Commission Directive (EU) 2015/559 of 9 April 2015 amending Council Directive 96/98/EC on marine equipment (Text with EEA relevance)

COMMISSION DIRECTIVE (EU) 2015/559

of 9 April 2015

amending Council Directive 96/98/EC on marine equipment

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Directive 96/98/EC of 20 December 1996 on marine equipment[(1)], and in particular Article 17 thereof,

Whereas:

(1) For the purposes of Directive 96/98/EC, the international conventions and testing standards should apply in their up-to-date versions.

(2) A number of amendments to the international conventions and applicable testing standards have entered into force since the adoption of the last amending act to Directive 96/98/EC. Those amendments should be incorporated into Directive 96/98/EC.

(3) During the same period, the International Maritime Organisation and the European standardisation organisations have also adopted standards, including detailed testing standards, for a number of items of equipment which are listed in Annex A.2 to Directive 96/98/EC or which, albeit not listed, are considered relevant for the purpose of that Directive. Therefore such items of equipment should be included in Annex A.1 or transferred from Annex A.2 to Annex A.1, as appropriate.

(4) Directive 96/98/EC should therefore be amended accordingly.

(5) It is reasonable to allow equipment newly subject to harmonised requirements under this Directive and manufactured before the expiry of the time limit for the implementation of this Directive to be placed on the market and on board a Community ship during a transitional period.

(6) The measures provided for in this Directive are in accordance with the opinion of the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS),

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annex A to Directive 96/98/EC is replaced by the text in the Annex to this Directive.

Article 2

Equipment listed in column 1 of Annex A.1 as having been transferred from Annex A.2 which was manufactured before 30 April 2016 in conformity with procedures for type-approval already in force before that date within the territory of a Member State, may continue to be placed on the market and on board a Community ship until 30 April 2018.

Article 3

1 Member States shall adopt and publish, by 30 April 2016 at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions.

They shall apply those provisions from 30 April 2016.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2 Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 4

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Article 5

This Directive is addressed to the Member States.

Done at Brussels, 9 April 2015.

For the Commission

The President

Jean-Claude JUNCKER

ANNEX

ANNEX General note for Annex A: SOLAS Regulations refer to SOLAS, as amended.
A

General note for Annex A: Within certain item designations, column 5 shows some possible product variants under the same item designation. Product variants are independently provisioned and separated by a dotted lined from each others. For certification purpose only the relevant product variant shall be chosen, as appropriate (Example: A.1/3.3).

List of acronyms used

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

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

AC, Amending Corrigendum concerning Standard Documents other than IMO.

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

Circ., Circular.

COLREG, International Regulations for Preventing Collisions at Sea.

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

EN, European Standard.

ETSI, European Telecommunication Standardisation Institute.

FSS, International Code for Fire Safety Systems.

FTP, International Code for Application of Fire Test Procedures.

HSC, High Speed Craft Code.

IBC, International Bulk Chemical Code.

ICAO, International Civil Aviation Organization.

IEC, International Electro-technical Commission.

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

IMO, International Maritime Organization.

ISO, International Standardisation Organisation.

ITU, International Telecommunication Union.

LSA, Life saving appliance.

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

MEPC, Marine Environment Protection Committee

MSC, Maritime Safety Committee.

NO_x, Nitrogen Oxides.

O_2/HC systems: Oxygen Hydro Carbon systems.

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

SO_x, Sulphur Oxides.

Reg., Regulation.

Res., Resolution.

ANNEX A.1

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 2013/52/EU[(2)] may apply. (9th Amendment of MED Annex A).

(c) Column 1: Article 2 of Commission Directive 2014/93/EU[(3)] may apply. (10th Amendment of MED Annex A).

(d) Column 5: Where IMO Resolutions are cited, only the testing standards contained in relevant parts of the Annexes to the Resolutions are applicable and exclude the provisions of the Resolutions themselves.

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

(f) Column 5: Where two sets of identifying standards are separated by "or", each set fulfils all the testing requirements to meet IMO Performance Standards; thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant International Instruments. Conversely, when other separators (comma) are used all the listed references apply.

(g) The requirements laid down in this annex shall be without prejudice to carriage requirements in the international conventions

1. **Life-saving appliances**

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

No.	**Item designation**	**Regulation SOLAS 74, as amended, where "type approval" is required**	**Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable**	**Testing standards**	**Modules for conformity assessment**
1	2	3	4	5	6
A.1/1.1	Lifebuoys	— Reg. III/4, — Reg. X/3.	— Reg. III/7, — Reg. III/34, — IMO Res.	— IMO Res. MSC.81(70).	B + D B + E B + F

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

A.1/1.3	Lifebuoys self-activating smoke signals	— Reg. III/4, — Reg. X/3.	— Reg. III/7, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, II, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	—	IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.4	Lifejackets	— Reg. III/4, — Reg. X/3.	— Reg. III/7, — Reg. III/22, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, II, — IMO Res. MSC.97(73)-(2000 HSC Code) 8,	—	IMO Res. MSC.81(70).	B + D B + E B + F

				— IMO MSC/ Circ.922, — IMO MSC.1/ Circ.1304, — IMO MSC.1/ Circ.1470.			
A.1/1.5	Immersion suits and anti-exposure suits designed to be worn in conjuction WITH a lifejacket a) immersion suit without inherent insulation b) immersion suit with inherent insulation c) anti exposure suits	— Reg. III/4, — Reg. X/3.		— Reg. III/7, — Reg. III/22, — Reg. III/32, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, II, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, — IMO MSC/ Circ.1046.	—	IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.6	Immersion suits and anti-exposure suits designed to be worn WITHOUT a lifejacket a) immersion suit without inherent insulation	— Reg. III/4, — Reg. X/3.		— Reg. III/7, — Reg. III/22, — Reg. III/32, — Reg. III/34, — IMO Res. MSC.36(63)-(1994	—	IMO Res. MSC.81(70).	B + D B + E B + F

	b) immersion suit with inherent insulation c) anti exposure suits			— HSC Code) 8, — IMO Res. MSC.48(66)- (LSA Code) I, II, — IMO Res. MSC.97(73)- (2000 HSC Code) 8, — IMO MSC/ Circ.1046.		
A.1/1.7	Thermal protective aids	— Reg. III/4, — Reg. X/3		— Reg. III/22, — Reg. III/32, — Reg. III/34, — IMO Res. MSC.36(63)- (1994 HSC Code) 8, — IMO Res. MSC.48(66)- (LSA Code) I, II, — IMO Res. MSC.97(73)- (2000 HSC Code) 8, — IMO MSC/ Circ.1046.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.8	Rocket parachute flares (pyrotechnics)	— Reg. III/4, — Reg. X/3.		— Reg. III/6, — Reg. III/34,	— IMO Res. MSC.81(70).	B + D B + E B + F

				— IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, III, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.			
A.1/1.9	Hand flares (pyrotechnics)	— Reg. III/4, — Reg. X/3.		— Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, III, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	— IMO Res. MSC.81(70).		B + D B + E B + F
A.1/1.10	Buoyant smoke signals (pyrotechnics)	— Reg. III/4, — Reg. X/3.		— Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code)	— IMO Res. MSC.81(70).		B + D B + E B + F

					I, III.		
A.1/1.11	Line-throwing appliances	— Reg. III/4, — Reg. X/3.	— Reg. III/18, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, VII, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	—	IMO Res. MSC.81(70).		B + D B + E B + F
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,	— And for extended service intervals: —	IMO Res. MSC.81(70). IMO MSC.1/Circ.1328.		B + D B + E

				—	IMO Res. MSC.97(73)-(2000 HSC Code) 8,			
				—	IMO MSC/ Circ.811,			
				—	IMO MSC.1/ Circ.1328.			
A.1/1.13	Rigid liferafts	—	Reg. III/4,	—	Reg. III/21,	—	IMO Res. MSC.81(70),	B + D B + E
		—	Reg. X/3.	—	Reg. III/26,	—	IMO MSC/ Circ.1006.	
				—	Reg. III/31,			
				—	Reg. III/34,			
				—	IMO Res. MSC.36(63)-(1994 HSC Code) 8,			
				—	IMO Res. MSC.48(66)-(LSA Code) I, IV,			
				—	IMO Res. MSC.97(73)-(2000 HSC Code) 8,			
				—	IMO MSC/ Circ.811.			
A.1/1.14	Automatically self-righting liferafts	—	Reg. III/4,	—	Reg. III/26,	—	IMO Res. MSC.81(70).	B + D B + E
		—	Reg. X/3.	—	Reg. III/34,	And for extended service intervals:		
				—	IMO Res. MSC.36(63)-			

					(1994 HSC Code) 8, — IMO Res. MSC 48(66)-(LSA Code) I, IV, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, — IMO MSC/Circ.809, — IMO MSC/Circ.811, — IMO MSC.1/Circ.1328.	— IMO MSC.1/Circ.1328.	
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) 8, — IMO Res. MSC.48(66)-(LSA Code) I, IV, — IMO Res. MSC.97(73)-(2000 HSC	— And for extended service intervals: — IMO MSC.1/Circ.1328.	IMO Res. MSC.81(70).	B + D B + E

