Council Directive 96/98/EC of 20 December 1996 on marine equipment (repealed)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on marine equipment (repealed)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 mean the standards set by — the International Maritime Organization (IMO),							
Stundards	_	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-	[F2 in their up-to-date version], and established in accordance with the relevant international conventions and with the relevant IMO resolutions and circulars to define testing methods and test results, but only in the form referred to in Annex A; shall mean the procedures for evaluating equipment produced in							
approval'	accordan	ice 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 2014/93/EU of 18 July 2014 amending Council Directive 96/98/ EC on marine equipment (Text with EEA relevance).

General Annex A		for	:	SOLAS Regulations refer to SOLAS consolidated version 2009.
	note	for	:	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 ac	ronym	is use	ed	
	A.1, <i>A</i>	Amer	ndn	nent 1 concerning Standard Documents other than IMO.
	A.2, <i>A</i>	Amer	ndn	nent 2 concerning Standard Documents other than IMO.
				ng Corrigendum concerning Standard Documents other than IMO.
	CAT,	Cate	goi	ry for radar equipment as defined in section 1.3 of IEC 62388 (2007).
	Circ.,	Circ	ula	ır.
				ternational Regulations for Preventing Collisions at Sea.
				MO's Sub-Committee on Radiocommunications and Search and Rescue. n Standard.
	-			ean Telecommunication Standardisation Institute.
				ional Code for Fire Safety Systems.
				ional Code for Application of Fire Test Procedures.
				peed Craft Code.
		•	-	ional Bulk Chemical Code.
				ational Civil Aviation Organization.
				ional Electro-technical Commission.
				tional Code for the Construction and Equipment of Ships Carrying ses in Bulk.
	IMO,	Inter	rna	tional Maritime Organization.
	ISO, I	Inter	nat	ional Standardisation Organisation.
	ITU, I	Inter	nat	ional Telecommunication Union.
				ving appliance.
				nternational Convention for the Prevention of Pollution from Ships.
		-		ne Environment Protection Committee.
				me Safety Committee.
	-		-	en Oxides.
		•		ns: Oxygen Hydro Carbon systems.
		-		rnational Convention for the Safety of Life at Sea.
		-		r Oxides.
	Reg.,	-		
	Res.,	Reso	olut	ion.

ANNEX A.1 EQUIPMENT FOR WHICH DETAILED TESTING STANDARDS ALREADY EXIST IN INTERNATIONAL INSTRUMENTS Notes applicable to the whole of Annex A.1

- a) General: in addition to the testing standards specifically mentioned, a number of provisions, which must be checked during type-examination (type approval) as referred to in the modules for conformity assessment in Annex B, are to be found in the applicable requirements of the international conventions and the relevant resolutions and circulars of the IMO.
- b) Column 1: Article 2 of Commission Directive 2012/32/EU⁽¹²⁾ may apply. (8th Amendment of MED Annex A).
- c) Column 1: Article 2 of Commission Directive 2013/52/EU⁽¹³⁾ may apply. (9th Amendment of MED Annex A).
- d) Column 5: Where IMO Resolutions are cited, only the testing standards contained in relevant parts of the Annexes to the Resolutions are applicable and exclude the provisions of the Resolutions themselves.
- e) Column 5: International conventions and testing standards apply in their up-to-date version. For the purpose of identifying correctly the relevant standards, test reports, certificates of conformity and declarations of conformity shall identify the specific testing standard applied and its version.
- f) Column 5: Where two sets of identifying standards are separated by 'or', each set fulfils all the testing requirements to meet IMO Performance Standards; thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant International Instruments. Conversely, when other separators (comma) are used all the listed references apply.
- g) The requirements laid down in this annex shall be without prejudice to carriage requirements in the international conventions

1. Life-saving appliances

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

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

A.1/1.1	Lifebuoys —	Reg. —	Reg. —	IMO B + D
		III/4,	III/7,	Res. $B + E$
		Reg. —	Reg.	MSC 81 (70).
		X/3.	III/34,	
			IMO Res.	
			MSC 36(63)-	
			(1994	
			HSC	
			Code)	
			8,	
			IMO	
			Res.	
			MSC 48(66)-	
			(LSA	
			Code)	
			I, II,	
		—	IMO	
			Res.	
			MSC 97(73)-	
			(2000	
			HSC	
			Code) 8.	
			0.	
A.1/1.2	Position- —	Reg. —	Reg. —	IMO B + D
	indicating	III/4,	III/7,	Res. $B + E$
	lights for —	Reg. —	Reg.	MSC 81 (70).
	life-saving	X/3.	III/22,	
	appliances:	<u> </u>	Reg.	
	(a) for survival		III/26, Pag	
	craft		Reg III/32,	
	and		Reg.	
	rescue		III/34,	
	boats,		IMO	
	(b) for		Res.	
	lifebuoys,		MSC 36(63)-	
	(c) for		(1994	
	lifejackets.		HSC	
			Code)	
			8,	
		<u> </u>	IMO	
			Res.	
			MSC 48(66)-	
			(LSA	
			Code)	
			II,	
			IV, IMO	
		<u> </u>	IMO Res.	
			NCS.	
			MSC 07(72)	
			MSC 97(73)- (2000	

			HS Coo 8.		
A.1/1.3	Lifebuoys self- activating smoke signals	— Reg. III/4, — Reg. X/3.	— Reg III/ — IM Res MS (19 HS Coo 8, — IM Res	7, Res. g. MSC 34, O 5. SC.36(63)- 94 C de) O	B + D B + E 2.831 (770).
			(LS Coo I, II — IM4 Res MS (20 HS Coo 8.	SA de) I, O S. SC 97(73)- 00 C de)	
A.1/1.4	Lifejackets	— Reg. III/4, — Reg. X/3.	- Reg III/ - Reg III/ - IM4 Res MS (19 HS Cod	7, Res. g. MSC 22, g. 34, O s. SC.36(63)- 94 C	B + D B + E 2.831 ((70)).
			(LS Coo I, II — IM Res	5. $C_{48}(66)$ - SA de) I_{4} O S_{2} $SC_{97}(73)$ - 00	

A.1/1.5	Immersion suits and anti- exposure suits designed to be worn in conjunction WITH a lifejacket a) immer suit with inher insula b) immer suit with c) anti expos suits	ent ation rsion ent ation	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	Res.	B + D B + E &I (70).
				 8, IMO MSC/ Circ.1046.		
A.1/1.6	Immersion suits and anti- exposure suits designed to be worn WITHOUT a lifejacket a) immer suit witho inher insula	out ent	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	Res.	B + D B + E ℬI (77€).

	b) imme suit with inher insula c) anti expos suits	ent ation			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.97(73)- (2000 HSC Code)	Res.	B + D B + E 81 (77€).
				_	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 \$81 (€7€).

			 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.	Res.	B + D B + E & (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 & (70).

			I, III.		
A.1/1.11	Line- throwing appliances	Reg. III/4, Reg. X/3.	III. 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.	Res.	B + D B + E 𝔄 (47€).
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,	Res.	B + D B + E S3 (776).

			 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 MSC/ Code) 8, IMO Res.	IMO B + D Res. B + E MSC SH (70), 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 Res. B + E MSC. 81 (79).

				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)	Res.	B + D B + E ℬ (47€).
				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 B + D Res. B + E MSC \$3 (#7€).
			 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) Davit launc lifebo — (b) Free- fall 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 S 1(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	Reg. III/4.	 Reg. — III/26, Reg. III/34,— IMO Res. MSC.48(66)- (LSA Code) I,V, IMO MSC/ Circ.1016, IMO MSC/ Circ.1094.	IMO 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. III/4, Reg. X/3.	 Reg. — III/23, Reg. III/33, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8, IMO Res. MSC.48(66)- (LSA Code) I, VI, IMO Res. MSC.97(73)-	

A.1/1.22	Float free launching appliances for	Moved to A	2/1.3	(2000 HSC Code) 8.	
A.1/1.23	survival craft Launching appliances for free-fall lifeboats	— Re III/ — Re X/3	/4, g. —	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 48(66)- (LSA Code) I, VI, IMO Res. MSC 97(73)- (2000 HSC Code) 8,	IMO Res. B + E MSC 81 (70). G
A.1/1.24	Liferaft launching appliances (Davits)	— Re III/ — Re X/	/4, g. —	Reg. — III/12, Reg. III/16, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8,	IMO B + D Res. B + E MSC. \$3 (€70). G

			 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. III/4.	 Reg. — III/26, Reg. III/34, IMO Res. MSC.48(66)- (LSA Code) I, VI.	Res.	B + D B + E 83 (776). G
A.1/1.26	Release mechanism for (a) Lifeb and rescu boats (laund by a fall or falls) (b) Lifera (laund by a fall or falls)	e ched afts	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, IWO Res. MSC.97(73)- (2000 HSC Code)	Res.	B + D B + E 83 (776).

				IMO MSC.1/ Circ.1419.	
A.1/1.27	Marine evacuation systems	Reg. III/4, Reg. X/3.		Reg. — III/15, Reg. III/26, Reg. III/34, IMO Res. MSC.36(63)- (1994 HSC Code) 8, IMO Res. MSC.48(66)- (LSA Code) I, VI, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	IMO B + D Res. B + F MSC % I (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.48(66)- (LSA Code) I, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	IMO B + D Res. B + E A.658(E)(6)F
A.1/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A.1/	5.17 and	A.1/5.18	
A.1/1.32	9 GHz SAR transponder (SART)	Moved to A.1/4	4.18		
A.1/1.33	Radar reflector for lifeboats and rescue boats (passive)	— Reg. III/4, — Reg. X/3.		Reg. — III/34, IMO Res A.384 (X), IMO Res.	EN B + D ISO B + E 8729 B + F (1998), EN 60945 (2002)

				MSC 36(63)- (1994 HSC Code) 8, IMO Res. Or, MSC 48(66)- (LSA Code) I, IV, V, IMO Res. MSC 97(73)- (2000 HSC Code) 8, IMO Or, Res MSC 164(78). Or, 	including IEC 60945 Corrigendum 1 (2008). EN ISO 8729 (1998), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), EN 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), EN 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), EN 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), EN 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008). ISO 8729-1 (2010), IEC 60945 Corrigendum 1 (2008).
A.1/1.34	Compass for lifeboats and rescue boats	Moved to A.1/4.	.23		
A.1/1.35	Portable fire — extinguishing	Moved to A.1/3.	.38		

	equipment for 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.4 (LSA Code) IV, V.	Res. MSC	B + D B + E ℬI (†7₲).
A.1/1.37	Rescue boat propulsion engine- outboard motor	_	Reg. — III/4, Reg. — X/3.	- Reg. – III/34, IMO Res. MSC.4 (LSA Code) V.	Res. MSC	B + D B + E 83 (776).
A.1/1.38	Searchlights for use in lifeboats and rescue boats	_	Reg. — III/4, Reg. — X/3. —	- Reg. – III/34, IMO Res. MSC.3 (1994 HSC Code) 8, IMO Res. MSC.4 (LSA Code) I, IV, V, IMO Res. MSC.9 (2000 HSC Code) 8.	Res. MSC 6(63)- 8(66)-	B + D B + E \$3 (79).
A.1/1.39	Open reversible liferafts	_	Reg. — III/4, Reg. X/3.	- IMO – Res. MSC.3 (1994 HSC Code) 8,	– IMO Res. 6(63)- MSC (1994 HSC Code	B + F .36(63)-

I, Code) — IMO Annex Res. 11. MSC 97(73)- (2000 HSC Code) 8, Annex 11. 11.	
A.1/1.40Mechanical pilot hoistMoved to A.1/4.48A.1/1.41Winches for survival craft—Reg. III/4,—IMOB + DB + EB + EB + EB + EB + EB + E	
and rescue – Reg. MSC \mathfrak{A} (* \mathfrak{F}). boats X/3. III/17, G (a) davit Launched Lifeboats, (
A.1/1.42 Pilot ladder Moved to A.1/4.49	

A.1/1.43	Rigid/inflated	—	Reg.		Reg. —	IMO B + D
	rescue boats		III/4,		III/21,	Res. $B + F$
			Reg.	<u> </u>	Reg.	MSC 81 (70),
			X/3.		III/31,—	IMO
					Reg.	MSC/
					III/34,	Circ.1006,
				—	IMO —	ISO
					Res.	15372
					MSC 36(63)-	(2000).
					(1994	Ϋ́Υ Ι΄
					HSC	
					Code)	
					8,	
					IMO	
					Res.	
					MSC 48(66)-	
					(LSA	
					Code)	
					I, V, [
					IMO	
					Res.	
					MSC 97(73)-	
					(2000	
					HSC	
					Code)	
					8.	

