoke detectors	Moved to A.1/3.51	
A.2/3.7	Heat detectors	Moved to A.1/3.51	
A.2/3.8	Electric safety lamp	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
A.2/3.9	Protective clothing resistant to chemical attack	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

		Code)— EN 7. 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

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	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
A.2/3.22	Galley Exhaust Duct Fixed Fire Extinguishing Systems components	— Reg. — Reg. II-2/9. II-2/9.
A.2/3.23	Helicopter Deck Fire Extinguishing Systems components	Moved to A.1/3.67
A.2/3.24	Portable Foam Applicator Units	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

				(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		I
A.2/3.26	Gaseous Fuel Systems Used for Domestic Purposes (components)	— Reg. II-2/4	1	Reg. II-2/4, IMO MSC.1/ Circ.1276.	
A.2/3.27	Fixed Gas Fire Extinguishing Systems (CO ₂) components.	— Reg. II-2// — Reg. X/3.	10,	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.97(73)- (2000 HSC Code) 5, IMO Res. MSC.98(73)- (FSS Code) 5, IMO MSC.1/ Circ.1313,	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).



		$\begin{array}{ c c c c c } & - & EN & & & & & & & & & & & & & & & & & $
A.2/3.28	Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers	Moved to A.1/3.57
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	Moved to A.1/3.59

	Chemical Tankers							
A.2/3.31	Water Spraying Hand Operated System	_	Reg. II-2/1 Reg. II-2/1	10, 	Reg. II-2/1 Reg. II-2/1	0,		
A.2/3.32	Dry chemical powder extinguishing systems	Moved	to A.1/	3.62				

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:

- 1. IEC 61162-1 ed4.0 (2010-11) Part 1: Single talker and multiple listeners
- 2. IEC 61162-2 ed1.0 (1998-09) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. 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
- 4. IEC 61162-400 ed1.0 (2001-11) Part 400: Multiple talkers and multiple listeners Ship systems interconnection — Introduction and general principles
 - IEC 61162-401 ed1.0 (2001-11) Part 401: Multiple talkers and multiple listeners — Ship systems interconnection — Application profile
 - IEC 61162-402 ed1.0 (2005-09) Part 402: Multiple talkers and multiple listeners — Ship systems interconnection — Documentation and test requirements
 - IEC 61162-410 ed1.0 (2001-11) Part 410: Multiple talkers and multiple listeners Ship systems interconnection Transport profile requirements and basic transport profile
 - IEC 61162-420 ed1.0 (2001-11) Part 420: Multiple talkers and multiple listeners Ship systems interconnection Companion standard requirements and basic companion standards
 - 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:

- 1. EN 61162-1 (2011) Part 1: Single talker and multiple listeners
- 2. EN 61162-2 (1998) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. EN 61162-3 (2008) Part 3: Serial data instrument network
 - EN 61162-3-am1 (2010) Amendment 1 Part 3: Serial data instrument network
- 4. EN 61162-400 (2002) Part 400: Multiple talkers and multiple listeners Ship systems interconnection Introduction and general principles
 - EN 61162-401 (2002) Part 401: Multiple talkers and multiple listeners —
 Ship systems interconnection Application profile
 - EN 61162-402 (2005) Part 402: Multiple talkers and multiple listeners Ship systems interconnection Documentation and test requirements
 - EN 61162-410 (2002) Part 410: Multiple talkers and multiple listeners —
 Ship systems interconnection Transport profile requirements and basic transport profile
 - EN 61162-420 (2002) Part 420: Multiple talkers and multiple listeners —
 Ship systems interconnection Companion standard requirements and basic companion standards
 - 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	Moved to A.1/	4.41		

	(GNSS method)	
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
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	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

				IMO — Res. MSC.115(73) IMO — Res. MSC.191(79) — — — — — —	EN 62288
A.2/4.12	DGPS, DGLONASS equipment	Moved to A.1/	4.44, A.1	/4.50 and A.1/4	1.51
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	 Reg. V/18 Reg. V/18 Reg. X/3, IMO Res. MSC (1994) HSC Code 13, IMO Res. 	 	Reg. — V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code) 13,	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series,

		MSC 97(73)- (2000 HSC Code) 13.	IMO — Res. MSC 97(73)- (2000 HSC — Code) 13, IMO Res. MSC 191(79), IMO Res. MSC 252(83). —	Corrigendum 1
A.2/4.16	Bridge equipment system	Deliberately left blank		
A.2/4.17	Radar target enhancer	Moved to A.1/4.53		
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