			Code) 8, — IMO MSC/Circ.809, — IMO MSC/Circ.811, — IMO MSC.1/Circ.1328.			
A.1/1.16	Float-free arrangements for liferafts (hydrostatic release units)	— Reg. III/4, — Reg. X/3.	— Reg. III/13, — Reg. III/26, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, IV, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, — IMO MSC/Circ.811.	IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.17	Lifeboats: (a) Davit-launched lifeboats: — partially enclosed, — totally enclosed. (b) Free-fall lifeboats.	— Reg. III/4, Reg. X/3.	— Reg. III/21, — Reg. III/31, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC	— IMO Res. MSC.81(70), IMO MSC/Circ.1006.	B + D B + F

				Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, IV, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, — IMO MSC.1/Circ.1423.			
A.1/1.18	Rigid rescue boats	— Reg. III/4, — Reg. X/3.		— Reg. III/21, — Reg. III/31, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, V, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006.		B + D B + F
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.81(70), — ISO 15372 (2000).		B + D B + F

				— IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, V, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.			
A.1/1.20	Fast rescue boats: (a) inflated (b) rigid (c) rigid-inflated	—	Reg. III/4.	— Reg. III/26, — Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) I,V, — IMO MSC/Circ.1016, — IMO MSC/Circ.1094.	—	IMO Res. MSC.81(70), IMO MSC/Circ.1006, ISO 15372 (2000).	B + D B + F G
A.1/1.21	Launching appliances using falls (davits)	— —	Reg. III/4, Reg. X/3.	— Reg. III/23, — Reg. III/33, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-	—	IMO Res. MSC.81(70).	B + D B + E B + F G

			—	(LSA Code) I, VI, IMO Res. MSC.97(73)-(2000 HSC Code) 8.		
A.1/1.22	Float free launching appliances for survival craft	Moved to A.2/1.3				
A.1/1.23	Launching appliances for free-fall lifeboats	— Reg. III/4, — Reg. X/3.	— Reg. III/16, — Reg. III/23, — Reg. III/33, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, VI, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	—	IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.24	Liferaft launching appliances (Davits)	— Reg. III/4, — Reg. X/3.	— Reg. III/12, — Reg. III/16, — Reg. III/34,	—	IMO Res. MSC.81(70).	B + D B + E B + F G

				— 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.			
A.1/1.25	Fast rescue boat launching appliances (Davits)	—	Reg. III/4.	— Reg. III/26, — Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) I, VI.	—	IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.26	Release mechanism for (a) Lifeboats and rescue boats (launched by a fall or falls) (b) Liferafts (launched by a fall or falls)	— —	Reg. III/4, Reg. X/3.	— Reg. III/16, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, IV, VI,	—	IMO Res. MSC.81(70).	B + D B + E B + F

	(c) Free fall lifeboats			— IMO Res. MSC.97(73)-(2000 HSC Code) 8, — 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 Res. MSC.81(70).		B + D B + F G
A.1/1.28	Means of rescue	—	Reg. III/4.	— Reg. III/26, — Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) I, VI.	— IMO Res. MSC.81(70), IMO MSC/ Circ.810.		B + D B + F
A.1/1.29	Embarkation ladders	—	Reg. III/4,	— Reg. III/11,	— IMO Res. MSC.81(70),		B + D B + F

		— Reg. III/11, — Reg. X/3.		— Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.48(66)-(LSA Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO MSC.1/Circ.1285.		ISO 5489 (2008).		
A.1/1.30	Retro-reflective materials	— Reg. III/4, — Reg. X/3.		— Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	—	IMO Res. A.658(16).	B + D B + E B + F	
A.1/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A.1/5.17 and A.1/5.18						

A.1/1.32	9 GHz SAR transponder (SART)	Moved to A.1/4.18									
A.1/1.33	Radar reflector for lifeboats and rescue boats (passive)	— Reg. III/4, — Reg. X/3.		— Reg. III/34, — IMO Res A.384~~(X)~~, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.~~48~~(66)-(LSA Code) I, IV, V, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, — IMO Res. MSC.164(78).		— EN ISO 8729 (1998), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — EN ISO 8729 (1998), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — ISO 8729-1 (2010), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — ISO 8729-1 (2010), IEC 60945 (2002) including IEC	B + D B + E B + F		

					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 equipment for lifeboats and rescue boats	Moved to A.1/3.38				
A.1/1.36	Lifeboat/ rescue boat propulsion engine	— Reg. III/4, — Reg. X/3.	— —	Reg. III/34, — IMO Res. MSC.48(66)- (LSA Code) IV, V.	IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.37	Rescue boat propulsion engine-outboard motor	— Reg. III/4, — Reg. X/3.	— —	Reg. III/34, — IMO Res. MSC.48(66)- (LSA Code) V.	IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.38	Searchlights for use in lifeboats and rescue boats	— Reg. III/4, — Reg. X/3.	— — — —	Reg. III/34, — IMO Res. MSC.36(63)- (1994 HSC Code) 8, IMO Res. MSC.48(66)- (LSA Code) I, IV, V, IMO Res. MSC.97(73)-	IMO Res. MSC.81(70).	B + D B + E B + F

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

			— IMO Res. MSC.48(66)-(LSA Code) I, VI, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.			
A.1/1.42	Pilot ladder	Moved to A.1/4.49				
A.1/1.43	Rigid/inflated rescue boats	— Reg. III/4, — Reg. X/3.	— Reg. III/21, — Reg. III/31, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, V, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006, — ISO 15372 (2000).	B + D B + F

2. **Marine pollution prevention**

No.	Item designation	Regulation MARPOL 73/78, as amended, where “type	Regulations of MARPOL 73/78, as amended, and the relevant	Testing standards	Modules for conformity assessment

		approval" is required	**resolutions and circulars of the IMO, as applicable**		
1	2	3	4	5	6
A.1/2.1	Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	— Annex I, Reg 14.	Annex I, Reg. 14, — IMO MEPC.1/ Circ.643.	— IMO Res. MEPC.107(49), IMO MEPC.1/ Circ.643.	B + D B + E B + F
A.1/2.2	Oil/water interface detectors	— Annex I, Reg. 32.	— Annex I, Reg. 32.	— IMO Res. MEPC.5(XIII).	B + D B + E B + F
A.1/2.3	Oil-content meters	— Annex I, Reg. 14.	Annex I, Reg. 14, — IMO MEPC.1/ Circ.643.	— IMO Res. MEPC.107(49), IMO MEPC.1/ Circ.643.	B + D B + E B + F
A.1/2.4	Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Deliberately left blank			
A.1/2.5	Oil discharge monitoring and control system for oil tankers	— — Annex I, Reg. 31, IMO MEPC.1/ Circ.761 Rev.1.	— Annex I, Reg. 31.	— IMO Res. MEPC.108(49).	B + D B + E B + F
A.1/2.6	Sewage systems	— Annex IV, Reg. 9.	— Annex IV, Reg. 9.	Until 31 December 2015: — IMO Res. MEPC.159(55).	B + D B + E B + F

					As from 1 January 2016: — IMO Res. MEPC.227(64).	
A.1/2.7	Shipboard incinerators	— Annex VI, Reg. 16.	— Annex VI, Reg.16, IMO MEPC.1/ Circ.793	— IMO Res. MEPC.76(40).		B + D B + E B + F G
A.1/2.8	NO_x analyser for use on board as per NO_x Technical Code 2008	— IMO Res. MEPC.176(58) (Revised MARPOL Annex VI, Reg. 13)	— IMO Res. MEPC.176(58) (Revised MARPOL Annex VI, Reg. 13); — IMO Res. MEPC.177(58) (NO_x Technical code 2008), — IMO Res. MEPC.198(62), — IMO MEPC.1/ Circ.638.	— IMO Res. MEPC.177(58) (NO_x Technical Code 2008).		B + D B + E B + F G
A.1/2.9	Equipment using other technological methods to limit SO_x emissions	Moved to A.2/2.4				
A.1/2.10	On board exhaust gas cleaning systems	— IMO Res. MEPC.176(58) (Revised MARPOL Annex VI, Reg. 4), — IMO Res. MEPC.184(59).	— IMO Res. MEPC.176(58) (Revised MARPOL Annex VI, Reg. 4).	— IMO Res. MEPC.184(59).		B + D B + E B + F G

3. Fire protection equipment

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

				Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 4, — IMO MSC/Circ.1239, — IMO MSC/Circ.1275.	— EN 3-10 (2009).		
A.1/3.3	Fire-fighter's outfit: protective clothing (close proximity clothing)	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.		Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 3.	Protective clothing for fire fighting: — EN 469 (2005) including A1 (2006) and AC (2006). Protective clothing for fire fighting — Reflective clothing for specialised fire-fighting: — EN 1486 (2007). Protective clothing for fire fighting — Protective clothing with a reflective outer surface:		B + D B + E B + F

						—	ISO 15538 (2001) Level 2.	
A.1/3.4	Fire-fighter's outfit: boots	— — —	Reg. II-2/10, Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 3.	— — — —	Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO Res. MSC.98(73)-(FSS Code) 3.	—	EN 15090 (2012).	B + D B + E B + F
A.1/3.5	Fire-fighter's outfit: gloves	— — —	Reg. II-2/10, Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 3.	— — — —	Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO Res. MSC.98(73)-(FSS Code) 3.	—	EN 659 (2003) including A1 (2008) and AC (2009).	B + D B + E B + F
A.1/3.6	Fire-fighter's outfit: helmet	—	Reg. II-2/10,	—	Reg. II-2/10,	—	EN 443 (2008).	B + D B + E B + F