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.	xAnnex I, Reg. 14, — IMO MEP Circ.(Res. MEP C .1 / IMO	C.1/

A.1/2.2	Oil/water interface detectors		Annex— I, Reg. 32.	Anne I, Reg. 32.]	Res.	B + D B + E Œ5 (XHII).
A.1/2.3	Oil-content meters		AnnexAnne I, 14, Reg. — 14.	ex I, Reg. IMO MEP Circ.0] C .1 /] 543.]	Res.	Œ1 ⊕7 (49), C.1∕
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.)	Delibera	tely left bla	ık			<u>, </u>
A.1/2.5	Oil discharge monitoring and control system for oil tankers		Annex— I, Reg. 31, IMO MEPC.1/ Circ.761 Rev.1.	Anne I, Reg. 31.]	Res.	B + D B + E Œ1⊕8(49).
A.1/2.6	Sewage systems		Annex— IV, Reg. 9.	Anne IV, Reg. 9.	As from 1 January 2 	IMO Res. MEP 016: IMO Res.	B + D B + E B + F C.159(55).
A.1/2.7	Shipboard incinerators		Annex— VI, Reg. 16. —	Anne VI, Reg.1 IMO MEP Circ.2] 6,] C.1/	Res.	B + D B + E B7 6 (#0). G
A.1/2.8	NOx analyser of		IMO — Res.	IMO Res.		IMO Res.	$\begin{array}{c} \mathbf{B} + \mathbf{D} \\ \mathbf{B} + \mathbf{E} \end{array}$

	Chemilumines detector (CLD) or heated Chemilumines detector (HCLD) type for use in on board direct measurement	cent	(Revised MARPOL Annex VI, Reg. 13) —	8) MEPC.176(5 - (Revised MARPOL Annex VI, — Reg. 13); IMO Res. MEPC.177(5 - (NOx Technical code 2008), IMO Res. MEPC.198(6 IMO MEPC.1/ Circ.638.	- (NOx Techr code) IEC 60092 incl. IEC 60092 8) Corr. 2011.	G nical 2-504:2001 2-504 1:
A.1/2.9	Equipment using other technological methods to limit SOx emissions	Moved t	o A.2/2.4			
A.1/2.10	On board exhaust gas cleaning systems		IMO — Res. MEPC.176(5 - (Revised MARPOL Annex VI, Reg. 4), IMO Res. MEPC.184(5	IMO Res. 8) MEPC.176(5 - (Revised MARPOL Annex VI, Reg. 4). 9).	Res.	B + D B + E Bl %4(59). G

3. **Fire protection equipment**

No.	Item designation	Regulation SOLAS 74, as amended,	Regulations of SOLAS 74, as amended,	Testing standards	Modules for conformity assessment
		where 'type approval' is required	and the relevant resolutions		

				and circula of the IMO, a applica	IS			
1	2	3		4		5		6
A.1/3.1	Primary decks covering		Reg. II-2/4 Reg. II-2/6 Reg. X/3.		(1994 HSC Code 7, IMO Res.	.36(63)-	Res.	. B)7(B 8)-
A.1/3.2	Portable fire extinguishers		Reg. II-2/1 Reg. X/3, IMO Res. MSC (FSS Code 4.	 	IMO Res. MSC (1994 HSC Code 7, IMO Res.	0, 8, 9, 0, 1(23), 36(63)-) 97(73)-	EN 3-7 (2004 inclue A.1 (2007) EN 3-8 (2006) inclue AC (2007) EN 3-9 (2006) inclue AC (2007) EN 3-9 (2006) inclue AC (2007) EN 3-9 (2006) inclue AC (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-8 (2007) EN 3-9 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN 3-10 (2007) EN (2007)	7), ding 7), ding ding

A.1/3.4	Fire-fighter's outfit: boots	— Reş II-2 — Reş X/3	2/10, g. —	Reg. EN B + D II-2/10, 15090B + E IMO (2012)B + F Res. MSC, 36(63)-
A.1/3.3	Fire-fighter's outfit: protective clothing (close proximity clothing)	- Reg X/3 - IM Res	$\frac{2}{10},$ $\frac{2}{5},$ $\frac{10}{5},$ 10	Circ. 1275. Reg. Protective $B + D$ II-2/1@lothing for $B + E$ IMO fire fighting: $B + F$ Res. — EN MSC 36(63)- 469 (1994 (2005) HSC including Code) A1 7, (2006) IMO and Res. AC MSC 97(73)- (2006). (2000 HSC code) fire fighting 7, - Reflective clothing for fire fighting: 7, - Reflective clothing for specialised MSC 97(73). Protective clothing for fire-fighting: 7, EN Code) 1486 3. (2007). Protective clothing with a reflective outer surface: — ISO 15538 (2001) Level 2.
				IMO Res. MSC.98(73)- (FSS Code) 4, IMO MSC/ Circ.1239, IMO MSC/

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

				HSC Code) 7, IMO Res. MSC 98(73)- (FSS Code) 3.		
A.1/3.7	Self- contained compressed- air-operated breathing apparatus <i>Note</i> : For use in accidents involving dangerous goods a positive pressure type mask is required.	Reg. II-2/1 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 And wh Res. the appa MSC 957(78) +s (2000 accident HSC with car Code) — 7, IMO Res. MSC 98(73)- (FSS Code) 3. And where the apparatus is for use in accidents with cargo: IMO Res. MSC 4(48)- (IBC Code) 14, IMO Res. MSC 5(48)- (IGC	includ AC (2003 EN 137 (2006 ere tratus e in ts go: ISO	3),

				Code) 14.	
A.1/3.8	Compressed air line breathing apparatus		Reg. — X/3. IMO Res. MSC.36(63)- (1994 HSC Code) 7. <i>Note</i> : This equipment is only for high speed craft built under provisions of the 1994 HSC Code,	IMO — Res. MSC.36(63)- (1994 — HSC Code) 7. —	EN B + D 14593B + E (2005)B + F 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)	n	Reg. — II-2/7, Reg. — II-2/10, Reg. — X/3, IMO — Res. MSC 98(73)- (FSS Code) 8. —	Reg. — II-2/7, Reg. II-2/9, Reg. II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.44(65), IMO Res. MSC.97(73)- (2000 HSC Code) 7,	IMO B + D Res. B + E A.800(E)9)F

	are included under this item)			IMO Res. MSC.98(73)- (FSS Code) 8. IMO MSC/ Circ.912.		
A.1/3.10	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces and cargo pump- rooms	 Reg. II-2/1 Reg. X/3, IMO Res. MSC (FSS Code 7. 	0, — .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) 7, IMO MSC.1/ Circ.1313.	MSC	B + D / B + E 1 B65,F endix
A.1/3.11	'A' & 'B' Class divisions fire integrity (a) 'A' class divisi (b) 'B' class divisi	'B' Class: — Reg. II-2/3 ons,	3.2A' Class —	Reg. II-2/3.2. IMO MSC/— Circ.1120 IMO MSC.1/ Circ.1434	Res.). 1/
A.1/3.12	Devices to prevent the passage of	— Reg. II-2/4	ļ ļ,	Reg — II-2/4,	EN ISO	For equipment

	flame into the cargo tanks in tankers			Reg II-2/16 	16852other than (2010) valves: ISO $B + D$ 15364 $B + E$ (2007) $B + F$ IMO For valves: MSC/B + F Circ.677.
A.1/3.13	Non- combustible materials	II — R	I-2/3, Reg. — (/3. — — —	Reg. — II-2/3, Reg. II-2/5, Reg. II-2/9, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	IMO B + D Res. B + E MSC. 307(8 8)- (2010 FTP Code).
A.1/3.14	Materials other than steel for pipes penetrating 'A' or 'B' Class division	Item incluc	ded in A.1/3.20	6 and A.1/3.27	
A.1/3.15	and	II — R X s, s, ble ablies ensators,	I-2/4, Reg. — X/3.	Reg. Pipes and II-2/4,fittings: IMO — Res. MSC. 36(63)- (1994 Valves: Code) 7, 10, IMO Res. Flexible MSC. 93(\$7)bli (2000 — HSC Code)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

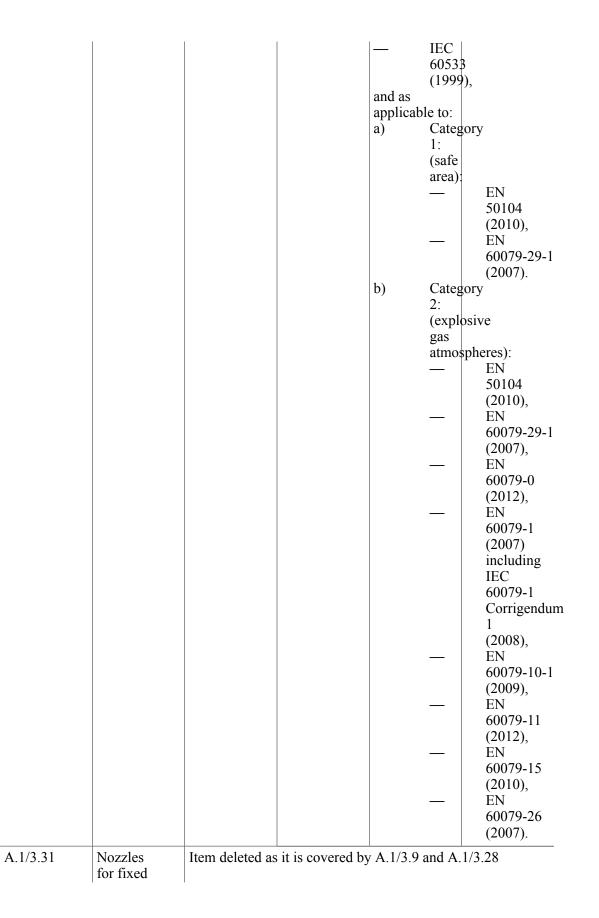
	with resiliand	meric			7, 10. IMO MSC. Circ.	Metallic compone with resilient a elastome seals.	ents and). 1 5), 2
A.1/3.16	Fire Doors		Reg. II-2/9		Reg. II-2/9		Res.). .1/
A.1/3.17	Fire door control systems components. <i>Note</i> : When the term 'system components' is used in column 2 it may be that 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.	,	Reg. II-2/9 IMO Res. MSC (2000 HSC Code 7.	.97(73)-	Res.	
A.1/3.18	Surface materials and floor	_	Reg. II-2/3	,	Reg. II-2/3	,	Res.	B + D B + E B)7(88)-

	coverings with low flame-spread characteristics (a) decora veneer (b) paint system (c) floor - coverin (d) pipe insulat covers (e) adhesi used in the constru of 'A', 'B' & c' c' class divisio (f) combu ducts membrice	I I I I I I I I I I I I I I I I I I I	$\begin{array}{c c} I-2/5, \\ \text{Reg.} & \\ I-2/6 \\ \hline \text{or} & \\ a), \\ b), & \\ c) \\ \text{Reg.} \\ I-2/9, \\ \hline \text{or} \\ e), \\ f) \\ \text{Reg.} \\ \\ \hline \text{K/3.} \\ \end{array}$	Reg. II-2/5, Reg. II-2/6, Reg. II-2/9, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7. IMO MSC/ Circ. 1120.	(2010 FTP Code).
A.1/3.19	Draperies, curtains and other suspended textile materials and films	I — F I — F	I-2/3, Reg. — I-2/9, Reg. — K/3.	Reg. — II-2/3, Reg. II-2/9, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	IMO B + D Res. B + E MSC. B 07(8 8)- (2010 FTP Code).
A.1/3.20	Upholstered - furniture -	I — F I — F	I-2/3, Reg. — I-2/5, Reg. —	Reg. — II-2/3, Reg. II-2/5, Reg. II-2/9,	IMO B + D Res. B + E MSC B 07(8 8)- (2010 FTP Code).

		— Reg.	X /3 . —	IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	
A.1/3.21	Bedding components	Reg. II-2// Reg. II-2// Reg. X/3.	3, 9,	Reg. — II-2/3, Reg. II-2/9, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	IMO B + D Res. B + E MSC 307(8 8)- (2010 FTP Code).
A.1/3.22	Fire dampers	— Reg. II-2/		Reg. — II-2/9.	IMO B + D Res. B + E 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	Reg. — II-2/9	Reg. — II-2/9, IMO MSC/ Circ.1120.	IMO B + D Res. B + E MSC. 307(88) - (2010 FTP Code).
A.1/3.26	Penetrations — through 'A' class divisions (a) electric cable transits, (b) pipe, duct, trunk, etc. penetr	Reg. — II-2/9. —	Reg. — II-2/9, IMO MSC.1/ Circ.1276. (only applicable to (b))	IMO B + D Res. B + E MSC 307(8 8)- (2010 FTP Code).
A.1/3.27	Penetrations — through 'B' class divisions (a) electric cable transits, (b) pipe, duct, trunk, etc. penetr	Reg. — II-2/9. ations.	Reg. — II-2/9.	IMO B + D Res. B + E MSC. 307(8 8)- (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-2/10, Reg. — X/3. —	Reg. — II-2/7, Reg. II-2/100r, IMO EN 122 Res. (1999) MSC. 366(h3)i (1994 (2001) HSC (2004) Code)A3 (20 7, IMO Res. MSC.44(65), IMO Res. MSC.97(73)- (2000 HSC Code) 7, IMO Res. MSC.97(73)-	ng A1 , A2 and 06).