A.2/4.20	Track control system for — high- speed craft	(2002) including IEC 60945 Corrigendum 1 (2008). (2008). - Reg. - IMO A.694(17), (2002) (2002) Res. - 60945 - IMO A.694(17), (2002) Res. - IMO MSC 36(63)- Res. IEC (1994 MSC 36(63)- 60945 HSC (1994 Corrigendum Code), HSC 1 MO Code), (2008), Res. - IMO Code), HSC 1 MSC 97(73)- Res. 61162 (2000) MSC 97(73)- series, HSC (2000 EN Code). HSC 62288 Code). (2008). - HSC (2000) - ISC 191(79). 60945 Code). (2008). - HSC 100 - ISC 191(79). 60945
A.2/4.21	Chart facilities for shipborne radar	Moved to A.1/4.45
A.2/4.22	Transmitting heading device THD (Gyroscopic method)	Moved to A.1/4.46
A.2/4.23	Transmitting heading	Moved to A.1/4.2

	device THD (Magnetic method)			
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 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61288 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	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, EN 62288 (2008). Or,

		— IMG Res MS	le), D	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	Code) (19 13, HSe IMO Coo Res. 15, MSC 97(73)- IMO (2000 Res HSC MS Code) (200 13. HSe Coo 15, IMO Res	9, 9, 94 94 , C.36(63)- 94 	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, EN 61209 (1999), EN 62288 (2008). Or, IEC 60945 (2008). Or, IEC 60945 (2002) including IEC

				IMO SN.1/ Circ.2	288. 	60945 Corrigendum 1 (2008), IEC 61162 Series, IEC 61209 (1999), IEC 62288 Ed. 1.0 (2008).
A.2/4.31	Bearing Device	Moved to A.1/4	4.54			
A.2/4.32	Bridge Navigational Watch Alarm System (BNWAS)	Moved to A.1/4	4.57			
A.2/4.33	Track control system (working at ship's speed from 30 knots and above)	— Reg. V/18.		Reg. V/19, IMO Res. A.694 (17), IMO Res. MSC.		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 60945 Corrigendum 1 (2008), IEC 60945 Series, EN 61162 Series, EN 62288 (2002) 1 1 1 (2002) 1 1 1 (2008), 1 1 2 1 1 2 1 1 2 1 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2

A.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	— Reg. V/19		IMO Res. MSC. IMO Res.	4(17), 3(19), 202(81), 2441(81), 263(84),	Series. Or,
A.2/4.35	Galileo Receiver	Moved to A.1/	4.56			Series.
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:

- 1. IEC 61162-1 ed4.0 (2010-11) Part 1: Single talker and multiple listeners
- 2. IEC 61162-2 ed1.0 (1998-09) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. 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
- 4. IEC 61162-400 ed1.0 (2001-11) Part 400: Multiple talkers and multiple listeners Ship systems interconnection — Introduction and general principles
 - IEC 61162-401 ed1.0 (2001-11) Part 401: Multiple talkers and multiple listeners — Ship systems interconnection — Application profile
 - IEC 61162-402 ed1.0 (2005-09) Part 402: Multiple talkers and multiple listeners Ship systems interconnection Documentation and test requirements
 - IEC 61162-410 ed1.0 (2001-11) Part 410: Multiple talkers and multiple listeners Ship systems interconnection Transport profile requirements and basic transport profile
 - IEC 61162-420 ed1.0 (2001-11) Part 420: Multiple talkers and multiple listeners — Ship systems interconnection — Companion standard requirements and basic companion standards
 - 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:

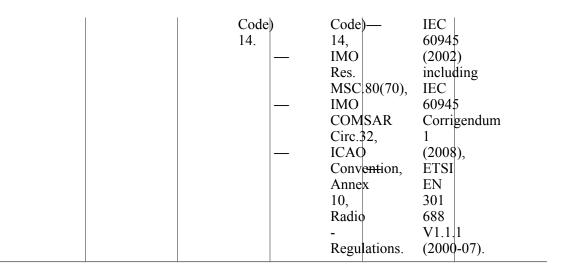
- 1. EN 61162-1 (2011) Part 1: Single talker and multiple listeners
- 2. EN 61162-2 (1998) Part 2: Single talker and multiple listeners, high-speed transmission
- 3. EN 61162-3 (2008) Part 3: Serial data instrument network
 - EN 61162-3-am1 (2010) Amendment 1 Part 3: Serial data instrument network
- 4. EN 61162-400 (2002) Part 400: Multiple talkers and multiple listeners Ship systems interconnection Introduction and general principles
 - EN 61162-401 (2002) Part 401: Multiple talkers and multiple listeners Ship systems interconnection Application profile
 - EN 61162-402 (2005) Part 402: Multiple talkers and multiple listeners Ship systems interconnection Documentation and test requirements
 - EN 61162-410 (2002) Part 410: Multiple talkers and multiple listeners —
 Ship systems interconnection Transport profile requirements and basic transport profile
 - EN 61162-420 (2002) Part 420: Multiple talkers and multiple listeners —
 Ship systems interconnection Companion standard requirements and basic companion standards
 - 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	Testing standards	Modules for conformity assessment
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			c o I a	nd circulars of the MO, as applicable			
1	2	3	4		5		6
A.2/5.1	VHF EPIRB		Reg IV/14, Reg. X/3, IMO Res. MSC 36 (1994 HSC Code), IMO Res. MSC 97 (2000 HSC Code)	- IMC Res. A.66 - IMC Res. 5(63)- A.69 - IMC Res. A.80 - IMC Res. 7(73)- MS0 (199 HSC Cod - IMC Res. MS0 (200 HSC Cod - ITU R M.4 (10/ - ITU R M.4	52(16), 52(16), 52(17), 55(19), 55(19), 52(16),	1 (2008 Or, IEC 6094 (2002 includ IEC 6094 Corri 1 (2008	2) ding 5 gendum 3). 5 2) ding 5 gendum
A.2/5.2	Radio reserve source of energy		Reg. – IV/14, Reg. – X/3, IMO Res. – MSC 36 (1994 HSC Code), IMO Res. – MSC 97 (2000	- IMC 5(63)- Res. MSC (199 HSC Cod - IMC 7(73)- Res.	3, 94(17), 2.36(63)- 2.97(73)-	EN 6094 (2002 includ IEC 6094 Corri 1 (2008 Or, IEC 6094 (2002 includ IEC	2) ding 5 gendum 3). 5

A.2/5.3	Inmarsat-F SES	Moved t	HSC Code). — — ••• A.1/5.19.	HSC Code), IMO COMSAR Circ.16, IMO COMSAR Circ.32.	60945 Corrigendum 1 (2008).
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).
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),	EN 60945 (2002)), including IEC 60945 Corrigendum 1 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendum

			 	IMO MSC/ Circ.862, IMO COMSAR Circ.32.	1 (2008).
A.2/5.6	L- band EPIRB (INMARSAT)	Deliberately le	eft 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 Corrigendum 1 (2008), EN 61162 Series. Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Series. 0 (2002) Series. (2008), Series. (2008), Series. (2008), Series. (2008), Series. (2008), Series. (2008), Series. (2008), Series. (2008) (2008), Series. (2008) (200
A.2/5.8 Ex A.1/5.16	Aeronautical two way VHF radio telephone apparatus	(199 HSC Code 14, — IMO Res.	 2.36(63)- 4 2.97(73)- 0	Reg. — IV/7, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code) 14, IMO Res. MSC.97(73)- (2000 HSC	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), ETSI EN 301 688 V1.1.1 (2000-07). Or,



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	— COL 72 Anne III/3.	x III/3, — IMO Res.	6094 x (200 inclu IEC 6094 4(17). Corr 1 (200 — Whis COL 72 Anno III/1 (Pert Bells or	2) iding 5 igendum 8), stles — REG ex formance),

I.	1	i		aarbaa
				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).

Bulk carrier safety equipment 7.

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		1, XII/1 — 1997 AS SOLA	MSC	

		Res. 5.	Res. 5.	
A.2/7.2	Water level detectors on bulk carriers	Item deleted		

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-1/4 — Reg. X/3.	 IMO Res. MSC (1994 HSC Code 12, IMO Res. 	.36(63)-	

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'⁽¹⁴⁾. 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.

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, finalproduct 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,
- the documentation concerning the quality system,
- the technical documentation of the approved type and a copy of the EC typeexamination 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.
- 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.
- 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.
- 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.
- 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
- 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.

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.

- 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.

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.

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.

ANNEX D

The of conformity following mark must take the

Mark of conformity



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.

- (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).
- (4) OJ No C 271, 7. 10. 1993, p. 1.
- (5) OJ No C 220, 30. 8. 1993, p. 23.
- (6) 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).
- (7) 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).
- (8) OJ No L 109, 26. 4. 1983, p. 8. Directive as last amended by the 1994 Act of Accession.
- (9) [^{F2}OJ L 324, 29.11.2002, p. 1.]
- (**10**) [^{F3}OJ L 324, 29.11.2002, p. 1.
- (**11**) OJ L 184, 17.7.1999, p. 23..]
- (12) [^{F4}OJ L 239, 15.9.2011, p. 1.
- (**13**) OJ L 312, 10.11.2012, p. 1.]
- (14) 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.

Textual Amendments

- **F2** Substituted by Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002 amending the Directives on maritime safety and the prevention of pollution from ships (Text with EEA relevance).
- F3 Substituted by Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny Part Four.
- **F4** Substituted by Commission Directive 2013/52/EU of 30 October 2013 amending Council Directive 96/98/EC on marine equipment (Text with EEA relevance).