		—	Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.	—	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.			
A.1/3.7	Self-contained compressed-air-operated breathing apparatus *Note:* For use in accidents involving dangerous goods a positive pressure type mask is required.	— — —	Reg. II-2/10, Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.	— — — And where the apparatus is for use in accidents with cargo: — IMO Res. MSC.4(48)-(IBC	Reg. II-2/10, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 3.	— And where the apparatus is for use in accidents with cargo: —	EN 136 (1998) including AC (2003), EN 137 (2006). ISO 23269-3(2011).	B + D B + E B + F

				Code) 14, — IMO Res. MSC.5(48)-(IGC Code) 14.			
A.1/3.8	Compressed air line breathing apparatus	— Reg. X/3. — IMO Res. MSC.36(63)-(1994 HSC Code) 7. *Note:* This equipment is only for high speed craft built under provisions of the 1994 HSC Code.	— —	IMO Res. MSC.36(63)-(1994 HSC Code) 7.	— —	EN 14593-1 (2005), EN 14593-2 (2005) including AC (2005), EN 14594 (2005) including AC (2005).	B + D B + E B + F
A.1/3.9	Sprinkler systems components for accommodation spaces, service spaces and control stations equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited to nozzles and their performance). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	— Reg. II-2/7, — Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 8.	— — — — —	Reg. II-2/7, Reg. II-2/9, Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.44(65), IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO Res. MSC.98(73)-(FSS	—	IMO Res. A.800(19).	B + D B + E B + F

				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-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 7.	— Reg. II-2/10, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 7, — IMO MSC.1/Circ.1313.	IMO MSC/Circ.1165, Appendix A.	B + D B + E B + F
A.1/3.11	“A” & “B” Class divisions fire integrity (a) “A” class divisions, (b) “B” class divisions.	“A” Class: — Reg. II-2/3.2. “B” Class: — Reg. II-2/3.4.	— Reg.II-2/9, and, “A” Class: — Reg. II-2/3.2. — IMO MSC/Circ.1120 — IMO MSC.1/Circ.1434 “B” Class: — Reg. II-2/3.4.	IMO Res. MSC.307(88)-(2010 FTP Code). IMO MSC.1/Circ.1435 (the latter is only for “A” Class divisions)	B + D B + E
A.1/3.12	Devices to prevent the passage of flame into the	— Reg. II-2/4, — Reg. II-2/16.	— Reg II-2/4, Reg II-2/16	— EN ISO 16852 (2010),	For equipment other than valves:

	cargo tanks in tankers			— ISO 15364 (2007), — IMO MSC/Circ.677.		B + D B + E B + F For valves: B + F
A.1/3.13	Non-combustible materials	— Reg. II-2/3, — Reg. X/3.	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/9, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.14	Materials other than steel for pipes penetrating "A" or "B" Class division	Item included in A.1/3.26 and A.1/3.27				
A.1/3.15	Materials other than steel for pipes conveying oil or fuel oil (a) plastic pipes and fittings, (b) valves, (c) flexible pipe assemblies and compensators, (d) metallic pipe	— Reg. II-2/4, — Reg. X/3.	— Reg. II-2/4, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, 10, — IMO Res. MSC.97(73)-(2000 HSC Code)	Pipes and fittings: — IMO Res. A.753(18), — IMO Res. MSC.307(88)-(2010 FTP Code). Valves: EN ISO 10497 (2010).		B + D B + E B + F

		components with resilient and elastomeric seals.			7, 10. IMO MSC/ Circ.1120.	Flexible pipe assemblies: — EN ISO 15540 (2001) — EN ISO 15541 (2001). Metallic pipe components with resilient and elastomeric seals. — ISO 19921 (2005), — ISO 19922 (2005).	
A.1/3.16	Fire Doors	—	Reg. II-2/9.	—	Reg. II-2/9.	— IMO Res. MSC.307(88)-(2010 FTP Code). — IMO MSC.1/ Circ.1319.	B + D B + E B + F
A.1/3.17	Fire door control systems components. *Note:* When the term "system components" is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international	— —	Reg. II-2/9, Reg. X/3.	— —	Reg. II-2/9, IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F

	requirements are fulfilled.						
A.1/3.18	Surface materials and floor coverings with low flame-spread characteristics (a) decorative veneers (b) paint systems, (c) floor coverings, (d) pipe insulation covers, (e) adhesives used in the construction of "A", "B" & "C" class divisions, (f) combustible ducts membrane	— — — 	Reg. II-2/3, Reg. II-2/5, Reg. II-2/6 for (a), (b), (c) Reg. II-2/9, for (e), (f) Reg. X/3.	— — — — — — —	Reg. II-2/3, Reg. II-2/5, Reg. II-2/6, Reg. II-2/9, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7. IMO MSC/Circ.1120.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.19	Draperies, curtains and other suspended textile materials and films	— — —	Reg. II-2/3, Reg. II-2/9, Reg. X/3.	— — — — —	Reg. II-2/3, Reg. II-2/9, IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7.	—	IMO Res. MSC.307(88)-(2010 FTP Code), IMO MSC.1/Circ.1456.	B + D B + E B + F

A.1/3.20	Upholstered furniture	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/9, — Reg. ~~X/3~~.	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/9, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/9, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.21	Bedding components	— Reg. II-2/3, — Reg. II-2/9, — Reg. X/3.	— Reg. II-2/3, — Reg. II-2/9, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— Reg. II-2/3, — Reg. II-2/9, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.22	Fire dampers	— Reg. II-2/9.	— Reg. II-2/9.	— Reg. II-2/9.	IMO Res. MSC.307(88)-(2010 FTP Code),	B + D B + E B + F
A.1/3.23	Non-combustible duct penetrations through	Moved to A.1/3.26				

	"A" class divisions									
A.1/3.24	Electric Cable Transits through "A" class divisions	Moved to A.1/3.26(a)								
A.1/3.25	"A" and "B" class fire proof windows and side scuttles	—	Reg. II-2/9.	—	Reg. II-2/9, IMO MSC/ Circ.1120.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F		
A.1/3.26	Penetrations through "A" class divisions (a) electric cable transits, (b) pipe, duct, trunk, etc penetrations.	—	Reg. II-2/9.	—	Reg. II-2/9, IMO MSC.1/ Circ.1276. (only applicable to (b))	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F		
A.1/3.27	Penetrations through "B" class divisions (a) electric cable transits, (b) pipe, duct, trunk, etc penetrations.	—	Reg. II-2/9.	—	Reg. II-2/9.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F		
A.1/3.28	Sprinkler systems (limited to sprinkler heads). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included	— — —	Reg. II-2/7, Reg. II-2/10, Reg. X/3.	— — —	Reg. II-2/7, Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7,	— — —	ISO 6182-(2014) Or, EN 12259-1 (1999) including A1 (2001), A2 (2004)	B + D B + E B + F		

	under this item)			— IMO Res. MSC.44(65), — IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 8, — IMO MSC/Circ.912.		and A3 (2006).	
A.1/3.29	Fire hoses with diameter ≤ 52 mm	— —	Reg. II-2/10, Reg. X/3.	— — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	Reg. II-2/10,	EN 14540 (2004) including A.1 (2007).	B + D B + E B + F
A.1/3.30	Portable oxygen analysis and gas detection equipment	— —	Reg. II-2/4, Reg. VI/3.	— — IMO Res. MSC.98(73)-(FSS Code) 15.	Reg. II-2/4, Reg. VI/3,	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008) or IEC 60945 (2002) including IEC 60945 Corrigendum	B + D B + E B + F

								1 (2008),
							—	IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011),
							—	IEC 60533 (1999),
							and as applicable to:	
							a)	Category 1: (safe area):
								— EN 50104 (2010),
								— EN 60079-29-1 (2007).
							b)	Category 2: (explosive gas atmospheres):
								— EN 50104 (2010),
								— EN 60079-29-1 (2007),
								— EN 60079-0 (2012) including A11:2013,
								— EN 60079-1 (2007) including IEC 60079-1 Corrigendum 1 (2008),

				— EN 60079-10-1 (2009), — EN 60079-11 (2012), — EN 60079-15 (2010), — EN 60079-26 (2007).	
A.1/3.31	Nozzles for fixed sprinkler systems, for high speed craft (HSC)	Item deleted as it is covered by A.1/3.9 and A.1/3.28			
A.1/3.32	Fire restricting materials (except furniture) for high speed craft	— Reg. X/3.	— IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7. — IMO MSC.1/Circ.1457.	— IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F.
A.1/3.33	Fire restricting materials for furniture for high speed craft	— Reg. X/3.	— IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F.