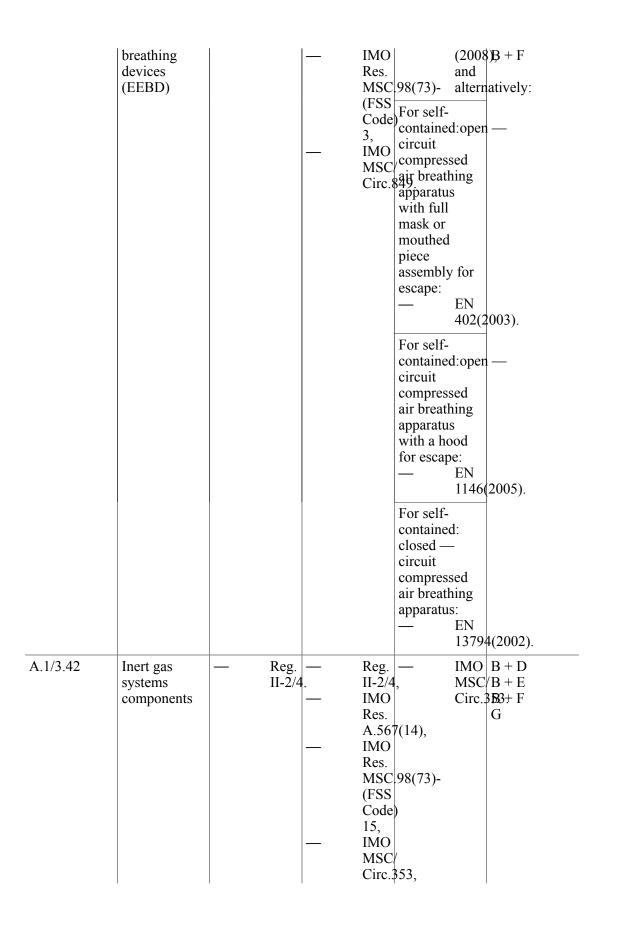
			 MSC 98(73)- (FSS Code) 8, IMO MSC/ Circ.912.	
A.1/3.29	Fire hoses	 Reg. II-2/1 Reg. X/3.	 Reg. — II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	EN B + D 14540B + E (2004)B + F including A.1 (2007).
A.1/3.30	Portable oxygen analysis and gas detection equipment	Reg. II-2/4 Reg. VI/3.	 Reg. — II-2/4, Reg. VI/3, IMO Res. MSC 98(73)- (FSS Code) 15.	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 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011)



	sprinkler systems, for high speed craft (HSC)					
A.1/3.32	Fire restricting materials (except furniture) for high speed craft		Reg. X/3.		IMO — Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	IMO B + D Res. B + E MSC 307(\$ 8)- (2010 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 B + D Res. B + E MSC. B 07(8 8)- (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 B + D Res. B + E MSC B 07(B 8)- (2010 FTP Code).
A.1/3.35	Fire doors on high speed craft	-	Reg. X/3.		IMO — Res. MSC.36(63)- (1994 HSC	IMO B + D Res. B + E MSC 307(\$ 8)- (2010

				Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	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. MSC.97(73)- (2000	IMO B + D Res. B + E MSC 307(88) - (2010 FTP Code).
				HSC Code) 7.	
A.1/3.37	Penetrations — through fire resisting divisions on high speed craft (a) electric	Reg. X/3.		IMO — Res. MSC 36(63)- (1994 HSC Code) 7,	IMO $B + D$ Res. $B + E$ MSC 307(88) - (2010 FTP Code).
	cable transits, (b) pipe, duct, trunk etc. pene	trations.		IMO Res. MSC 97(73)- (2000 HSC Code) 7.	
A.1/3.38	Portable fire- extinguishing equipment for — lifeboats and rescue boats	Reg. III/4, Reg. X/3.		Reg. — III/34, IMO Res. A.951(23), IMO Res. — MSC.36(63)- (1994 HSC Code) 8,	EN B + D 3-7 B + E (2004)B + F including A1 (2007), EN 3-8 (2006) including AC (2007),
			<u> </u>	IMO Res.	EN 3-9

				MSC.48(66)- (LSA Code) I, IV, V, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	(2006) including AC (2007), EN 3-10 (2009).
A.1/3.39	Nozzles for equivalent water- mist fire extinguishing systems for machinery spaces and cargo pump rooms	I 	Reg. — I-2/10, Reg. — K/3. —	Reg. — II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.98(73)- (FSS Code) 7, IMO Res. MSC.1/ Circ.1313.	IMO B + D MSC/B + E Circ. 1B65.F
A.1/3.40	Low-location lighting systems (components only)		Reg. — I-2/13, MO — Res. MSC 98(73)- FSS — Code) 1.	Reg. — II-2/13, IMO Res. Or, A.752(18), IMO Res. MSC.98(73)- (FSS Code) 11.	IMO B + D Res. B + E A.752(18)F ISO 15370 (2010).
A.1/3.41	Emergency escape		Reg. — I-2/13.	Reg. — II-2/13,	ISO B + D 23269EI + E



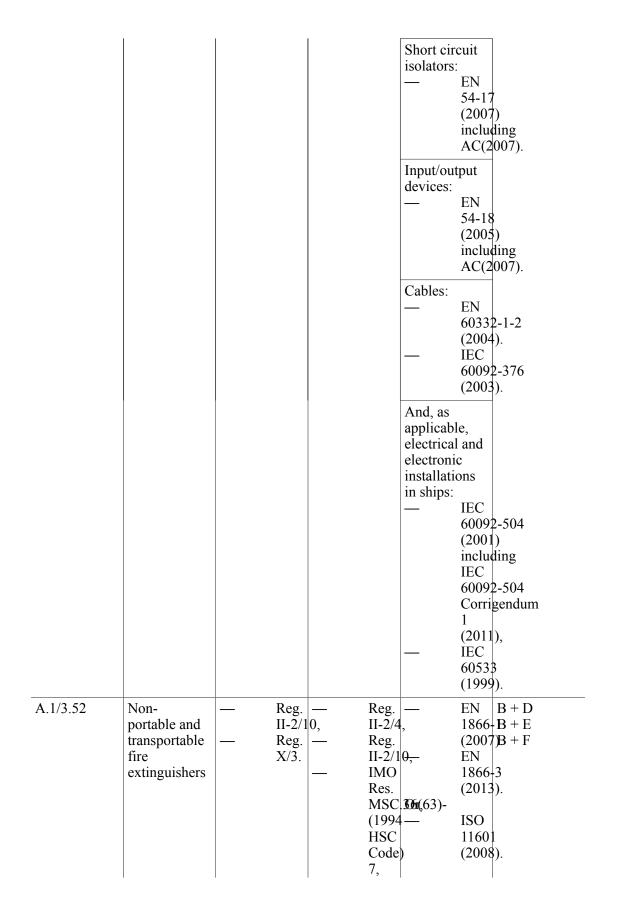
			-	IMO MSC/ Circ.485,	
				IMO MSC/ Circ.731, IMO MSC/ Circ.1120.	
A.1/3.43	Nozzles for deep fat cooking equipment fire extinguishing systems (automatic or manual type).	— II- — Re II-	eg. — -2/1, eg. — -2/10, eg. — '3.	Reg. — II-2/1, Reg. II-2/10, IMO Res. MSC.97(73)- (2000 HSC Code) 7, IMO MSC.1/ Circ.1433.	ISO B + D 15371B + E (2009)B + F
A.1/3.44	Fire-fighters outfit — lifeline	— Re X/ — IN Re M (F	eg. — -2/10, eg. — /3, 10 es. SC.98(73)- SS ode) —	Reg. — II-2/10, IMO Res. MSC 36(63)- (1994 HSC — Code) 7, IMO Res. MSC 97(73)- (2000 HSC Code) 7, IMO Res. MSC 98(73)- (FSS Code) 3.	IMO B + D Res. B + E MSC 98(7F)- (FSS Code) 3, IMO Res. MSC 307(88)- (2010 FTP Code).
A.1/3.45	Equivalent fixed gas fire extinguishing systems components (extinguishing	— Re X/ — IN	eg. — -2/10, eg. — /3, 10 es.	Reg. — II-2/10, IMO Res. — MSC.36(63)- (1994	IMO B + D MSC/B + E Circ.8489; F IMO MSC,1/ Circ.1316. Circ.1316.

	medium, head valves and nozzles) for machinery spaces and cargo pump rooms	MSC (FSS Code 5.	.98(73)-) 	HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7, IMO Res. MSC.98(73)- (FSS Code) 5, IMO MSC(
			_	MSC/ Circ.848, IMO MSC.1/ Circ.1313, 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 Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 5, IMO MSC.98(73)- (FSS Code) 5, IMO MSC.1/ Circ.1270 including	MSC Circ.l incluc	B + D B + E B70 F ling gendum

			_	Corrigendum 1 IMO MSC 1/ Circ. 1313.	
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		g. — 2/10.	Reg. — II-2/10, IMO Res. MSC 98(73)- (FSS Code) 6.	IMO B + D MSC/B + E Circ.6720+ F
A.1/3.48	Fixed water based local application fire fighting systems components for use in category 'A'	— Re II-: — Re X/:	2/10, g. —	Reg. — II-2/10, IMO Res. MSC 36(63)- (1994 HSC Code) 7,	IMO B + D MSC. B + E Circ. 1 B87.F

	machinery spaces (Nozzles and performance tests).			IMO Res. MSC 97(73)- (2000 HSC Code) 7.		
A.1/3.49	Fixed water- based fire- fighting systems for ro-ro spaces, vehicle spaces and special category spaces	— Re — Re — Re — Re — IM — M (F	eg. — -2/19, eg. — -2/20, eg. — /3, /AO es. (SC.98(73)- (SS ode) —	Reg. — II-2/19, Reg. II-2/20, nd the IMO additiona Res. design MSC 36(63) em (1994 for: HSC — Code) 7, IMO Res. MSC 97(73)- (2000 HSC Code) — 7. IMO Res. MSC 98(73)- (FSS Code) 7.	MSC Circ. dl ents Presc based system as per Circ. Claus 4:	ms 1430 se rmance- t ms 1430
A.1/3.50	Protective clothing resistant to chemical attack	Moved to A		 		
A.1/3.51	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodatio spaces, cabin balconies, machinery spaces and unattended	II- Ra X/ — IN Ra M (F Ca	eg. — -2/7, eg. — /3, /10 es. (SC.98(73)- 'SS ode) —	Reg. Control a II-2/7, indicating IMO equipment Res. Electrica MSC 36(fa3) atio (1994 in ships: HSC — Code) 7, IMO Res. MSC 97(73)- (2000 HSC Power su	g nt. l ons EN 54-2 (1997 includ AC(1 and A1(2) ppply	ding 999)

maching	177 7	I		Code	`	EN	I
machine spaces	зıу)—	EN 54-4	
	Conti			7, IMO		(1997	N
(a)	and	01		Res.		inclu	
	indica	ting			.98(73)-	AC(1	
					.90(75)-		
(h)	equip Powe			(FSS Code	`	A1(2) and	<i>002)</i>
(b)				1)		006)
	suppl			9, IMO		A2(2	000).
(a)	equip Heat	mem		MSC	Heat		
(c)		tors —		Circ.	detectors Point	—	
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(u)	detec					54-5	
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	or				detectors		
	ioniza	ation			using scattered		
(e)	Flam				light,		
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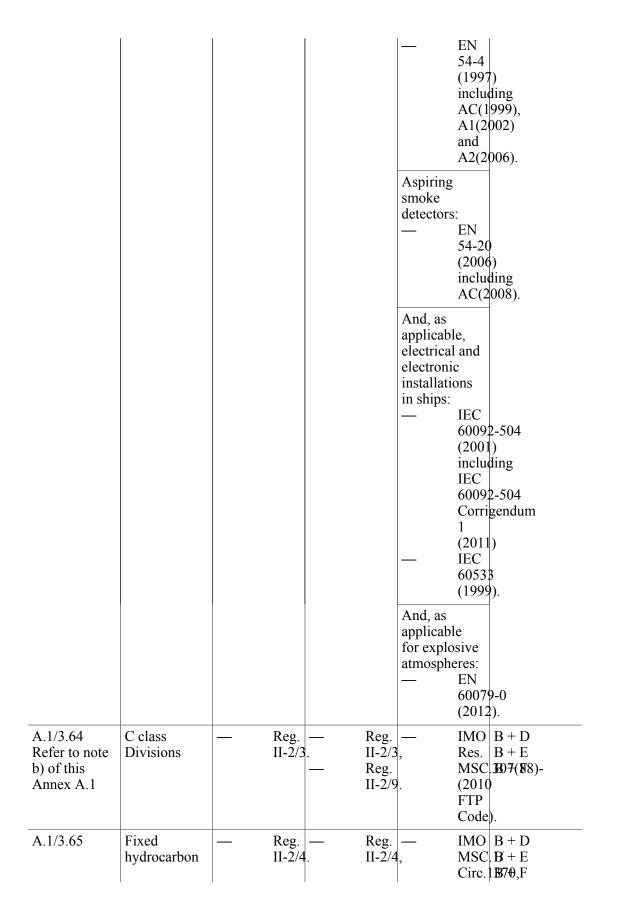
				_	IMO Res. MSC (2000 HSC Code 7.			
A.1/3.53	Fire alarm devices — Sounders		Reg. II-2/7 Reg. X/3, IMO Res. MSC (FSS Code) 9.	.98(73)-	(1994 HSC Code 7, IMO Res. MSC (2000 HSC Code 7, IMO Res.	.36(63)-) .97(73)-) .98(73)-) .1/	EN 54-3 (2001 includ A1(2) and A2(2) IEC 60092 (2001 includ IEC 60092) ding 002) 006), 2-504) ding 2-504 gendum),
A.1/3.54	Fixed oxygen analysis and gas detection equipment]	Reg. II-2/4 Reg. VI/3.	For com O ₂ /HC systems additiona	(FSS Code 15. bined	.98(73)-) and as applicabl a) .1/	(2001 includ IEC 60092 Corri 1 (2011 IEC 60533 (1999	2-504 gendum), 3 9), 3

				b) For comb O ₂ /HC systems additiona	— Dined Illy:, IMO MSC Circ.1	25555555555555555555555555555555555555
A.1/3.55	Dual purpose type nozzles (spray/jet type)	Reg. II-2/1 Reg. X/3.	II-2/1 IMO Res. MSC (1994 HSC Code 7, IMO Res.	.97(73)-	pes se – ttion pes EN 15182 (2007 includ A1(20 EN 15182 (2007 includ A1(20 d pes se – pore r one ay	7) ding 2009), 2-2 7) ding

				-	EN 15182-1 (2007) including A1(2009).
A.1/3.56	Fire hoses (reel type)	— Rej II-2 — Rej X/3	2/10, g. —	Reg. — II-2/10, IMO Res. MSC.36(63) (1994 HSC Code)	EN B + D 671-1 B + E (2012)B + F)-
				7, IMO Res. MSC 97(73) (2000 HSC Code) 7.)-
A.1/3.57	Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers	— Re _I II-2	g 2/10	Reg. — II-2/10.8.1, IMO Res. MSC 98(73 (FSS Code) 14, IMO MSC 1/	IMO B + D MSC/B + E Circ.798+ F)-
			-	Circ.1239, IMO MSC.1/ Circ.1276.	
A.1/3.58	Fixed Low Expansion Foam Fire Extinguishing Systems components for		g 2/10	Reg. — II-2/10, IMO Res. — MSC 98(73) (FSS Code)	IMO $B + D$ MSC $B + E$ Circ. $1B12$.F IMO)- MSC 1/ Circ. $1312/$ Corr. 1.
	Machinery Spaces and Tanker Deck Protection.			6, 14, IMO MSC 1/ Circ.1239, IMO MSC 1/ Circ.1276,	