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 MSC.1/Circ.1457.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.35	Fire doors on high speed craft	—	Reg. X/3.	— IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.36	Fire dampers on high speed craft	—	Reg. X/3.	— IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.37	Penetrations through fire resisting divisions on high speed craft	—	Reg. X/3.	— IMO Res. MSC.36(63)-(1994 HSC	—	IMO Res. MSC.307(88)-(2010	B + D B + E B + F

	(a) electric cable transits, (b) pipe, duct, trunk etc penetrations.			— IMO Res. MSC.97(73)-(2000 HSC Code) 7.		FTP Code).	
A.1/3.38	Portable fire-extinguishing equipment for lifeboats and rescue boats	—	Reg. III/4, Reg. X/3.	— IMO Res. A.951(23), — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, IV, V, — IMO Res. MSC.97(73)-(2000 HSC Code) 8.	Reg. III/34, —	EN 3-7 (2004) including A1 (2007), EN 3-8 (2006) including AC (2007), EN 3-9 (2006) including AC (2007), EN 3-10 (2009).	B + D B + E B + F
A.1/3.39	Nozzles for equivalent water-mist fire extinguishing systems for machinery spaces and cargo pump rooms	— —	Reg. II-2/10, Reg. X/3, IMO Res.MSC.98(73)-(FSS Code) 7	— IMO Res. MSC.36(63)-1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7,	Reg. II-2/10,	IMO MSC/ Circ.1165.	B + D B + E B + F

				— IMO Res. MSC.98(73)-(FSS Code) 7, — IMO MSC.1/ Circ.1313, — IMO MSC.1/ Circ.1458.				
A.1/3.40	Low-location lighting systems (components only)	— —	Reg. II-2/13, IMO Res. MSC.98(73)-(FSS Code) 11.	— Reg. II-2/13, IMO Res. A.752(18), IMO Res. MSC.98(73)-(FSS Code) 11.	— IMO Res. A.752(18) Or, ISO 15370 (2010).		B + D B + E B + F	
A.1/3.41	Emergency escape breathing devices (EEBD)	—	Reg. II-2/13.	— Reg. II-2/13, IMO Res. MSC.98(73)-(FSS Code) 3, — IMO MSC/ Circ.849.	— ISO 23269-1 (2008), and alternatively:		B + D B + E B + F	For self-contained: open — circuit compressed air breathing apparatus with full mask or mouthed piece assembly for escape: — EN 402(2003). For self-contained: open —

						circuit compressed air breathing apparatus with a hood for escape: — EN 1146(2005). For self-contained: closed — circuit compressed air breathing apparatus: — EN 13794(2002).
A.1/3.42	Inert gas systems components	— Reg. II-2/4.	— Reg. II-2/4, — IMO Res. A.567(14), — IMO Res. MSC.98(73)-(FSS Code) 15, — IMO MSC/ Circ.353, — IMO MSC/ Circ.485, — IMO MSC/ Circ.731, — IMO MSC/ Circ.1120.	— IMO MSC/ Circ.353.	B + D B + E B + F G
A.1/3.43	Nozzles for deep fat cooking equipment fire extinguishing	— Reg. II-2/1, — Reg. II-2/10, — Reg. X/3.	— Reg. II-2/1, — Reg. II-2/10, — IMO Res.	— ISO 15371 (2009).	B + D B + E B + F	

	systems (automatic or manual type).				MSC.97(73)-(2000 HSC Code) 7, — IMO MSC.1/ Circ.1433.		
A.1/3.44	Fire-fighters outfit — lifeline	— — —	Reg. II-2/10, Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 3.	— — —	Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 3.	— —	IMO Res. MSC.98(73)-(FSS Code) 3, IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E
A.1/3.45	Equivalent fixed gas fire extinguishing systems components (extinguishing medium, head valves and nozzles) for machinery spaces and cargo pump rooms	— — —	Reg. II-2/10, Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 5.	— — —	Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 5,	— —	IMO MSC/Circ.848, IMO MSC.1/ Circ.1316.	B + D B + E B + F

				— IMO 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-2/10, — Reg. X/3, — IMO Res. MSC.98(73)- (FSS Code) 5.		— Reg. II-2/10, — IMO Res. MSC.36(63)- (1994 HSC Code) 7, — IMO Res. MSC.97(73)- (2000 HSC Code) 7, — IMO Res. MSC.98(73)- (FSS Code) 5, — IMO MSC.1/ Circ.1270 including Corrigendum 1 — IMO MSC.1/ Circ.1313.	—	IMO MSC.1/ Circ.1270 including Corrigendum 1.	B + D B + E B + F
A.1/3.47	Concentrate for Fixed High Expansion Foam Fire Extinguishing Systems for Machinery Spaces and Cargo Pump Rooms. *Note:* The fixed high	—	Reg. II-2/10.	— Reg. II-2/10, — IMO Res. MSC.98(73)- (FSS Code) 6.	—	IMO MSC/ Circ.670.	B + D B + E B + F

	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.						
A.1/3.48	Fixed water based local application fire fighting systems components for use in category “A” machinery spaces (Nozzles and performance tests).	— — 	Reg. II-2/10, Reg. X/3.	— — —	Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7.	IMO MSC.1/Circ.1387.	B + D B + E B + F
A.1/3.49	Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces	— — — —	Reg. II-2/19, Reg. II-2/20, Reg. X/3, IMO Res. MSC.98(73)-(FSS	— — — 	Reg. II-2/19, Reg. II-2/20, IMO Res. MSC.36(63)-(1994 HSC Code) 7,	IMO MSC.1/Circ.1430.	B + D B + E B + F

	(a) Prescriptive-based systems as per Circ. 1430 Clause 4: (b) Performance-based systems as per Circ. 1430 Clause 5.		Code) 7.	— —	IMO Res. MSC.97(73)-(2000 HSC Code) 7. IMO Res. MSC.98(73)-(FSS Code) 7.		
A.1/3.50	Protective clothing resistant to chemical attack	Moved to A.2/3.9					
A.1/3.51	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces (a) Control and indicating equipment (b) Power supply equipment (c) Heat detectors — Point detectors (d) Smoke detectors: Point	— — —	Reg. II-2/7, Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 9.	— — — — —	Reg. II-2/7, IMO Res. MSC.36(63) (1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO Res. MSC.98(73)-(FSS Code) 9, IMO MSC.Circ.1120	Control and indicating equipment. Electrical installations in ships: — Power supply equipment: — Heat detectors — Point detectors: —	B + D B + E B + F EN 54-2 (1997) including AC(1999) and A1(2006). EN 54-4 (1997) including AC(1999), A1(2002) and A2(2006). EN 54-5 (2000)

	detectors using scattered light, transmitted light or ionization	including A1(2002). Smoke detectors — Point detectors using scattered light, transmitted light or ionization: — EN 54-7 (2000) including A1(2002) and A2(2006).
(e)	Flame detectors: Point detectors	Flame detectors — Point detectors: — EN 54-10 (2002) including A1(2005).
(f)	Manual call points	Manual call points: — EN 54-11 (2001) including A1(2005).
(g)	Short circuit isolators	Short circuit isolators: — EN 54-17 (2007) including AC(2007).
(h)	Input/ output devices	Input/output devices: — EN 54-18 (2005) including AC(2007).
(i)	Cables	Cables: — EN 60332-1-2 (2004).

						— IEC 60092-376 (2003). And, as applicable, electrical and electronic installations in ships: — IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), — IEC 60533 (1999).		
A.1/3.52	Non-portable and transportable fire extinguishers	— — —	Reg. II-2/10, Reg. X/3.	— — — — —	Reg. II-2/4, Reg. II-2/10, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— — —	EN 1866-(2007) EN 1866-3 (2013). Or, ISO 11601 (2008).	B + D B + E B + F
A.1/3.53	Fire alarm devices — Sounders	— — —	Reg. II-2/7, Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 9.	— — — —	Reg. II-2/7, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000	Sounders — —	EN 54-3 (2001) including A1(2002) and A2(2006), IEC 60092-504 (2001) including IEC	B + D B + E B + F

				HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 9, — IMO MSC.1/Circ.1242.	—	60092-504 Corrigendum 1 (2011), IEC 60533 (1999).		
A.1/3.54	Fixed oxygen analysis and gas detection equipment	— Reg. II-2/4, — Reg. VI/3.		— Reg. II-2/4, — Reg. VI/3, — IMO Res. MSC.98(73)-(FSS Code) 15. For combined O2/HC systems additionally: — IMO MSC.1/Circ.1370.	— and as applicable to: (a) (b) For combined O2/HC	IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), IEC 60533 (1999), Category 4: (safe area) — EN 50104 (2010). Category 3: (explosive gas atmospheres) — EN 50104 (2010), — EN 60079-0 (2012) including A11:2013, — EN 60079-29-1 (2007).	B + D B + E B + F	

					systems additionally: — IMO MSC.1/ Circ.1370.		
A.1/3.55	Dual purpose type nozzles (spray/jet type)	— Reg. II-2/10, — Reg. X/3.	— Reg. II-2/10, — IMO Res. MSC.36(63)- (1994 HSC Code) 7, — IMO Res. MSC.97(73)- (2000 HSC Code) 7.	Reg. II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC Code) 7.	Hand-held branchpipes for fire service use — Combination branchpipes PN 16: — EN 15182-1 (2007) including A1(2009), — EN 15182-2 (2007) including A1(2009). Hand-held branchpipes for fire service use — Smooth bore jet and/or one fixed spray jet angle branchpipes PN 16: — EN 15182-1 (2007) including A1(2009).	B + D B + E B + F	
A.1/3.56	Fire hoses (reel type)	— Reg. II-2/10, — Reg. X/3.	— Reg. II-2/10, — IMO Res. MSC.36(63)- (1994 HSC Code) 7, — IMO Res. MSC.97(73)- (2000 HSC	Reg. II-2/10, IMO Res. MSC.36(63)- (1994 HSC Code) 7, IMO Res. MSC.97(73)- (2000 HSC	— EN 671-1 (2012)	B + D B + E B + F	