A.1/3.59	Expansion — Foam for Fixed Fire — Extinguishing Systems for Chemical Tankers	Reg. — II-2/1, IMO Res. MSC.4(48)- (IBC Code)— 11	IMO — Res. MSC 4(48)- (IBC — Code) 11, IMO MSC/ Circ.553.	IMO $B + D$ MSC $B + E$ Circ. $1B12$.F IMO MSC $1/$ Circ. $1312/$ Corr. 1.
A.1/3.60	Nozzles for — fixed pressure water- spraying fire- extinguishing systems for cabin balconies	Reg. — II-2/10. —	Reg. — II-2/10, IMO Res. MSC 98(73)- (FSS Code) 7, IMO MSC 1/ Circ. 1313	IMO B + D MSC B + E Circ.1268.F
A.1/3.61	 a) Inside— air high expansion foam systems for the protection of machinery spaces and cargo pump rooms. b) Outside air high expansion foam systems for the protection of machinery spaces and cargo 	Reg. — II-2/10. —	Reg. — II-2/10, IMO Res. MSC 98(73)- (FSS Code) 6.	IMO B + D MSC. B + E Circ. 1B84.F

	pump room Note: Inside/ Outside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms shall be tested with the approved concentrate to the satisfaction of the Administration	S.						
A.1/3.62	Dry chemical powder extinguishing systems		Reg. II-2/1		Reg. II-2/1 IMO Res. MSC (IGC Code 11.	, M Ci .5(48)-	[SC	B + D B + E I₿I5.F
A.1/3.63 Refer to note b) of this Annex A.1	Sample extraction smoke detection systems components		Reg. II-2/7 Reg. II-2/1 Reg. II-2/2	, 9, 	Res. MSC	, Ro M 9, (F Co 0, 10 and for: Control and indicating equipment. Electrical installations in ships: Electrical installations in ships: 54 (1 in A an	es. [SC SS ode), 1 1 s N 4-2 997 clua C(1 nd 1(2)	



Refer to note b) of this Annex A.1	gas detection system			IMO — Res. MSC 98(7 (FSS — Code) 16, IMO — MSC 1/ Circ. 1370	EN 60079-29-1 (2007), IEC 60092-504
A.1/3.66 Refer to note b) of this Annex A.1	Evacuation guidance systems used as an alternative to low-location lighting systems	— Reg. II-2/1	<u>.</u>	Reg. — II-2/13, IMO MSC 1/ Circ.1168	IMO B + D MSC B + E Circ. 1B68.F
A.1/3.67 Refer to note c) of this Annex A.1	Helicopter facility foam fire-fighting appliances	— Reg. II-2/1		Reg. — II-2/18. IMO MSC 1/ Circ.1431	$ \begin{array}{c c} EN & B + D \\ 13565BI + E \\ (2003)B + F \\ including \\ A1 \\ (2007). \end{array} $

4. **Navigation equipment**

Notes applicable to section 4: Navigation equipment.

Column 5

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

- IEC 61162-1 ed4.0 (2010-11) Part 1: Single talker and multiple listeners
- IEC 61162-2 ed1.0 (1998-09) Part 2: Single talker and multiple listeners, high-speed transmission
- IEC 61162-3 ed1.1 Consol. with am1 (2010-11) Part 3: Serial data instrument network
- IEC 61162-3 ed1.0 (2008-05) Part 3: Serial data instrument network
 - IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 Part 3: Serial data instrument network

- IEC 61162-450 ed1.0 (2011-06) - Part 450: Multiple talkers and multiple listeners — Ethernet interconnection

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

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

No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/4.1	Magnetic compass Class A for ships	(199 HSC Cod 13, — IMC Res	R_{1} $V/19$ R_{2} $ R_{2}$ R_{3} R_{2} R_{3} $R_{$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 59 B + E \\ 73 B + F \\ 0 G \\ 862 \\ 109), \\ 945 \\ 102) \\ 10ding \\ C \\ 945 \\ rrigendum \\ 108). \\ 0 \\ 59 \\ 73), \\ 0 \end{array} $

A.1/4.2	Transmitting heading device THD	 Reg. — V/18, Reg. —	Reg. — V/19, IMO	IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). EN B + D 60945B + E (2002)B + F
	(magnetic method)	V/19, Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)- (2000 HSC Code) 13. — —	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 016(73), IMO — Res. MSC 191(79).	includ G ig IEC 60945 Corrigendum 1 (2008), EN 61162 series; ISO 22090-2 (2004), including Corrigendum 2005, EN 62288 (2008). IEC 60945

A.1/4.3	Gyro compass		leg. —	Reg. — V/19,	EN B+D ISO B+E		
	compuse	,		IMO	8728 B + F		
				Res. $\mathbf{A} = \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A} \mathbf{A}$	(1998)G		
			_	A.424 (X I), IMO	EN 60945		
				Res.	(2002)		
				A.694(17),	including		
			_	IMO Res.	IEC 60945		
				MSC.191(79).			
					(2008), EN		
					61162		
					series,		
				—	EN 62288		
					(2008).		
				Or,			
				<u> </u>	ISO 8728		
					(1997),		
					IEC		
					60945		
					(2002) including		
					IEC		
					60945		
					Corrigendum 1		
					(2008),		
					IEC 61162		
					series,		
					IEC		
					62288 Ed.1.0(2008).		
				4.25 1.4.1/4	· · · ·		
A.1/4.4	Radar equipment	Moved to A.1/4.34, A.1/4.35 and A.1/4.36					
A.1/4.5	Automatic radar plotting aid (ARPA)	Moved to A	A.1/4.34				
A.1/4.6	Echo —		leg. —	Reg. —	EN B+D		
	sounding	V	7/18,	V/19,	ISO $B + E$		
	equipment		leg. — 1/3,	IMO Res.	9875 B + F (2001)G		
			MO	A.224(VII),	including		
		R	les. —	IMO	ISO		
			ASC 36(63)-	Res. (17)	Technical		
		(.	1994	A.694(17),	Corrigendum		

	Greedend	HSC — Code) 13, IMO Res. MSC.97(73)- (2000 HSC — Code) 13. — —	IMO Res. MSC. 36(63)- (1994 HSC Code) 13, IMO Res. MSC. 74(69) Annex 4, IMO Res. MSC. 97(73)- (2000 HSC Code)Or, 13, IMO Res. MSC. 191(79). 	ISO Technical Corrigendum 1: 2006, 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)	 Reg. — V/18, Reg. — X/3, IMO Res. — MSC.36(63)- (1994 HSC —	Reg. — V/19, IMO Res. A.694(17), IMO Res. A.824(19), IMO Res.	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008),

			Code 13, IMO Res. MSC (2000 HSC Code 13.	.97(73)-	(1994 HSC Code) 13, IMO Res. MSC. IMO Res. (2000 HSC Code) 13, IMO Res.	96(72),	EN 61023 (2007), EN 61162 series, EN 62288 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61023 (2007), IEC 61023 (2007), IEC 61162 series, IEC 62288 Ed.1.0(2008).
A.1/4.8	Rudder angle, rpm, pitch indicator	Moved to	o A.1/4	4.20, A.1,	/4.21 ai	nd A.1/4.	22
A.1/4.9	Rate-of-turn indicator		(1994 HSC Code 13, IMO Res.		(1994 HSC Code) 13, IMO Res.	4(17), <u></u> 36(63)- <u></u> 97(73)-	EN B + D 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ISO 20672 (2007), EN 62288 (2008). IEC 60945

					(2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 20672 (2007), IEC 62288 Ed.1.0(2008).
A.1/4.10	Direction finder	Delibera	tely left blan	k	
A.1/4.11	Loran-C equipment		Reg. — V/18, Reg. — X/3, IMO Res. — MSC 36(63) (1994 HSC — Code) 13, IMO Res. MSC 97(73) (2000 HSC — Code) 13.	A.818(19), IMO Res. — MSC.36(63)- (1994 HSC —	EN $B + D$ 60945B + E (2002)B + F includGag IEC 60945 Corrigendum 1 (2008), EN 61075 (1993), EN 61162 series, EN 61288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61075 (1991), IEC 61162 series, (1991), IEC 61162 series, (1991), IEC

				-	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. Or, 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 61075 (1993), EN 61162 series, EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61075 (1991), IEC 61162 series, IEC 61075 (1991), IEC 61162 series, IEC 61075 (1991), IEC 61162 series, IEC 61075 (1991), IEC 61162 series, IEC 61075 (1991), IEC 61162 series, IEC 61075 (1991), IEC 61162 series, IEC 61075 (1991), IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, 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.1/4.13	Decca navigator equipment	Delibera	tely left blank		
A.1/4.14	GPS equipment		Reg. — V/18, Reg. — X/3, IMO Res. — MSC.36(63)- (1994	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

		HSC Code) 13, IMO — Res. MSC 97(73)- (2000 HSC Code) 13. — —	(1994 HSC Code),— IMO Res. MSC.97(73)- (2000 HSC Code),— IMO Res. MSC.02(73), IMO — Res. MSC.191(79).	1 (2008), EN 61108-1 (2003), EN 61162 series, EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61108-1 (2003), IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162
A.1/4.15	GLONASS equipment	Reg V/18, Reg X/3, IMO Res MSC.36(63)- (1994 HSC Code) 13, IMO Res MSC.97(73)- (2000 HSC Code) 13. 	Reg. — V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code) 13, IMO — Res. MSC.97(73)- (2000 — HSC Code) 13, Or, IMO — Res. MSC.113(73),	EN B + D 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61108-2 (1998), EN 61162 series, EN 62288 (2008). IEC 60945 (2002)

			IMO Res. MSC.191(79). — —	including IEC 60945 Corrigendum 1 (2008), IEC 61108-2 (1998), IEC 61162 series, IEC 62288 Ed.1.0(2008).
A.1/4.16	Heading control system (HCS)	— Reg. V/18	Reg. — V/19, IMO Res. — A.342(IX), IMO Res. MSC.64(67) Annex 3, — IMO Res. MSC.191(79). Or, — — — —	$ISO B + D \\ 11674B + E \\ (2006)B + F \\ EN G \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), EN \\ 61162 \\ series, EN \\ 62288 \\ (2008). \\ ISO \\ 11674 \\ (2006), IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), IEC \\ 61162 \\ series, IEC \\ 62288 \\ Ed.1.0(2008). \\ $

A.1/4.17	Mechanical pilot hoist	Moved to A.1/1.40
A.1/4.18	9 GHz SAR transponder (SART)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
A.1/4.19	Radar equipment for high-speed craft	Moved to A.1/4.37
A.1/4.20	Rudder angle indicator	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

		MSC.97(73)- (2000 HSC Code) 13.	IMO — Res. MSC.97(73)- (2000 — HSC Code) 13, Or, IMO — Res. MSC.191(79).	ISO 20673 (2007), EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, ISO 20673 (2007), IEC 62288 Ed.1.0(2008).
A.1/4.21	Propeller revolution indicator	Reg V/18, Reg X/3, IMO Res MSC.36(63)- (1994 HSC Code) 13, IMO Res MSC.97(73)- (2000 HSC Code) 13	Reg. — V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code) 13, IMO — Res. MSC.97(73)- (2000 — HSC Code) 13, Or, IMO — Res. MSC.191(79).	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ISO 22554 (2007), EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum

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. —	MSC (1994 HSC Code 13, IMO - Res. MSC (2000 HSC Code 13, IMO Res.	36(63)- 	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
A.1/4.23	Compass for lifeboats and rescue boats	 	Reg. — III/4, Reg. — X/3,	Reg. III/34 IMO Res.	,	$ \begin{array}{c c} \text{ISO} & \text{B} + \text{D} \\ 1069 & \text{B} + \text{E} \\ (1973) \text{B} + \text{F} \\ \text{G} \end{array} $

			IMO Res. MSC 36(63)- (1994 HSC Code)— 13, IMO Res. MSC 97(73)- (2000 HSC Code) 13. —	MSC 48(66)- (LSA Code) IV, V, IMO Res. MSC 36(63)- (1994 HSC Code) 8, 13, IMO Res. MSC 97(73)- (2000 HSC Code) 8, 13.	ISO 25862 (2009), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).
A.1/4.24	Automatic radar plotting aid (ARPA) for high- speed craft	Moved t	to A.1/4.37		
A.1/4.25	Automatic tracking aid (ATA)	Moved t	to A.1/4.35		
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved t	o A.1/4.38		
A.1/4.27	Electronic plotting aid (EPA)	Moved t	to A.1/4.36		
A.1/4.28	Integrated bridge system	Moved t	to A.2/4.30		
A.1/4.29	Voyage data recorder (VDR)	 	Reg. — V/18, Reg. — V/20, Reg. X/3, IMO — Res. MSC 36(63)- (1994 HSC	Reg. — V/20, IMO Res. A.694 (17), IMO Res. MSC 36(63)- (1994 HSC	IEC $B + D$ 60945B + E (2002)B + F includGing IEC 60945 Corrigendum 1 (2008),

		 Code 13, IMO Res. MSC (2000 HSC Code 13.	 .97(73)-	IMO Res.		IEC 61162 Series, IEC 61996-1 (2013-05). IEC 62288 Ed.1.0(2008)
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.		IMO - Res. MSC.1 IMO Res. MSC.2 IMO SN.1/ Circ.26 back- CDS le - s ality ed in - IS.	36(63)- 	including IEC