				Code) 7.			
A.1/3.57	Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers	—	Reg. II-2/10.	— Reg. II-2/10.8.1, IMO Res. MSC.98(73)-(FSS Code) 14, — IMO MSC.1/ Circ.1239, — IMO MSC.1/ Circ.1276.		IMO MSC/ Circ.798.	B + D B + E B + F
A.1/3.58	Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck Protection.	—	Reg. II-2/10.	— Reg. II-2/10, IMO Res. MSC.98(73)-(FSS Code) 6, 14, — IMO MSC.1/ Circ.1239, — IMO MSC.1/ Circ.1276,	—	IMO MSC.1/ Circ.1312 IMO MSC.1/ Circ.1312/ Corr.1.	B + D B + E B + F
A.1/3.59	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	— —	Reg. II-2/1, IMO Res. MSC.4(48)-(IBC Code) 11	— IMO Res. MSC.4(48)-(IBC Code) 11, IMO MSC/ Circ.553.	—	IMO MSC.1/ Circ.1312 IMO MSC.1/ Circ.1312/ Corr.1.	B + D B + E B + F
A.1/3.60	Nozzles for fixed pressure water-spraying fire-extinguishing systems for cabin balconies	— —	Reg. II-2/10, IMO Res. MSC.98(73) (FSS Code) 7.	— — IMO Res. MSC.98(73)-(FSS Code) 7,	—	IMO MSC.1/ Circ.1268.	B + D B + E B + F

				—	IMO MSC.1/ Circ.1313.		
A.1/3.61	(a) Inside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces and cargo spaces. (b) Outside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces	—	Reg. II-2/10.	—	Reg. II-2/10, IMO Res. MSC.98(73)-(FSS Code) 6.	IMO MSC.1/ Circ.1384.	B + D B + E B + F

	and cargo spaces. *Note:* Inside/ Outside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces and cargo spaces shall be tested with the approved concentrate to the satisfaction of the Administration						
A.1/3.62	Dry chemical powder extinguishing systems	—	Reg. II-2/1.	—	Reg. II-2/1, IMO Res. MSC.5(48)-(IGC Code) 11.	—	IMO MSC.1/ Circ.1315. B + D B + E B + F
A.1/3.63	Sample extraction smoke detection systems components	— — —	Reg. II-2/7, Reg. II-2/19, Reg. II-2/20.	— — —	Reg. II-2/7, Reg. II-2/19, Reg. II-2/20, IMO Res. MSC.98(73)-(FSS Code) 10.	— and for:	IMO Res. MSC.98(73)-(FSS Code) 10, Control and indicating equipment. Electrical installations in ships: — EN 54-2 B + D B + E B + F

					(1997) including AC(1999) and A1(2006). Power supply equipment: — EN 54-4 (1997) including AC(1999), A1(2002) and A2(2006). Aspiring smoke detectors: — EN 54-20 (2006) including AC(2008). And, as applicable, electrical and electronic installations in ships: — IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), — IEC 60533 (1999). And, as applicable for explosive atmospheres: — EN 60079-0

							(2012) **including A11:2013.**
A.1/3.64	C class Divisions	—	Reg. II-2/3.	—	Reg. II-2/3, Reg. II-2/9.	—	IMO Res. MSC.307(88)-(2010 FTP Code).	B + D B + E B + F
A.1/3.65	Fixed hydrocarbon gas detection system	—	Reg. II-2/4.	— — — —	Reg. II-2/4, IMO Res. MSC.98(73)-(FSS Code) 16, IMO MSC.1/ Circ.1370.	— — — —	IMO MSC.1/ Circ.1370, EN 60079-0 (2012) including A11:2013. EN 60079-29-1 (2007), IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), IEC 60533 (1999).	B + D B + E B + F
A.1/3.66	Evacuation guidance systems used as an alternative to low-location lighting systems	—	Reg. II-2/13.	— —	Reg. II-2/13, IMO MSC.1/ Circ.1168.	— —	IMO MSC.1/ Circ.1168.	B + D B + E B + F
A.1/3.67 Refer to note b) of this Annex A.1	Helicopter facility foam fire-fighting appliances	—	Reg. II-2/18.	— —	Reg. II-2/18. IMO MSC.1/ Circ.1431.	— —	EN 13565-1 (2003) including A1 (2007).	B + D B + E B + F
A.1/3.68 Ex A.2/3.22	Galley Exhaust Duct Fixed Fire	—	Reg. II-2/9.	—	Reg. II-2/9.	—	ISO 15371 (2009)	B + D B + E B + F

	Extinguishing Systems components				

4. **Navigation equipment**

Notes applicable to section 4: Navigation equipment.

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

Column 5:

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

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

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

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

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

			IMO, as applicable, and ITU recommendations, as applicable		
1	2	3	4	5	6
A.1/4.1	Magnetic compass Class A for ships	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.(1994 HSC Code) 13, — IMO Res. MSC.(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.382(X), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— ISO 1069 (1973), — ISO 25862 (2009), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, ISO 1069 (1973), ISO 25862 (2009), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F G
A.1/4.2	Transmitting heading device THD (magnetic method)	— Reg. V/18, — Reg. V/19, — Reg. X/3, — IMO Res. MSC.(1994 HSC Code) 13,	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code) 13,	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series;	B + D B + E B + F G

		—	IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— IMO Res. MSC.~~116~~(73), — IMO Res. MSC.191(79).	IMO Res. MSC.97(73)-(2000 HSC Code) 13,	— — —	ISO 22090-2 (2014), IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series. ISO 22090-2 (2014), IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.3	Gyro compass	—	Reg. V/18.	— IMO Res. A.424(~~X~~I), — IMO Res. A.694(17), — IMO Res. MSC.191(79).	Reg. V/19,	— — —	EN ISO 8728 (1998), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or,	B + D B + E B + F G

				— ISO 8728 (1997), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series. — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.4	Radar equipment	Moved to A.1/4.34, A.1/4.35 and A.1/4.36			
A.1/4.5	Automatic radar plotting aid (ARPA)	Moved to A.1/4.34			
A.1/4.6	Echo — sounding equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.224(VII), — IMO Res. A.694(17), — IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 13, — IMO Res. MSC.74(69) Annex 4, — IMO Res. MSC.97(73)-(2000 HSC Code) 13,	— EN ISO 9875 (2001) including ISO Technical Corrigendum 1: 2006, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — IEC 62288 Ed.	B + D B + E B + F G

					—	IMO Res. MSC.191(79).		2.0 (2014-07). Or, — ISO 9875 (2000) including ISO Technical Corrigendum 1: 2006, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).		
A.1/4.7	Speed and distance measuring equipment (SDME)	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.			— IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13,	Reg. V/19, IMO Res. A.694(17), IMO Res. A.824(19), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13,	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61023 (2007), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, — IEC 60945	B + D B + E B + F C	

			— IMO Res. MSC.191(79).	(2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61023 (2007), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.8	Rudder angle, rpm, pitch indicator	Moved to A.1/4.20, A.1/4.21 and A.1/4.22			
A.1/4.9	Rate-of-turn indicator	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.526(13), — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.~~191~~(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — ISO 20672 (2007) including Corrigendum 1 (2008), — IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum	B + D B + E B + F G

				1 (2008), — IEC 61162 series, — ISO 20672 (2007) including Corrigendum 1 (2008), — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.10	Direction finder	Deliberately left blank			
A.1/4.11	Loran-C equipment	Moved to A.2/4.38			
A.1/4.12	Chayka equipment	Moved to A.2/4.39			
A.1/4.13	Decca navigator equipment	Deliberately left blank			
A.1/4.14	GPS equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO Res. MSC.112(73), — IMO Res. MSC.191(79).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61108-1 (2003), — EN 61162 series, — IEC 62288 Ed. 2.0 (2014-07). Or, — IEC 60945 (2002)	B + D B + E B + F G

									including IEC 60945 Corrigendum 1 (2008), — IEC 61108-1 Ed.2.0 (2003), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.15	GLONASS equipment	—	Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	—	Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.~~11~~3(73), — IMO Res. MSC.191(79).	—		EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61108-2 (1998), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-2 Ed.1.0 (1998),	B + D B + E B + F G	

					— IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.16	Heading control system (HCS)	— Reg. V/18.	— Reg. V/19, — IMO Res. A.342(IX), — IMO Res. A.694(17), — IMO Res. MSC.64(67) Annex 3, — IMO Res. MSC.191(79).	—	ISO 11674 (2006), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — EN 62288 (2008). Or, — ISO 11674 (2006), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed.1.0(2008).	B + D B + E B + F G
A.1/4.17	Mechanical pilot hoist	Moved to A.1/1.40				
A.1/4.18	Search and rescue locating	— Reg. III/4, — Reg. IV/14,	— Reg. III/6, — Reg. III/26,	—	EN 60945 (2002) including	B + D B + E B + F G

	devices (SRLD): 9 GHz SAR transponder (SART)	—	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. IV/7, IMO Res. A.530(13), IMO Res. A.802(19), IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, ITU-R M.628-3(11/93).	—	IEC 60945 Corrigendum 1 (2008), EN 61097-1 (2007). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-1 (2007).		
A.1/4.19	Radar equipment for high-speed craft	Moved to A.1/4.37									
A.1/4.20	Rudder angle indicator	—	Reg. V/18, Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	—	Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ISO 20673 (2007), IEC 62288 Ed.	B + D B + E B + F G			

				Code) 13, — IMO Res. MSC.191(79).			2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — ISO 20673 (2007), — IEC 62288 Ed. 2.0 (2014-07).
A.1/4.21	Propeller revolution indicator	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.		— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.~~191~~(79).			EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ISO 22554 (2007), IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum
							B + D B + E B + F G

							1 (2008), — IEC 61162 series, — ISO 22554 (2007), — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.22	Pitch indicator	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.		— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.~~191~~(79).		EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ISO 22555 (2007), IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — ISO 22555 (2007), — IEC 62288 Ed.	B + D B + E B + F G

									2.0 (2014-07).		
A.1/4.23	Compass for lifeboats and rescue boats	—	Reg. III/4,	—	Reg. III/34,	—	ISO 10690 (1973),	B + D			
		—	Reg. X/3,	—	IMO Res. MSC.36(63)- (1994 HSC Code) 13,	—	IMO Res. MSC.48(66)- (LSA Code) IV, V,	—	ISO 25862 (2009), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + E	
		—	IMO Res. MSC.97(73)- (2000 HSC Code) 13.	—	IMO Res. MSC.36(63)- (1994 HSC Code) 8, 13,					B + F	
					IMO Res. MSC.97(73)- (2000 HSC Code) 8, 13.					G	
A.1/4.24	Automatic radar plotting aid (ARPA) for high-speed craft	Moved to A.1/4.37									
A.1/4.25	Automatic tracking aid (ATA)	Moved to A.1/4.35									
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved to A.1/4.38									
A.1/4.27	Electronic plotting aid (EPA)	Moved to A.1/4.36									
A.1/4.28	Integrated bridge system	Moved to A.2/4.30									
A.1/4.29	Voyage data recorder (VDR)	—	Reg. V/18,	—	Reg. V/20,	—	EN 60945 (2002) including	B + D			
		—	Reg. V/20,	—	IMO Res.			B + E			

		—	Reg. X/3,		A.694 (17),		IEC 60945 Corrigendum 1 (2008), EN 61162 Series, EN 61996-1 (2013), IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, IEC 61996-1 Ed.2.0 (2013-05), IEC 62288 Ed. 2.0 (2014-07).				
		—	IMO Res. MSC.36(63)- (1994 HSC Code) 13,	—	IMO Res. MSC.36(63)- (1994 HSC Code) 13,	—					
		—	IMO Res. MSC.97(73)- (2000 HSC Code) 13.	—	IMO Res. MSC.97(73)- (2000 HSC Code) 13,	—					
				—	IMO Res. MSC.191(79),						
				—	IMO Res. MSC.333(90).						
A.1/4.30	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)	—	Reg. V/18,	—	Reg. V/19,	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series,	B + D	B + E	B + F	G
		—	Reg. X/3,	—	IMO Res. A.694(17),						
		—	IMO Res. MSC.36(63)- (1994 HSC Code) 13,	—	IMO Res. MSC.36(63)- (1994 HSC Code) 13	—					
		—	IMO Res. MSC.97(73)-	—	IMO Res.						

			(2000 HSC Code) 13.	— IMO Res. MSC.191(79), — IMO Res. MSC.232(82), — IMO SN.1/Circ.266. [ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested].	MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.191(79), — IMO Res. MSC.232(82), — IMO SN.1/Circ.266.	EN 61174 (2008), IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, IEC 61174 (2008), IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.31	Gyro compass for high-speed craft	— Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— IMO Res. A.694(17), — IMO Res. A.821(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.191(79).	— IMO Res. A.694(17), — IMO Res. A.821(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.191(79).	ISO 16328 (2014), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, IEC 62288 Ed. 2.0 (2014-07). Or,	B + D B + E B + F G	

				— ISO 16328 (2014), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.32	Universal automatic identification system equipment (AIS)	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.74(69), IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.191(79), — ITU-R M. 1371-5(2014). *Note:* ITU-R M.	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — EN 61993-2 (2013), IEC 62288 Ed. 2.0 (2014-07). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),	B + D B + E B + F G

			1371-5(2014) shall only be applicable in accordance with requirements of IMO Res.MSC.74(69).	—	IEC 61162 Series, — IEC 61993-2 (2012), — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.33	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)	— Reg. V/18.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.74(69), — IMO Res. MSC.191(79).	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, — IEC 62065 Ed.2.0 (2014-02), — IEC 62288 Ed. 2.0 (2014-07). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62065 Ed.2.0 (2014-02), — IEC 62288 Ed.	B + D B + E B + F G

							2.0 (2014-07).	
A.1/4.34	Radar equipment CAT 1	—	Reg. V/18.	— Reg. V/19. — IMO Res. A.278(VIII), — IMO Res. A.694(17), — IMO Res. A.823(19), — IMO Res. MSC.191(79), — IMO Res. MSC.192(79), — ITU-R M. 1177-4(04/11).	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, IEC 62288 Ed. 2.0 (2014-07). EN 62388 (2013). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed. 2.0 (2014-07). — IEC 62388 Ed.2.0 (2013-06).	B + D B + E B + F G
A.1/4.35	Radar equipment CAT 2	—	Reg. V/18.	— Reg. V/19, — IMO Res. A.278(VIII), — IMO Res. A.694(17),	—	EN 60945 (2002) including IEC 60945 Corrigendum	B + D B + E B + F G	

				— IMO Res. MSC.~~191~~191(79), — IMO Res. MSC.~~192~~192(79), — ITU-R M. 1177-4(04/11).		— EN 62388 (2013). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed. 2.0 (2014-07). — IEC 62388 Ed.2.0 (2013-06).		
A.1/4.36	Radar equipment CAT 3	—	Reg. V/18.	— Reg. V/19, — IMO Res. A.278(VIII), — IMO Res. A.694(17), — IMO Res. MSC.191(79), — IMO Res. MSC.192(79), — ITU-R	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, IEC 62288 Ed. 2.0 (2014-07).	B + D B + E B + F G	

					M. 1177-4(04/11).	— EN 62388 (2013). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed. 2.0 (2014-07). — IEC 62388 Ed.2.0 (2013-06).		
A.1/4.37	Radar equipment for high speed craft applications (CAT 1H and CAT 2H)	— — —	Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — — —	IMO Res. A.278(VIII), IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13, IMO Res. MSC.191(79), IMO Res. MSC.192(79),	— — — — —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, IEC 62288 Ed. 2.0 (2014-07). EN 62388 (2013). Or, IEC 60945 (2002) including IEC 60945	B + D B + E B + F G

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

						—	2.0 (2014-07). IEC 62388 Ed.2.0 (2013-06).
A.1/4.39	Radar reflector — passive type	— — — —	Reg. V/18, Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — — —	Reg. V/19, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13, IMO Res. MSC.164(78).	— — — —	ISO 8729-(2010), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), Or, ISO 8729-1 (2010), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). B + D B + E B + F G
A.1/4.40	Heading control system for high speed craft	— — —	Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — — —	IMO Res. A.694(17), IMO Res. A.822(19), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13,	— — —	ISO 16329-(2003), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, B + D B + E B + F G

				— IMO Res. MSC.191(79).		— ISO 16329 (2003), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).		
A.1/4.41	Transmitting heading device THD (GNSS method)	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.		— IMO Res. MSC.191(79), — IMO Res. MSC.~~191~~(79).	Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13, IMO Res. MSC.~~116~~(73),	— — — —	ISO 22090-3 (2014), EN 60945 (2002) including IEC 60945 Corrigendum (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, ISO 22090-3 (2014), IEC 60945 (2002) including IEC 60945 Corrigendum	B + D B + E B + F G

								1 (2008), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.42	Searchlight for high speed craft	— — —	Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — —	IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — —	ISO 17884 (2004), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, ISO 17884 (2004), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F G	
A.1/4.43	Night vision equipment for high speed craft	— — —	Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — —	IMO Res.A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.94(72), IMO Res. MSC.97(73)-(2000 HSC	— — —	ISO 16273 (2003), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 62288 Ed. 2.0 (2014-07).	B + D B + E B + F G	