				B certific shall ind whether options v tested].	icate these			
A.1/4.31	Gyro compass for high-speed craft		(1994 HSC Code 13, IMO Res.) ,97(73)- 	(1994 HSC Code) 13, IMO Res. MSC, (2000 HSC Code) 13, IMO Res.	(19), 36(63)-) 	(2001 EN 6094: (2002 includ IEC 6094: Corri 1 (2008 EN 61162 Serie: EN 62283 (2008 ISO 16323 (2001 IEC 6094: (2002 includ IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri IEC 6094: Corri I (2008 IEC 6094: Corri I (2008 IEC 6094: Corri I (2008 IEC 6094: Corri I (2008 IEC 6094: Corri IEC 6094: Corri I (2008 IEC 6094: Corri Corri IEC 6094: Corri	() ding 5 gendum (), 2 (), 2 (), 3 (), 5 gendum (), 2 (), 2 (), 2 (), 2 (), 2 (), 2 (), 2 (), 2 (), 2 (), 2 (), 2 (), 3 ()) (), 3 ()) () (), ()) (), (),) ()) ()) ()) ())
A.1/4.32	Universal automatic identification system equipment (AIS)	 	Reg. V/18 Reg. X/3, IMO Res. MSC (199 ² HSC	 . 36 (63)-	Reg. V/19, IMO Res. A.694 (17), IMO Res. MSC. (1994	36(63)-	(2002 inclue IEC 6094:	5 gendum

		1 	2000 ISC Code) 3.	 97(73)- 	IMO Res. MSC (2000 HSC Code 13, IMO Res. MSC ITU- R M. 1371- 010) / be e in ce ents	 74(69), 97(73)- Or, 191(79), 4(2010). 	EN 61162 Series, EN 61993-2 (2013), EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, IEC 61162 Series, IEC 61993-2 (2012), 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)		keg. 7/18.	 	IMO Res.	— 4(17), 74(69), — 191(79). — Or, —	EN B + D 60945B + E (2002)B + F includ G ig IEC 60945 Corrigendum 1 (2008), EN 61162 Series, EN 62065 (2002), EN 62288 (2008). IEC 60945 (2002)

				 including IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, 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. A.823 IMO Res. MSC IMO Res. MSC ITU- R M. 	 (2008), EN 62388 (2008). IEC

A.1/4.35	Radar equipment CAT 2	eg. — //18. — — — —	IMO Res. A.694 IMO Res. MSC. IMO Res. ITU- R M.		Series, EN 62288 (2008), EN 62388
				4(04/11). Or, —	
A.1/4.36	Radar equipment CAT 3	eg. — /18. — — —	IMO Res. A.694 IMO Res. MSC. IMO Res.	— 3(VIII), 4(17), — 191(79), — 192(79),	EN B + D 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, EN

A.1/4.37	Radar equipment for high speed craft applications (CAT 1H and CAT 2H)	Reg. — X/3, IMO Res. — MSC.36((1994 HSC — Code) 13, IMO Res. MSC.97((2000 HSC — Code) 13. — —		IMO Res. A.278 IMO Res. A.694 IMO Res. MSC. (1994 HSC Code) 13, IMO Res. MSC. (2000 HSC Code) 13, IMO Res. MSC. IMO Res. MSC. IMO Res. MSC.	(VIII), (17), 36(63)- 97(73)- Or, 191(79),	1 (2008 IEC 61162 Series IEC 62288 Ed.1.0 IEC 62388 Ed.1.0 EN 60945 (2002 includ IEC 60945 Corris 1 (2008 EN 61162 Series EN 62288 (2008 EN 62288 (2008 EN 62288 (2008 EN 62288 (2008 EN 62388 (2008 EN 62388 (2008 EN 62388 (2008) EN 62388 (2007) (2007) EN 60945 (2008) EN 62388 (2007) (2). (). (). (). (). (). (). (). (
		_]]]]]	Res. MSC. ITU- R M.	192(79), 4(04/11).	60945	gendum	

					-	IEC 61162 Series, IEC 62288 Ed.1.0(2008). IEC 62388 Ed.1.0(2007).
A.1/4.38	Radar equipment approved with a chart option, namely: a) CAT 1C b) CAT 2C, c) CAT 1HC for HSC d) CAT 2HC for HSC	(1994 HSC Code 13, IMO Res.) .97(73)- 	IMO — Res. A.278(V IMO Res. A.694(1 ⁴) IMO Res. MSC.360 (1994 — HSC Code) 13, — IMO Res. MSC.976 (2000 HSC Code)Or 13, — IMO Res. MSC.197 INO Res. MSC.197 INO Res. MSC.197 INO RES. MSC.197 INO	<pre>/III), 7), (63)- - (73)- (73)- r, - 1(79), 2(79), 2(79), - 04/11). -</pre>	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, EN 62288 (2008), EN 62288 (2008), EN 62388 (2008), EN 62388 (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 61162 Series, IEC 61162 Series, IEC 61162 Series, IEC 61162 Series, IEC 61162 Series, IEC 62288 Ed. 1.0(2007).
A.1/4.39	Radar reflector – passive type	 Reg. V/18, Reg. X/3, IMO Res.		Reg. — V/19, IMO Res. — MSC.360 (1994	- (63)-	$ \begin{array}{r} \text{ISO} & \text{B} + \text{D} \\ \text{8729-B} + \text{E} \\ \text{(2010)B} + \text{F} \\ \text{EN} & \text{G} \\ \text{60945} \\ \text{(2002)} \end{array} $

		MSC.36(63)- (1994 HSC Code)— 13, IMO Res. MSC.97(73)- (2000 HSC Code)— 13.	HSC Code) 13, IMO Res. MSC.97(73)- (2000 Or, HSC — Code) 13, IMO — Res. MSC.164(78).	including IEC 60945 Corrigendum 1 (2008).
A.1/4.40	Heading control system for high speed craft	Reg. — X/3, IMO Res. — MSC.36(63)- (1994 HSC — Code) 13, IMO Res. MSC.97(73)- (2000 HSC — Code) 13.	IMO — Res. A.694(17), IMO — Res. A.822(19), IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)- (2000 HSC Code)Or, 13, — IMO Res. MSC.191(79).	$\begin{array}{llllllllllllllllllllllllllllllllllll$

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							IEC	
$ \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. NGS — Reg. NGS — ISO V/18 B + D V/19 22090BF + E (2004)B + F MO Q2004B + F Including method) — Reg. NGS — IMO Q2004B + F MSC 36(63) P IMO A.694(17), Res. ISO B + D MSC 36(63) Res. 1 Including Including MSC 36(63) Res. 1 Including Including MSC 36(63) Res. 13, Including Including Res. — IMO ISC 60945 (2000 MSC 97(73)- Res. 60945 (2000 HSC (2008), I3. Code) EN MSC 116(73), 62288 — IMO (2008), Res. IMO 22090-3 (2004) Including ISO 20090-3 20090-3 20090-3 20090-3 2004) Including ISO Corrrigendum I ISO								,
A.1/4.41 Transmitting heading device THD (GNSS method) — Reg. Neg. Neg. V/18, V/19, V/19, V/19, V/19, V/19, V/19, V/19, V/19, V/19, V/19, Res. NO Code) — ISO (2004)B + F including Res. (2005), HISC - IMO (GNSS method) - IMO (A.694(17), ISO Res. Code) - IMO (2004)B + F including Res. - - IMO (GNSS method) - IMO (1994 (1994 (2006) - IMO (2005), ISC (2002) - IMO (1994 (2006) - IMO (2002) - IMO (2005), ISC (2000) - - IMO (2007) - IMO (2007) - EC - IMO (2006) 13, Code) - IMO (2008), I3. - EN (2006) - IMO (2008), I3. - EN (2006) - EN (2007) - IMO (2008), Res. (2004) - EN (2005), IEC (60945) - - - IEC (2005), IEC (60945) - - - - - IEC (2005), IEC (2005), IEC (2006), IEC (2006), IEC - - -								•
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$								
heading device THD (GNS method) - Reg IMO (2004)B + F (GNS method) - IMO A.694(17), ISO Res IMO Corrigendum MSC36(63)-Res. 1 (1994 MSC36(63)-(2005), HSC (1994 EN Code) HSC 60945 (2002) - IMO I3, including Res IMO HSC (2000) - IMO I3, including Res IMO HSC (2000) ISC 97(73)- Corrigendum HSC (2000 HSC 97(73)- Corrigendum HSC (2000 HSC 97(73)- Corrigendum HSC (2000 ISC 97(73)- Corrigendum HSC (2000) I3, Code) HSC (2008), I3, Code) HSC (2008), I3, Code) HSC (2008), I3, Code) - IMO Series, Res EN MSC 116(73), 62288 - IMO (2008), Res. Or, MSC 97(7) ISO 22090-3 (2004) including ISO Corrigendum I (2005), - IEC 60945 (2002) including ISO Corrigendum I (2005), - IEC 60945 Corrigendum I (-					, ,
$ \begin{array}{c ccccc} device THD & - & Reg. & - & IMO & (2004)B + F \\ (GNSS & X/3, & Res. & includiding \\ method) & - & IMO & A.694(17), ISO \\ Res. & - & IMO & Corrigendum \\ MSC 36(63)- Res. & 1 \\ (1994 & MSC 36(63)- (2005), \\ HSC & (1994 - EN \\ Code) & HSC & 60945 \\ 13, & Code) & (2002) \\ - & IMO & 13, & including \\ Res. & - & IMO & IEC \\ MSC 97(73)- Res. & 60945 \\ (2000 & MSC 97(73)- Corrigendum \\ HSC & (2000 - I \\ Code) & HSC & (2008), \\ 13. & Code) - & EN \\ Code) & HSC & (2008), \\ 13. & Code) - & EN \\ MSC 1116(73), 62288 \\ - & IMO \\ Res. & Or, \\ MSC 116(73), 62288 \\ - & IMO \\ Res. & Or, \\ MSC 116(73), 62288 \\ - & IMO \\ Res. & Or, \\ MSC 116(73), 62288 \\ - & IMO \\ Res. & Or, \\ MSC \\ 191(79). ISO \\ 22090-3 \\ (2004) \\ including \\ ISO \\ Corrigendum \\ 1 \\ (2005), \\ - & IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ - & IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ - & IEC \\ \end{array} $	A.1/4.41	—						
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			1					
$ \begin{array}{c cccc} method & - & IMO & A.694(17), & ISO & \\ Res & IMO & Corrigendum \\ MSC 36(63)- & Res. & 1 \\ (1994 & MSC 36(63)- & (2005), \\ HSC & (1994 - & EN \\ Code & HSC & 60945 \\ (2002) & IISO & \\ Code & ISC & (2002) \\ - & IMO & 13, & including \\ Res & IMO & IEC \\ MSC 97(73)- & Res. & 60945 \\ (2000 & MSC 97(73)- & Corrigendum \\ HSC & (2000 & 1 \\ Code & HSC & (2008), \\ 13. & Code - & EN \\ MSC & 116(73), & 62288 \\ - & IMO & series, \\ Res & EN \\ MSC & 116(73), & 62288 \\ - & IMO & series, \\ Res. & - & EN \\ MSC & 116(73), & 62288 \\ - & IMO & (2008). \\ Res. & Or, \\ MSC & 191(79). & ISO \\ 120090-3 \\ (2004) & including \\ ISO \\ Corrigendum \\ 1 \\ (2005), & - & IEC \\ 60945 \\ (2002) & including \\ ISO \\ Corrigendum \\ 1 \\ (2005), & - & IEC \\ 60945 \\ (2002) & including \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ - & IEC \\ \\ \end{array} $								
Res. — IMO Corrigendum MSC 36(63)- Res. 1 (1994 MSC 36(63)- (2005), HSC (1994— EN Code HSC 60945 13, Code (2002) IMO 13, including Res. — IMO IEC MSC 97(73)- Res. 60945 (2000) MSC 97(73)- Corrigendum HSC (2000) MSC 97(73)- (2000) MSC 97(73)- Corrigendum HSC (2000) 13. Code) ISC (2000) 14SC (2008), I3. Code) HSC (2008). I3. Code) HSC (2008). I3. Code) EN 13. I3. Code) EN 13. I3. Code) HSC (2008). Res. — IMO series, Res. Or, MSC 191(79). ISO (2004) Including						4(17)		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$.(17);		gendum
$ \left \begin{array}{cccccccccccccccccccccccccccccccccccc$				36(63)-				
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MSC 97(73)- Res. 60945 (2000 MSC 97(73)- Corrigendum HSC (2000) 1 Code) HSC (2008), 13. Code)— EN 13. Code)— EN 13. 61162 — IMO series, Res. — EN MSC 116(73), 62288 — IMO (2008). Res. Or, MSC 191(79). ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), — IEC 60945 (2002) including IEC 60945 (2008), — IEC		—						ding
(2000 MSC 97(73)- Corrigendum HSC (2000 1 Code) HSC (2008), 13. Code) — EN 13. G1162 — IMO series, Res. — EN MSC 116(73), 62288 — IMO (2008). Res. Or, MSC 1491(79). ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), — IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 (2008), — IEC								5
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- IMO series, Res EN MSC 116(73), 62288 - IMO (2008). Res. Or, MSC 191(79). ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), - IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC								2
MSC 116(73), 62288 - IMO (2008). Or, MSC +91(79). ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), - IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC				_			series	,
Res. Or, MSC 191(79). ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), - IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), - IEC						.116(73),		
MSC 191(79). ISO 22090-3 (2004) including ISO Corrigendum 1 (2005), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2002) including IEC 60945 Corrigendum 1 (2003), IEC						0	(2008	\$).
22090-3 (2004) including ISO Corrigendum 1 (2005), IEC 60945 (2002) including IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),							100	
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including ISO Corrigendum 1 (2005), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC								
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(2002) including IEC 60945 Corrigendum 1 (2008), — IEC								
including IEC 60945 Corrigendum 1 (2008), — IEC								
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Corrigendum 1 (2008), — IEC								5
$ \frac{1}{(2008)},$ $ \frac{1}{IEC}$								
- IEC								
- IEC							(2008	\$),
61162							ÌEC	
series,							series	,

			—	IEC 62288 Ed.1.0(2008).
A.1/4.42	Searchlight for high speed craft	Reg. — X/3, IMO Res. — MSC.36(63)- (1994 HSC Code) 13, IMO Res. — MSC.97(73)- (2000 HSC Code) 13.	IMO — Res. A.694(17), IMO — Res. MSC.36(63)- (1994 HSC Code) 13, IMO Res. MSC. D (73)- (2000 — HSC Code) 13. —	$\begin{array}{ccccccc} \text{ISO} & \text{B} + \text{D} \\ 17884\text{B} + \text{E} \\ (2004)\text{B} + \text{F} \\ \text{EN} & \text{G} \\ 60945 \\ (2002) \\ \text{including} \\ \text{IEC} \\ 60945 \\ \text{Corrigendum} \\ 1 \\ (2008). \\ \end{array}$ $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 94(72), IMO — Res. MSC 97(73)- (2000 Or, HSC — Code) 13, IMO — Res. MSC 191(79).	(2003)B + F EN G 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 62288 (2008). ISO 16273 (2003), IEC 60945

A.1/4.44	Differential beacon receiver for DGPS and DGLONASS Equipment		Reg. — V/18, Reg. — X/3, IMO Res. MSC 36(63)- (1994 HSC Code) 13, IMO Res. MSC 97(73)- (2000 HSC Code)	Reg. — V/19, IMO Res. A.694 (17), IMO Res. MSC.36(63)- (1994 — HSC Code) 13, — IMO Res. MSC.907(73)- (2000 —	$\begin{array}{c} 60945 \\ Corrigendum \\ 1 \\ (2008), \\ IEC \\ 62288 \\ Ed.1.0(2008). \\ \hline EN & B + D \\ 60945B + E \\ (2002)B + F \\ includ \\ \hline Gg \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ IEC \\ 61108-4 \\ (2004), \\ EN \\ 61162 \\ series. \\ \hline IEC \\ \hline \end{array}$
			13.	HSC Code) 13, IMO	60945 (2002) including IEC
				Res. MSC.114(73).	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	vered 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	Reg. — V/19, IMO Res. A.694 (17), IMO — Res. MSC 36(63)-	ISO B + D 22090B + E (2002)B + F including Corr.1 (2005), EN 60945 (2002)

		Code 13, IMO Res. MSC (2000 HSC Code 13.	. 97 (73)-	(2000 HSC Code 13, IMO Res. MSC IMO Res.) 9 7 (73)-)— Or, 1 1 6(73),	including IEC 60945 Corrigendum 1 (2008), EN 61162 series, EN 62288 (2008). ISO 22090-1 (2002) including Corr.1 (2005), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC 61162 series, IEC
A.1./4.47	Simplified voyage data recorder (S- VDR)	Reg. V/20.		IMO Res.	— 4(17), .163(78), — .191(79). —	EN B + D 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61162 series, EN 61996-2 (2008), EN 62288 (2008).

				Or, 	IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 61996-2 (2007), IEC 62288 Ed.1.0(2008).
A.1/4.48	Mechanical pilot hoist				SC.308(88), in force ot hoists shall not be
A.1/4.49	Pilot ladder	_	Reg. — V/23, Reg. — X/3. —	Reg. — V/23, IMO — Res.A.1045(27 IMO MSC/ Circ.773.	IMO $B + D$ Res.AB04E(27), ISO $B + F$ 7)799 G (2004).
A.1/4.50	DGPS Equipment		Reg. — V/18, Reg. — X/3, IMO Res. MSC. 36 (63)- (1994 HSC Code) 13, IMO Res. MSC.97(73)- (2000 HSC Code) 13.	Reg. — V/19, IMO Res. A.694 (17), IMO Res. MSC.36(63)- (1994 — HSC Code) 13, — IMO Res. MSC.97(73)- (2000 HSC Code)— 13, Or,	EN B + D 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61108-1 (2003), EN 61108-4 (2004), EN 61162 series, EN 62288 (2008).

			IMO Res. MSC IMO Res.		including IEC 60945 Corrigendum 1
A.1/4.51	DGLONASS Equipment	Reg. — V/18, — Reg. — X/3, IMO Res. MSC. 3-6((1994 HSC Code) I3, IMO Res. 97-((2000 HSC Code) I3. — —	Res. MSC (1994 HSC Code 13, (73)- IMO Res. MSC (2000 HSC Code 13, IMO Res. MSC IMO Res. MSC IMO Res.	4 .36(63)- 	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61108-2 (1998), EN 61108-4 (2004), EN 61162 series, EN 61162 series, EN 61288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (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).	MO Res. MSC.97(72), IMO Res. MSC.97(73)- (2000) HSC Code).	$\begin{array}{c} \text{IEC} \\ 61108-2 \\ (1998), \\ \text{IEC} \\ 61108-4 \\ (2004), \\ \text{IEC} \\ 61162 \\ \text{series}, \\ \text{IEC} \\ 62288 \\ \text{Ed.1.0(2008).} \\ \hline \text{EN} \text{B} + \text{D} \\ 60945\text{B} + \text{E} \\ (2002)\text{B} + \text{F} \\ \text{including} \\ \text{IEC} \\ 60945 \\ \text{Corrigendum} \\ 1 \\ (2008), \\ \text{ISO} \\ 25861 \\ (2007). \\ \hline \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \hline \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \hline \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \hline \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \hline \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \hline \text{IEC} \\ 60945 \\ (2002) \\ \text{including} \\ \hline \text{IEC} \\ 60945 \\ (2007). \\ \hline \end{array}$
A.1/4.53	Radar target enhancer	 Reg. — V/18, Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)- (2000	IMO — Res. A.694(17), IMO — Res. MSC.36(63)- (1994 HSC Code) 13, IMO Res. MSC. 97h (73)- (2000 HSC	ISO $B + D$ $8729 \cdot 28 + E$ (2009)B + F EN G 60945 (2002) including IEC 60945 Corrigendum 1 (2008),

		(HSC Code) 13.	 Code) 13, IMO Res. MSC. ITU- R M 1176- (02/1	 164(78), 1	(2002 inclue IEC 60945), 5 ling 5 gendum
A.1/4.54	Bearing Device		Reg V/18.	Reg. V/19.	 Or, 	25862 (2009) EN 60943 (2002) includ IEC 60943 Corrig 1 (2008) ISO 25862 (2009) IEC 60943 (2002) includ IEC 60943 (2002)	2) ding 5 gendum 3), 2), 5)), 5 ding 5 gendum
A.1/4.55	AIS SART equipment		Reg III/4, Reg IV/14.	 IMO Res. MSC. IMO Res.		(2002 inclue IEC 60943 Corri 1 (2008	5 gendum ?), 7-14 !).

A.1/4.56	Galileo		Reg. —	M. 1371-4(2010). 	(2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-14 (2010). EN B + D
A. 174.50	Receiver		Reg. — V/18, Reg. Reg. — MSC.36(63)- (1994 HSC — Code) 13, IMO Res. MSC.97(73)- (2000) HSC — Code) 13.	Reg. — V/19, IMO Res. A.694(17), IMO Res. A.813(19), IMO Res. — MSC.36(63)-(1994 HSC — Code) 13, IMO — Res. MSC.97(73)-(2000 Or, HSC — Code) 13, IMO Res. MSC.191(79), IMO Res. MSC.233(82). — — — —	60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), EN 61108-3 (2010), EN 61162 Series, EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1
A.1/4.57	Bridge Navigational Watch Alarm System (BNWAS)	_	Reg. — V/18.	IMO — Res. A.694(17),	EN B + D 60945B + E (2002)B + F includ G g IEC

			_	IMO Res.	.128(75), .191(79). Or,	60945 Corrigendum 1 (2008), EN 61162 Series, EN 62288 (2008),
					_	IEC 62616(2010) including IEC 62616 Corrigendum 1 (2012). IEC
						60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC
					_	61162 Series, IEC 62288 Ed.1.0(2008), IEC 62616(2010) including IEC
A.1/4.58	Sound	 Reg.		Reg.		62616 Corrigendum 1 (2012). EN B + D
Refer to note c) of this Annex A.1	reception system	 V/18, Reg. X/3, IMO Res. MSC. (1994 HSC Code)		V/19, IMO Res. A.694 IMO Res. MSC (1994	4(17), .36(63)-	60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008),

		IMO Res. MSC.97(73)- (2000 HSC Code)	HSC Code), IMO Res MSC 86(70), IMO Res MSC 97(73)- (2000 HSC Or, Code), IMO Res. MSC 191(79).	EN 61162 series, EN 62288 (2008), ISO 14859 (2012). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 61162 series, IEC 62288 Ed.1.0(2008), ISO 14859 (2012).
A.1/4.59 Ex A.2/4.15	Integrated navigation system	Reg. — V/18, Reg. — X/3, IMO Res. — MSC.36(63)- (1994 HSC Code) 13, IMO Res. — MSC.97(73)- (2000 HSC Code) 13. —	Reg. — V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code) 13, IMO — Res. MSC.97(73)- (2000 — HSC Code) 13, Or, IMO — Res. MSC.191(79),	$\begin{array}{c c} EN & B + D \\ 60945B + E \\ (2002)B + F \\ includ Grig \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ EN \\ 61162 \\ series, \\ EN \\ 61162 \\ series, \\ EN \\ 62288 \\ (2008), \\ IEC \\ 61924-2 \\ (2012). \\ IEC \\ 60945 \\ (2002) \\ including \\ IEC \\ IEC \\ \end{array}$

		IMO	60945
		Res.	Corrigendum
		MSC 252(83),	1
		IMO	(2008),
		Res. —	IEC
		MSC 302(83)	61162
		-	series,
		(Bridge-	IEC
		Alert	62288
		Management,	Ed.
		(BAM)).	1.0
			(2008),
			IEC
			61924-2
			(2012).

5. **Radiocommunication equipment**

Notes applicable to section 5: Radiocommunication equipment.

11		1 1
Column 5	:	In case of conflicting requirements between IMO MSC/Circ.862 and the product testing standards, the IMO MSC/Circ.862 requirements shall take precedence.
Column 5	:	IEC 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems — Digital interfaces:
		— IEC 61162-1 ed4.0 (2010-11) - Part 1: Single talker and multiple listeners
		— IEC 61162-2 ed1.0 (1998-09) - Part 2: Single talker and multiple listeners, high-speed transmission
		— IEC 61162-3 ed1.1 Consol. with am1 (2010-11) - Part 3: Serial data instrument network
		— IEC 61162-3 ed1.0 (2008-05) - Part 3: Serial data instrument network
		 — IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 — Part 3: Serial data instrument network
		— IEC 61162-450 ed1.0 (2011-06) - Part 450: Multiple talkers and multiple listeners — Ethernet interconnection
		EN 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems — Digital interfaces:
		— EN 61162-1 (2011) - Part 1: Single talker and multiple listeners
		— EN 61162-2 (1998) - Part 2: Single talker and multiple listeners, high-speed transmission
		— EN 61162-3 (2008) - Part 3: Serial data instrument network
		— EN 61162-3-am1 (2010) Amendment 1 — Part 3: Serial data instrument network

No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	SOLAS of SOLAS standar 74, as 74, as amended, amended, amended, amended, where 'type and the approval' is relevant		Modules for conformity assessment
1	2	3	4	5	6
A.1/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	MSC (1994 HSC Code 14, IMO Res.		7, MSC 8 , Circ. 3 , — EN 0 6094 53 , — EN 0 6094 53 , — EN 0 6094 53 , — 6094 $524(13)$, inclu 0 1 $524(13)$, Corrigon $524(13)$, Corrigon $594(17)$, EN 0 6116 $5.$ serie $303(19)$, ETSI 0 EN $503(19)$, ETSI 0 2010 $55.$ 300 $55.$ 300 $55.$ 300 $55.$ 300 $55.$ 300 $55.$ 300 $55.$ 301 0 301 0 $843-7$ $56.$ 71.2 $56.$ 71.2 $56.$ 71.2 <	2) ding 5 igendum 8), 2 s, 1 1 1 1 1 1 1 0-02), 1 2 .1 0-02), 1 2 .1 4-06), 1

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

			ITU- R M.489£, (10/95),- ITU- R M.493-13 (10/09), ITU- R M.541-9 (05/04), ITU- R M.689-2 (09/94)	V1.3.1 (2010-09). IMO MSC/ Circ.862, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-3 (1994), IEC 61097-7 (1996), IEC 61162 series.
A.1/5.2	VHF DSC watch- keeping receiver	Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36(63) (1994 — HSC Code) 14, — IMO Res. MSC.97(73) (2000 HSC Code) 14. —	IMO Res. A.803 (19), IMO Res. MSC 36 (63)-	$\begin{array}{c c} EN & B + D \\ 60945B + E \\ (2002)B + F \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ EN \\ 61162 \\ series, \\ ETSI \\ EN \\ 300 \\ 338-1 \\ V1.3.1 \\ (2010-02), \\ ETSI \\ EN \\ 300 \\ 338-2 \\ V1.3.1 \\ (2010-02), \\ ETSI \\ EN \\ 300 \\ 338-2 \\ V1.3.1 \\ (2010-02), \\ ETSI \\ EN \\ 301033 \end{array}$

				ITU- R M.489 (10/92 ITU- R M.493 (10/05 ITU- R M.541 (05/02	5), 3-13 9), Or, 1-9	V1.3. (2010) ETSI EN 301 843-2 V1.2. (2004) IEC 60942 (2002) includ IEC 60943 Corrig 1 (2008) IEC 61094 (1994) IEC 61097 (1998) IEC 61097 Series	p-09), 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2
A.1/5.3	NAVTEX receiver	Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36((1994 — HSC Code) 14, IMO Res. MSC.97((2000 — HSC Code) 14.	(63)-	(1994 HSC Code) 14, IMO Res. MSC. (2000 HSC Code) 14, IMO Res.	36 (63)- 97(73)- Or,	(2002 inclue IEC 60945	5 gendum 3), 1 2-01), 1 1 06), 5