			Code) 13, — IMO Res. MSC.191(79).	Or, — ISO 16273 (2003), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.44	Differential beacon receiver for DGPS and DGLONASS Equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.114(73).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-4 (2004), — EN 61162 series. Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-4 (2004), — IEC 61162 series.	B + D B + E B + F G
A.1/4.45	Chart facilities for	Item deleted, as it is covered by A.1/4.38			

	shipborne radar							
A.1/4.46	Transmitting heading device THD (Gyroscopic method)	— — — — —	Reg. V/18. Reg. X/3, IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 13, IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 13.	— — — — —	Reg. V/19, IMO Res. A.694 (17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 13, IMO Res. MSC.116(73), IMO Res. MSC.191(79).	— — — — — — —	ISO 22090-1 (2014), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, ISO 22090-1 (2014), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed. 2.0 (2014-07).	B + D B + E B + F G
A.1./4.47	Simplified voyage data recorder (S-VDR)	—	Reg. V/20.	— — —	Reg. V/20, IMO Res. A.694(17), IMO Res. MSC.163(78),	— — —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),	B + D B + E B + F G

					— IMO Res. MSC.191(79).		— EN 61162 series, — EN 61996-2 (2008), — IEC 62288 Ed. 2.0 (2014-07). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 61996-2 (2007), — IEC 62288 Ed. 2.0 (2014-07).			
A.1/4.48	Mechanical pilot hoist	Deliberately left blank (as IMO Res. MSC.308(88), in force on 1 July 2012, quotes: “Mechanical pilot hoists shall not be used”)									
A.1/4.49	Pilot ladder	— Reg. V/23, — Reg. X/3.			— Reg. V/23, — IMO Res.A.1045(27), — IMO MSC/Circ.1428.		— IMO Res.A.1045(27), — ISO 799 (2004).		B + D B + F G		
A.1/4.50	DGPS Equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.~~36~~(63)-(1994 HSC			— Reg. V/19, — IMO Res. A.694 (17), — IMO Res. MSC.36(63)-		— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),		B + D B + E B + F G		

			Code) 13, — IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 13.		(1994 HSC Code) 13, — IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 13, — IMO Res. MSC.112(73), — IMO Res. MSC.114(73), — IMO Res. MSC.191(79).	—	EN 61108-1 (2003), EN 61108-4 (2004), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-1 (2003), — IEC 61108-4 (2004), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).	
A.1/4.51	DGLONASS Equipment	— — — —	Reg. V/18, Reg. X/3, IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-	— —	Reg. V/19, IMO Res. A.694 (17), IMO Res. MSC.36(63)-(1994 HSC Code) 13,	— —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61108-2 (1998),	B + D B + E B + F G

			(2000 HSC Code) 13.	— IMO Res. MSC.113(73), — IMO Res. MSC.~~114~~(73), — IMO Res. MSC.191(79).	IMO Res. MSC.97(73)-(2000 HSC Code) 13, — IMO Res. MSC.113(73), — IMO Res. MSC.~~114~~(73), — IMO Res. MSC.191(79).	EN 61108-4 (2004), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-2 (1998), — IEC 61108-4 (2004), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).
A.1/4.52	Daylight signalling lamp	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.~~95~~(72), — IMO Res. MSC.97(73)-	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), ISO 25861 (2007). Or, IEC 60945 (2002) including	B + D B + E B + F	

						(2000 HSC Code).			IEC 60945 Corrigendum 1 (2008), — ISO 25861 (2007).		
A.1/4.53	Radar target enhancer	—	Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	—	Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13, IMO Res. MSC.164(78), ITU-R M 1176-1 (02/13)	—	ISO 8729-2 (2009), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), Or, ISO 8729-2 (2009), IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F G		
A.1/4.54	Bearing Device	—	Reg. V/18.	—	Reg. V/19.	—	ISO 25862 (2009), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), Or, ISO 25862 (2009), IEC 60945	B + D B + E B + F G			

							(2002) including IEC 60945 Corrigendum 1 (2008).	
A.1/4.55	Search and rescue locating devices (SRLD): AIS SART equipment	— Reg. III/4, — Reg. IV/14.		— Reg. III/6, — Reg. III/26, — Reg. IV/7, — IMO Res. MSC.246(83), — IMO Res. MSC.256(84), — ITU-R M. 1371-5(2014).		—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61097-14 (2010). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-14 (2010).	B + D B + E B + F G
A.1/4.56	Galileo Receiver	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.		— Reg. V/19, — IMO Res. A.694(17), — IMO Res. A.813(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC		—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61108-3 (2010), EN 61162 Series, IEC 62288 Ed. 2.0 (2014-07).	B + D B + E B + F G

				Code) 13, — IMO Res. MSC.191(79), — IMO Res. MSC.233(82).		Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-3 (2010), — IEC 61162 Series, — IEC 62288 Ed. 2.0 (2014-07).		
A.1/4.57	Bridge Navigational Watch Alarm System (BNWAS)	— Reg. V/18.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.128(75), — IMO Res. MSC.191(79).	—	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 Series, — IEC 62288 Ed. 2.0 (2014-07). — IEC 62616(2010) including IEC 62616 Corrigendum 1 (2012). Or, — IEC 60945 (2002) including IEC	B + D B + E B + F G		

										60945 Corrigendum 1 (2008), — IEC 61162 Series, — IEC 62288 Ed. 2.0 (2014-07). — IEC 62616 (2010) including IEC 62616 Corrigendum 1 (2012).	
A.1/4.58 Refer to note (b) of this Annex A.1	Sound reception system	— — — —	Reg. V/18, Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code), IMO Res. MSC.97(73)-(2000 HSC Code).	— — — —	Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code), IMO Res. MSC.86(70), IMO Res. MSC.97(73)-(2000 HSC Code), IMO Res. MSC.191(79).	— — — —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). ISO 14859 (2012). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),	B + D B + E B + F G			

						—	IEC 61162 series,	
						—	IEC 62288 Ed. 2.0 (2014-07).	
						—	ISO 14859 (2012).	
A.1/4.59 Refer to note (c) of this Annex A.1	Integrated navigation system	—	Reg. V/18,	—	Reg. V/19,	—	EN 60945 (2002) including Corrigendum 1 (2008),	B + D B + E B + F G
		—	Reg. X/3,	—	IMO Res. A.694(17),			
		—	IMO Res. MSC.36(63)-(1994 HSC Code) 13,	—	IMO Res. MSC.36(63)-(1994 HSC Code) 13,	—	EN 61162 series,	
		—	IMO Res. MSC.97(73)-(2000 HSC Code) 13.	—	IMO Res. MSC.97(73)-(2000 HSC Code) 13,	—	IEC 62288 Ed. 2.0 (2014-07).	
				—	IMO Res. MSC.~~191~~191(79),	—	IEC 61924-2 (2012). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed. 2.0 (2014-07). IEC 61924-2 (2012).	
				—	IMO Res. MSC.252(83),			
				—	IMO Res. MSC.302(83) (Bridge Alert Management, (BAM)).			

5. **Radiocommunication equipment**

Notes applicable to section 5: Radiocommunication equipment.

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

Column 5:

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

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

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

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

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

			as applicable			
1	2	3	4	5		6
A.1/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 14.	— Reg. IV/7, — Reg. X/3, — IMO Res. A.385(X), — IMO Res. A.524(13), — IMO Res. A.694(~~17~~), — IMO Res. A.803(~~19~~), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO MSC/Circ.862, — IMO MSC.1/Circ.1460, — IMO COMSAR Circ.32, — ITU-R M.489-2 (10/95), — ITU-R M.493-13 (10/09), — ITU-R	— IMO MSC/Circ.862, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI EN 301 843-2 V1.2.1 (2004-06), ETSI EN 301 925 V1.4.1 (2013-05).		B + D B + E B + F

				—	M.541-9 (05/04), ITU-R M.689-3 (03/12).		
A.1/5.2	VHF DSC watch-keeping receiver	—	Reg. IV/14,	—	Reg. IV/7,	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI EN 301 033 V1.4.1 (2013-09), ETSI EN 301 843-2 V1.2.1 (2004-06),
		—	Reg. X/3,	—	Reg. X/3,		
		—	IMO Res. MSC.36(63)-(1994 HSC Code) 14,	—	IMO Res. A.694(17), IMO Res. A.803(~~19~~),		
		—	IMO Res. MSC.97(73)-(2000 HSC Code) 14.	—	IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 14,		
				—	IMO Res. MSC.97(73)-(2000 HSC Code) 14,		
				—	IMO COMSAR Circ.32,		
				—	ITU-R M.489-2 (10/95~~),~~		
				—	ITU-R M.493-13 (10/09),		
				—	ITU-R M.541-9 (05/04).		
A.1/5.3	NAVTEX receiver	—	Reg. IV/14,	—	Reg. IV/7,	—	EN 60945 (2002) including IEC 60945 Corrigendum
		—	Reg. X/3,	—	Reg. X/3,		
		—	IMO Res. MSC.36(63)-	—	IMO Res. A.694(17),		