				IMO COMSAR Circ.32, ITU- R M.540-2 (06/90) , ITU- R M.625-3 (10/95).	including IEC 60945 Corrigendum 1 (2008), IEC 61097-6 (2005-12).
A.1/5.4	EGC receiver	(1994 HSC Code) 14, IMO Res.	 36(63)- 97(73)-	Reg. — IV/7, Reg. X/3, IMO Res. A.570(14), IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code) 14, IMO Res. MSC.97(73)- (2000 — HSC Code) 14, IMO Res. MSC.97(73)- (2000 — HSC Code) 14, IMO Res. MSC.306(87), IMO COMSAR Circ.32. Or, —	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), ETSI ETS 300460 Ed.1 (1996-05), ETSI ETS 300 460/ A1 (1997-11), ETSI EN 300829 V1.1.1 (1998-03), ETSI EN 301 843-1 V1.3.1 (2012-08), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),

					I	IEC
						61097-4
						(2007).
A 1/C C			D		D	<u> </u>
A.1/5.5	HF marine	—	Reg.		$\operatorname{Reg.}$ —	EN B + D
	safety information		IV/14	,	IV/7, Peg	60945B + E (2002)B + F
	(MSI)	_	Reg. X/3,		Reg. X/3,	including
	equipment		IMO		IMO	IEC
	(HF NBDP		Res.		Res.	60945
	receiver)			.36(63)-	A.694(17),	Corrigendum
			(1994		IMO	1
			HSC		Res.	(2008),
			Code		A.699 (1 7),	EN
			14,		IMO	61162
		—	IMO		Res.	Series,
			Res.	07(72)	A.700 (1 7),	ETSI
				97(73)-	IMO Baa	ETS 2000 C7
			(2000 HSC	,	Res. A.806(19),	300067 Ed.1
			Code		IMO	(1990-11),
			14		Res. —	ETSI
					MSC 36(63)-	ETS
					(1994	300
					HSC	067/
					Code)	A1
					14,	Ed.1
					IMO	(1993-10).
					Res. Or,	IEC
					MSC 97(73)-	IEC 60945
					(2000 HSC	(2002)
					Code)	including
					14,	IEC
					IMO	60945
					COMSAR	Corrigendum
					Circ.32,	1
					ITU-	(2008),
					R —	IEC
					M.491-1	61162 Series
					(07/86), ITU- —	Series, ETSI
					R	ETS
					M.492-6	300067
					(10/95),	Ed.1
					ÌTU-	(1990-11),
					R —	ÈTSI
					M.540-2	ETS
					(06/90),	300
					ITU-	067/
					R M 625 2	Al
					M.625-3 (10/95),	Ed.1 (1993-10).
					(10/30),	(1779-10).

			—	ITU-	
				R	
				M.688	
				(06/90).	
A.1/5.6	406 MHz		Reg. —	Reg. —	IMO B + D
	EPIRB		IV/14,	IV/7,	MSC/B + E
	(COSPAS-	—	Reg. —	Reg.	Circ.8 6 2+F
	SARSAT)		X/3,	X/3, —	EN CODA5
			IMO — Res.	IMO Res.	60945 (2002)
			MSC 36(63)-	A.662(16),	including
			(1994—	IMO	IEC
			HSC	Res.	60945
			Code)	A.694(17),	Corrigendum
			14, —	IMO	1
		_	IMO	Res.	(2008),
			Res. MSC 97(73)-	A.696 (1 7), IMO	ETSI EN
			(2000)	Res.	300066
			HSC	A.810(19),	V
			Code)—	IMO	1.3.1
			14.	Res.	(2001-01).
				MSC 304(63)-	
				(1994—	IMO
				HSC	MSC/
				Code) 14, —	Circ.862, IEC
			<u> </u>	IMO	60945
				Res.	(2002)
				MSC 97(73)-	including
				(2000	IEC
				HSC	60945 Comin on home
				Code) 14,	Corrigendum 1
				IMO	(2008),
				MSC/—	IEC
				Circ.862,	61097-2
				IMO	(2008),
				COMSAR	Note:
				Circ.32,	
				ITU- R	MSC/ Circ. 862
				M.633-3	is
				(05/04),	applicable
				ÌTU-	only
				R	to
				M.690-1	the
				(10/95).	optional
					remote activation
					device,
					not
	I	T	I	I	

				to the EPIRB itself.
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left blank	i	/
A.1/5.8	2182 kHz watch receiver	Deliberately left blank		
A.1/5.9	Two-tone alarm generator	Deliberately left blank		
A.1/5.10	MF radio capable of transmitting and receiving DSC and radiotelephony <i>Note</i> : In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards	 Reg. — IV/14, Reg. — X/3, IMO — Res. MSC 36(63)- (1994 HSC Code)— 14, IMO Res. — MSC 97(73)- (2000 HSC Code) 14. — —	Reg. — IV/9, Reg. IV/10,— Reg. X/3, IMO Res. A.694(17), IMO Res. A.804(19), IMO Res. MSC.36(63)- (1994 — HSC Code) 14, IMO Res. MSC.97(73)- (2000 HSC Code) 14, IMO 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 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 Res. M.493-13 (10/09), ITU-— R M.541-9 (05/04).	IMO B + D MSC/B + E Circ.862+ F EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI EN 300 338-3 V1.3.1 (2011-01), ETSI EN 301 843-5

			-	Or, 	V1.1.1 (2004-06), IMO MSC/ Circ.862, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-3 (1994), IEC 61097-9 (1997), IEC 61162 series.
A.1/5.11	MF DSC watch- keeping receiver	Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36(63)- (1994 HSC Code)— 14, IMO Res. — MSC.97(73)- (2000 HSC Code) 14. —	Reg IV/9, Reg. IV/10, Reg. X/3, IMO Res. A.694(IMO - Res. A.804(IMO - Res. MSC.3 (1994 HSC Code) 14, - IMO Res. MSC.9 (2000 HSC Code)- 14,	(19), 	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 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-2 V1.3.11 (2010-02), ETSI EN 300 338-3 338-2 V1.3.11 (2010-02), ETSI EN 300 338-38

					IMO COM	SAR	V1.2.1 (2010-0	9)
				_	Circ.3 ITU- R		ETSI EN 301	<i>,</i>
					M.493 (10/09 ITU-		843-5 V1.1.1 (2004-0	6)
							IEC 60945	0),
				—	ITU- R M.117		(2002) includin IEC	Ig
					(10/95		60945 Corriger	ndum
							(2008), IEC 61097-3	3
							(1994), IEC 61097-8	
							(1998), IEC 61162	
A.1/5.12	Inmarsat-B		Dog		Dog		series. IMO B	+ D
A.1/J.12	SES Note: The	_	Reg. IV/14 Reg.	·,	Reg. IV/10 Reg.	,	MSC/B	
	service will be discontinued		X/3, IMO Res.	_	X/3, IMO Res.	_	862, EN 60945	
	on and after 31 December			.36(63)-	A.570 IMO	(14),	(2002) includin	ıg
	2014.		HSC Code 14,)	Res. A.694 IMO	(17),	IEC 60945 Corrige	ndum
		_	IMO Res.		Res. A.808		1 (2008).	ndum
			MSC (2000 HSC	. 97(73)-	IMO Res. MSC.	Or, 36(63)-	IMO MSC/	
			Code 14.)	(1994 HSC Code)		Circ 862, IEC	
				_	14, IMO		60945 (2002)	
					Res. MSC. (2000	97(73)-	includin IEC 60945	lg
					HSC		Corrige	ndum

			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, IMO Res. MSC 97(73) (2000 HSC Code) 14. — — — — — —	IMO Res. A.664 (16), (applicable only —	IMO B + D MSC/B + E Circ.862 \pm F EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ETSI ETS 300460 Ed.1 (1996-05), ETSI ETS 300 460/ A1 (1997-11), ETSI EN 300829 V1.1.1 (1998-03), ETSI EN 301 843-1 V1.3.1 (2012-08), IEC 60945 (2002) including IEC 60945

			IMO COMSAR Circ.32.	Corrigendum 1 (2008), IEC 61097-4 (2007), IEC 61162 series.
A.1/5.14	MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony <i>Note</i> : In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on A3H are no longer applicable in testing standards.	Reg. — IV/14, Reg. — X/3, IMO — Res. MSC.36(63 (1994 — HSC Code) 14, — IMO Res. MSC.97(73 (2000 HSC Code) 14. — — — — — — —	IMO Res. A.806(19), IMO Res. MSC. 36 (63)-	IMO B + D MSC/B + E Circ.862+ F EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ETSI ETS 300067 Ed.1 (1990-11), ETSI ETS 3000 067/ A1 Ed.1 (1993-10), ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI ETS 300 373-1

			ITU- R M.493-13 (10/09), ITU- R M.541-9 (05/04), ITU- Or, R M.625-3 (10/95), ITU- R M.1173 (10/95).	V1.3.1 (2011-01), ETSI EN 301 843-5 V1.1.1 (2004-06), IMO MSC/ Circ.862, IEC 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. — X/3, IMO — Res. MSC.36(63)- (1994 — HSC Code) 14, — IMO Res. MSC.97(73)- (2000 HSC Code) 14. —	IMO Res. A.806 (19), IMO Res. MSC 36 (63)-	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

				Code) 14, IMO — COMSAR Circ.32, ITU- R M.493-13 (10/09), ITU- R M. 541-9 (05/040)r, — —	V1.3.1 (2010-02), ETSI EN 301033 V1.3.1 (2010-09), ETSI EN 301 843-5 V1.1.1 (2004-06). 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 A	.2/5.8		
A.1/5.17	Portable survival craft two- way VHF radiotelephone apparatus	Re X/ IM Re MS (19 HS Co 14 IM Re MS	714, g. — 3, 10 s. — SC.36(63)- 994 SC — 36	Reg. — III/6, IMO Res. A.694(17), IMO Res. A.809(19), IMO Res. MSC.36(63)- (1994 HSC Code)	$\begin{array}{c c} EN & B + D \\ 60945B + E \\ (2002)B + F \\ including \\ IEC \\ 60945 \\ Corrigendum \\ 1 \\ (2008), \\ ETSI \\ EN \\ 300225 \\ V1.4.1 \\ (2004-12), \end{array}$

		HSC Code 14.)	8,	ETSI EN 301 843-2 V1.2.1 (2004-06). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-12 (1996).
A.1/5.18	Fixed survival craft two- way VHF radiotelephone apparatus	 (1994 HSC Code 14, IMO Res.	 _36(63)- _97(73)-	Reg. — III/6, IMO Res. A.694(17), IMO Res. A.694(17), IMO Res. A.809(19), IMO Res. — MSC.36(63)- (1994 HSC Code) 8, Or, 14, — IMO Res. MSC.97(73)- (2000 HSC Code) 8, 14, ITU- R M.489-2 (10/95).	EN $B + D$ 60945B + E (2002)B + F including IEC 60945 Corrigendum 1 (2008), ETSI EN 301466 V1.1.1 (2000-10), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC (2008), IEC (2008), IEC (2008),
A1/5.19	Inmarsat-F77	 Reg. IV/14 Reg. X/3,	 	Reg. — IV/10, IMO Res. —	IMO B + D MSC/B + E Circ.862+ F EN 60945

	_	IMO		A.570)	(2002	
		Res.		(14),		inclu	
			. 36 (63)-	IMO		IEC	*····8
		(1994		Res.		6094	5
		HSC		A.808	2		gendum
		Code		(19),)	1	gendum
		14,		IMO		(2008	3
		IMO		Res.		IEC	·),
		Res.		A.694	1	6109'	7 13
			.97(73)-		t	(2003)	
				(17), IMO	Ô۳	(2003	
		(2000	,		Or,	IMO	
		HSC		Res.			/
		Code)		.36(63)-	MSC.	
		14.		(1994		Circ.8	362,
				HSC		IEC	-
				Code)	6094	
				14,		(2002	
			—	IMO		inclu	ling
				Res.		IEC	_
					.97(73)-	6094	
				(2000		Corri	gendum
				HSC		1	
				Code)	(2008	5),
				14,		IEC	
			—	IMO		6109	7-13
				MSC	/	(2003)	i).
				Circ.	362,		·
				IMO	,		
				COM	SAR		
				Circ.			
				2			

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	— COL Anne I/14.	x Anne I/14, — IMO Res.	ex 1474 (200	C

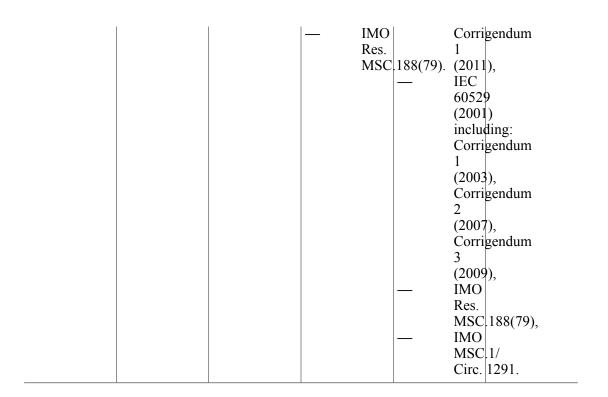
		 IMO		EN
		Res.		60945
			.253(83)	
				including
				IEC
				60945
				Corrigendum
				1
				(2008).
			Or,	
				EN
				14744
				(2005)
				including
				AC
				(2006),
				IEC
				60945
				(2002)
				including
				IEC 60045
				60945 Corrigon dum
				Corrigendum
				1
				(2008).

7. **Bulk carrier safety equipment**

No items in Annex A.1.

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

No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/8.1	Water level detectors	Reg. II-1/2 Reg. II-1/2 Reg. XII/1	2-1, II-1/2 — Reg. 25, XII/1 — IMO	25, 6009 (2001 2, inclu	2 550 4E)B + F ding



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.	MSC		
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/16 Reg. III/26 Reg. III/34 III/34 III/34 IMO Res. MSC (1994 HSC Code 8, IMO Res. 	, ,36(63)- ,48(66)-	

A.2/1.4	Embarkation	Moved to A.1/1	 IV, VI, IMO Res. MSC.97(73)- (2000 HSC Code) 8.	
A.2/1.5	Public address & general emergency alarm system (when used as fire alarm device item A.1/3.53 shall apply)	— Reg. III/6.	 IMO Res. A.1021(26), IMO Res. MSC.36(63)- (1994 HSC Code), IMO Res. MSC.48(66)- (LSA Code), IMO Res. MSC.97(73)- (2000 HSC Code), IMO SC/ Code), IMO Res.	

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 SOx 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 (new item)	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)

Technical		
Code 2008		

3. **Fire protection equipment**

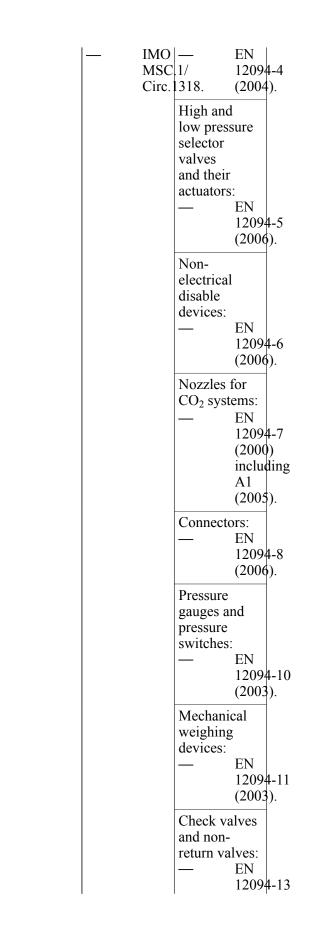
No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/3.1	Non- portable and transportable extinguishers	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	 Reg II-2/ Reg X/3, IMC Res. MSC (FSS Cod 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), 3.	IEC 60079 series.
A.2/3.9	Protective clothing resistant to chemical attack	— Reg II-2/		Reg. — II-2/19, IMO Res. MSC.36(63)- (1994 HSC — Code) 7, IMO — Res. MSC.97(73)- (2000 HSC	EN 943-1 (2002) including AC (2005), EN 943-2 (2002), EN ISO 6529 (2001),

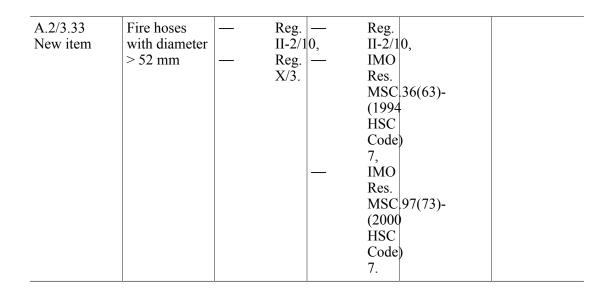
			Code)— 7. —	EN ISO 6530 (2005), EN 14605 (2005) including A1(2009), IMO MSC/ Circ.1120.
A.2/3.10	Low-location lighting systems	Moved to A.1/3.40		
A.2/3.11	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces	Moved to A.1/3.10		
A.2/3.12	Equivalent fixed gas fire extinguishing systems for machinery spaces and cargo pump rooms	Moved to A.1/3.45		
A.2/3.13	Compressed airline breathing apparatus (High Speed Craft)	Item deleted		
A.2/3.14	Fire hoses (reel type)	Moved to A.1/3.56		
A.2/3.15	Sample extraction smoke detection systems components	Moved to A.1/3.63		
A.2/3.16	Flame detectors	Moved to A.1/3.51		

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	
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	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

<u>A.2/3.25</u>	C class	Moved to A.1	/3 64	(2000 HSC Code) 7, IMO Res. MSC.98(73)- (FSS Code) 4, IMO MSC.1/ Circ.1239, IMO MSC.1/ Circ.1313.
1 1, 2/J,2J	Divisions		, 5.07	
A.2/3.26	Gaseous Fuel Systems Used for Domestic Purposes (components)	— Reg II-2/		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. Electrical II-2/1Qutomatic Reg. control and II-2/2Qlelay devices: IMO — EN Res. 12094-1 MSC 36(63)- (2003). (1994 HSC electrical automatic 7, control and delay devices: MSC 97(73)- EN MSC 97(73)- EN MSC 97(73)- 12094-2 (2000 (2003). Code) Manual 7, triggering and IMO stop devices: Res. — EN MSC 98(73)- 12094-3 (FSS (2003). Code) Container 5, valve assemblies Circ. 1374 their actuators:



		(2001) including AC (2002). Odorizing devices for CO ₂ low pressure systems: EN 12094-16 (2003).
A.2/3.28	Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers	Moved to A.1/3.57
A.2/3.29	Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck Protection.	Moved to A.1/3.58
A.2/3.30	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	Moved to A.1/3.59
A.2/3.31	Water Spraying Hand Operated System	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
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:

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

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

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

No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/4.1	Gyro compass for high speed craft	Moved to A.1/-	4.31		
A.2/4.2	Heading control system for high speed craft (formerly auto-pilot)	Moved to A.1/	4.40		
A.2/4.3	Transmitting heading device THD (GNSS method)	Moved to A.1/4.41			
A.2/4.4	Daylight signalling lamp	Moved to A.1/-	4.52		
A.2/4.5	Searchlight for high speed craft	Moved to A.1/-	4.42		
A.2/4.6	Night vision equipment for high speed craft	Moved to A.1/4.43			
A.2/4.7	Track control system	Moved to A.1/4.33			
A.2/4.8	Electronic Chart Display and Information System (ECDIS).	Moved to A.1/4.30			

A.2/4.9	Electronic Chart Display and Information System (ECDIS) backup	Moved to A.1/4.30		
A.2/4.10	Raster Chart Display System (RCDS)	Moved to A.1/4.30		
A.2/4.11	Combined GPS/ GLONASS equipment	 Reg	Reg. — V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC — Code), IMO Res. — MSC.97(73)- (2000 HSC — Code), IMO Res. — MSC.115(73), IMO Res. Or, MSC.115(73), IMO Res. Or, MSC.1991(79).	(2008).

		— IEC 62288 Ed.1.0(2008).			
A.2/4.12	DGPS, DGLONASS equipment	Moved to A.1/4.44, A.1/4.50 and A.1/4.51			
A.2/4.13	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.14	Voyage data recorder (VDR)	Moved to A.1/4.29			
A.2/4.15	Integrated navigation system	Moved to A.1/4.59			
A.2/4.16	Bridge equipment system	Deliberately left blank			
A.2/4.17	Radar target enhancer	Moved to A.1/4.53			
A.2/4.18	Sound reception system	Moved to A.1/4.58			
A.2/4.19	Magnetic compass for high speed craft	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			

		IEC 60945 Corrigendum 1 (2008).
A.2/4.20	Track control system for — high- speed craft	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
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 device THD	Moved to A.1/4.2

	(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 Or, Code),— IMO Res. MSC.191(79).	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 60945 Corrigendum 1 (2008), IEC 61162 series, 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 60945 Corrigendum 1 (2008), 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 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 HSC Or, Code),	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, EN 62288 (2008).

				IMO — Res. MSC 191(79). —	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	o A.1/4.9		
A.2/4.27	Rudder angle indicator	Moved to	o A.1/4.20		
A.2/4.28	Propeller revolution indicator	Moved to	o A.1/4.21		
A.2/4.29	Pitch indicator	Moved to	o A.1/4.22		
A.2/4.30	Bridge equipment system		Reg. — V/18, Reg. — X/3, IMO Res. MSC 36(63)- (1994 HSC Code) 13, IMO Res. MSC 97(73)- (2000 HSC Code) 13. —	Reg. — V/19, IMO Res. A.694 (17), IMO Res. MSC.36(63)- (1994 — HSC Code) 15, — IMO Res. MSC.007(73)- (2000 — HSC Code) 15, IMO Res. MSC 191(79),	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, EN 62288 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum

				IMO SN.1/ Circ.2		1 (2008), IEC 61162 Series, IEC 62288 Ed. 1.0 (2008).
A.2/4.31	Bearing Device	Moved to A.1/	4.54			
A.2/4.32	Bridge Navigational Watch Alarm System (BNWAS)	Moved to A.1/	4.57			
A.2/4.33	Track control system (working at ship's speed from 30 knots and above)	Deliberately le	ft blank			
A.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	— Reg. V/19		IMO Res. MSC IMO Res.	4(17), 8(19), 	Series.
A.2/4.35	Galileo Receiver	Moved to A.1/	4.56			

A.2/4.36	AIS SART	Moved to A.1/4.55
	equipment	

5. **Radiocommunication equipment**

Notes applicable to section 5: Radiocommunication equipment.

- Column 5 : IEC 61162 series refer to the following reference standards for Maritime navigation and radiocommunication equipment and systems — Digital interfaces:
 - IEC 61162-1 ed4.0 (2010-11) Part 1: Single talker and multiple listeners
 - IEC 61162-2 ed1.0 (1998-09) Part 2: Single talker and multiple listeners, high-speed transmission
 - IEC 61162-3 ed1.1 Consol. with am1 (2010-11) Part 3: Serial data instrument network
 - IEC 61162-3 ed1.0 (2008-05) Part 3: Serial data instrument network
 - IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 Part 3: Serial data instrument network
 - IEC 61162-450 ed1.0 (2011-06) Part 450: Multiple talkers and multiple listeners Ethernet interconnection

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

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

No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/5.1	VHF EPIRB	— Reg. IV/14	— Reg.1 4,	V/8, EN 6094 (2002	

		Reg. — X/3, IMO Res. — MSC 36(63)- (1994 HSC — Code), IMO Res. — MSC 97(73)- (2000 HSC Code). — —	IMO Res. A.662(16), IMO Res. A.694(17), IMO Or, Res. 	including IEC 60945 Corrigendum 1 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).
A.2/5.2	Radio reserve source of energy	 Reg. — IV/14, Reg. — X/3, IMO Res. — MSC 36(63)- (1994 HSC Code), IMO Res. — MSC 97(73)- (2000 HSC Code). — —	Reg. — IV/13, IMO Res. A.694(17), IMO Res. MSC.36(63)- (1994 HSC Or, Code),— IMO Res. MSC.97(73)- (2000 HSC Code), IMO COMSAR Circ.16, IMO COMSAR Circ.32.	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).

A.2/5.3	Inmarsat-F SES	Moved to A.1/5.19.
A.2/5.4	Distress panel	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
A.2/5.5	Distress alarm or alert panel	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
A.2/5.6	L- band EPIRB (INMARSAT)	Deliberately left blank

A.2/5.7	Ship security				Reg.		EN
	alert system				XI-2/	6,	60945
				—	IMO		(2002)
					Res.		including
					A.694	4 (17),	IEC
				—	IMO		60945
					Res.	/ `	Corrigendum
						.147(77),	1
				—	IMO	,	(2008),
					MSC		EN
					Circ.	10/2.	61162
						0.	Series.
						Or,	IEC
							IEC 60945
							(2002)
							including
							IEC
							60945
							Corrigendum
							1
							(2008),
						_	IEC
							61162
							Series.
A.2/5.8	Aeronautical	_	Reg.		Reg.		EN
Ex A.1/5.16	two way		IV/14		IV/7,		60945
	VHF radio		Reg.		IMO		(2002)
	telephone		X/3,		Res.		including
	apparatus		IMO		A.694	4(17),	IEC
			Res.	—	IMO		60945
				.36(63)-	Res.		Corrigendum
			(1994	-		.36(63)-	1
			HSC		(1994		(2008).
			Code)	HSC	_	ETSI
			14,		Code)	EN 201
			IMO Daa		14,		301
			Res.		IMO Res.		688 V1.1.1
			(2000)	.97(73)-		.97(73)-	(2000-07).
			HSC		(2000)		(2000-07).
			Code		HSC	<u> </u>	IEC
			14.	,	Code)	60945
					14,	,	(2002)
				<u> </u>	IMO		including
					Res.		IEC
						.80(70),	60945
				<u> </u>	IMO		Corrigendum
					COM	SAR	1
					Circ.		(2008).
				<u> </u>	ICAC		ETSI
					Conv	ention,	EN

Annex	301
10,	688
Radio	V1.1.1
-	(2000-07).
Regulations	

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	- COLI 72 Anne III/3.	x Anno III/3 — IMO Res.	4(17). 4(17). 4(17). 4(17). (2003) (2003) (2003) (2003) (2003) (2004) (2005)	2) ding 5 gendum 8), tles — REG ex formance), gs — REG ex formance).

		IEC 60945
		Corrigendum
		1
		(2008),
		 Whistles —
		COLREG
		72
		Annex
		III/1
		(Performance),
		 Bells
		or
		Gongs —
		COLREG
		72
		Annex
		III/2
		(Performance).
8	 · · · · · · · · · · · · · · · · · · ·	

7. Bulk carrier safety equipment

No.	Item designation	Regulation SOLAS 74, as amended, where 'type approval' is required	Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/7.1	Loading instrument	Reg. XII/1 1997 SOL/ Conf Res. 5.	1, XII/1 — 1997 AS SOL	1, MSC Circ	
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 typeexamination 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.

IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

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

Mark of conformity

The mark of conformity must take the following



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 312, 10.11.2012, p. 1.
- (**13**) OJ L 304, 14.11.2013, 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 2014/93/EU of 18 July 2014 amending Council Directive 96/98/ EC on marine equipment (Text with EEA relevance).