			(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	—	IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 14, IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO Res. MSC.148(77), — IMO COMSAR Circ.32, — ITU-R M.540-2 (06/90), — ITU-R M.625-4 (03/12)	1 (2008), ETSI EN 300 065-1 V1.2.1 (2009-01), ETSI EN 301 843-4 V1.2.1 (2004-06), Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-6 (2012-01).
A.1/5.4	EGC receiver	— — — — —	Reg. IV/14, Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 14, IMO Res. MSC.97(73)-(2000 HSC Code) 14.	— — — — —	Reg. IV/7, Reg. X/3, IMO Res. A.570(14), IMO Res. A.694(~~17~~), IMO Res. MSC.36(63)-(1994 HSC Code) 14, IMO Res. MSC.97(73)-(2000 HSC Code) 14,	— — — — —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), ETSI ETS 300 460 Ed.1 (1996-05), ETSI ETS 300 460/A1 (1997-11), ETSI EN 300	B + D B + E B + F

				—	IMO Res. MSC.306(87),		829 V1.1.1 (1998-03),			
				—	IMO COMSAR Circ.32.		ETSI EN 301 843-1 V1.3.1 (2012-08), Or,			
						—	IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),			
						—	IEC 61097-4 (2012-05).			
A.1/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	—	Reg. IV/14,	—	Reg. IV/7,	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series, ETSI ETS 300 067 Ed.1 (1990-11), ETSI ETS 300 067/ A1 Ed.1 (1993-10).	B + D	B + E	B + F
		—	Reg. X/3,	—	Reg. X/3,					
		—	IMO Res. MSC.36(63)-(1994 HSC Code) 14,	—	IMO Res. A.694(17),					
					IMO Res. A.699(17),					
		—	IMO Res. MSC.97(73)-(2000 HSC Code) 14	—	IMO Res. A.700(17),					
					IMO Res. A.806(19),					
				—	IMO Res. MSC.36(63)-(1994 HSC Code) 14,					
					IMO Res. MSC.97(73)-(2000 HSC Code) 14,	—	IEC 60945 (2002) including			

				— IMO MSC.1/ Circ.1460, — IMO COMSAR Circ.32, — ITU-R M.492-6 (10/95), — ITU-R M.540-2 (06/90), — ITU-R M.625-4 (03/12), — ITU-R M.688 (06/90).				IEC 60945 Corrigendum 1 (2008), IEC 61162 Series, ETSI ETS 300 067 Ed.1 (1990-11), ETSI ETS 300 067/ A1 Ed.1 (1993-10).		
A.1/5.6	406 MHz EPIRB (COSPAS-SARSAT)	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.		— Reg. IV/7, — Reg. X/3, — IMO Res. A.662(16), — IMO Res. A.694(17), — IMO Res. A.696(17), — IMO Res. A.810(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14,				IMO MSC/ Circ.862, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), ETSI EN 300 066 V 1.3.1 (2001-01). Or, IMO MSC/ Circ.862, IEC 60945 (2002) including IEC 60945 Corrigendum	B + D B + E B + F	

			— IMO MSC/Circ.~~862~~, — IMO COMSAR Circ.32, — ITU-R M.633-4 (12/10), — ITU-R M.690-2 (03/12).	1 (2008), IEC 61097-2 (2008), *Note:* IMO MSC/Circ. 862 is applicable only to the optional remote activation device, not to the EPIRB itself.	
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left blank			
A.1/5.8	MF DSC 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 *Note:* In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	— Reg. IV/9, — Reg. IV/10, — Reg. X/3, — IMO Res. A.694(17), — IMO Res. A.804(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 14,	— IMO MSC/Circ.~~862~~, — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — EN 61162 series, — ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02),	B + D B + E B + F

				—	IMO MSC.1/Circ.1460,	—	ETSI EN 300 373-1 V1.4.1 (2013-09),		
				—	IMO COMSAR Circ.32,				
				—	ITU-R M.493-13 (10/09),	—	ETSI EN 301 843-5 V1.1.1 (2004-06).		
				—	ITU-R M.541-9 (05/04).				
A.1/5.11	MF DSC watch-keeping receiver	—	Reg. IV/14,	—	Reg. IV/9,	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI EN 301 033 V1.4.1 (2013-09), ETSI EN 301 843-5 V1.1.1 (2004-06).	B + D B + E B + F	
		—	Reg. X/3,	—	Reg. IV/10,				
		—	IMO Res. MSC.~~36~~(63)-(1994 HSC Code)-14,	—	Reg. X/3, IMO Res. A.694(17),				
		—	IMO Res. MSC.97(73)-(2000 HSC Code) 14.	—	IMO Res. A.804(19),				
				—	IMO Res. MSC.36(63)-(1994 HSC Code) 14,	—			
				—	IMO Res. MSC.97(73)-(2000 HSC Code)-14,	—			
				—	IMO COMSAR Circ.32,				
				—	ITU-R M.493-13 (10/09),	—			
				—	ITU-R M.541-9 (05/04),				

				— ITU-R M.1173-1 (03/12).			
A.1/5.12	Inmarsat-B SES *Note:* The service will be discontinued on and after 31 December 2016.	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.		— Reg. IV/10, — Reg. X/3, — IMO Res. A.570(14), — IMO Res. A.694(17), — IMO Res. A.808(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO MSC/Circ.862, — IMO COMSAR Circ.32.	IMO MSC/Circ 862, EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, IMO MSC/Circ 862, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F
A.1/5.13	Inmarsat-C SES	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000		— Reg. IV/10, — Reg. X/3, — IMO Res. A.570(14), — IMO Res. A.664 (16), (applicable only if the	IMO MSC/Circ.862, EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series,	B + D B + E B + F

			HSC Code) 14.		Inmarsat C SES comprises EGC functions), — IMO Res. A.694(17), — IMO Res. A.807(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO Res. MSC.306(87), — IMO MSC/Circ.862, — IMO COMSAR Circ.32.	ETSI ETS 300 460 Ed.1 (1996-05), ETSI ETS 300 460/A1 (1997-11), ETSI EN 300 829 V1.1.1 (1998-03), ETSI EN 301 843-1 V1.3.1 (2012-08), Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-4 (2012), — IEC 61162 series.
A.1/5.14	MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony *Note:* In line with IMO and ITU decisions, the requirements	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14,		— Reg. IV/10, — Reg. X/3, — IMO Res. A.694(17), — IMO Res. A.806(19), — IMO Res.		IMO MSC/Circ.862, EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),	B + D B + E or F

	for Two Tone Alarm generator and transmission on A3H are no longer applicable in testing standards.	—	IMO Res. MSC.97(73)-(2000 HSC Code)— 14.		MSC.~~36~~(63)-(1994 HSC Code)— 14, IMO Res. MSC.97(73)-(2000 HSC — Code) 14, — IMO MSC/ Circ.862, — IMO MSC.~~1/~~ Circ.1460, — IMO COMSAR Circ.32, — ITU-R — M.476-5 (10/95), — ITU-R M.492-6 (10/95~~),~~ — ITU-R M.493-13 (10/09), — ITU-R — M.541-9 (05/04), — ITU-R M.625-4 (03/12), — ITU-R M.1173-1 (03/12).	EN 61162 series, ETSI ETS 300 067 Ed.1 (1990-11), ETSI ETS 300 067/ A1 Ed.1 (1993-10), ETSI EN 300 338-1 V1.3.1 (2010-02), ETSI EN 300 338-2 V1.3.1 (2010-02), ETSI EN 300 373-1 V1.4.1 (2013-09), ETSI EN 301 843-5 V1.1.1 (2004-06).
A.1/5.15	MF/HF DSC scanning watch keeping receiver	— — —	Reg. IV/14, Reg. X/3, IMO Res. MSC.36(63)-	— — —	Reg. IV/10, Reg. X/3, IMO Res. A.694(17),	— EN 60945 (2002) including IEC 60945 Corrigendum	B + D B + E B + F

			(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	— IMO Res. A.806(~~19~~), — IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO COMSAR Circ.32, — ITU-R M.493-13 (10/09), — ITU-R M. 541-9 (05/04).	— 1 (2008), EN 61162 series, — ETSI EN 300 338-1 V1.3.1 (2010-02), — ETSI EN 300 338-2 V1.3.1 (2010-02), — ETSI EN 301 033 V1.4.1 (2013-09), — ETSI EN 301 843-5 V1.1.1 (2004-06). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-3 (1994), — IEC 61097-8 (1998), — IEC 61162 series.
A.1/5.16	Aeronautical two way VHF radio	Moved to A.2/5.8				

	telephone apparatus				
A.1/5.17	Portable survival craft two-way VHF radiotelephone apparatus	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	— Reg. III/6, — IMO Res. A.694(17), — IMO Res. A.809(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, — IMO Res. MSC.149(77), — ITU-R M.489-2 (10/95).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ETSI EN 300 225 V1.4.1 (2004-12), — ETSI EN 301 843-2 V1.2.1 (2004-06). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61097-12 (1996).	B + D B + E B + F
A.1/5.18	Fixed survival craft two-way VHF radiotelephone apparatus	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC	— Reg. III/6, — IMO Res. A.694(17), — IMO Res. A.809(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — ETSI EN 301 466 V1.1.1 (2000-10), Or,	B + D B + E B + F

			Code) 14.	— —	IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, ITU-R M.489-2 (10/95).	— —	IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-12 (1996).	
A1/ 5.19	Inmarsat-F77	— — — —	Reg. IV/14, Reg. X/3, IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 14, IMO Res. MSC.97(73)-(2000 HSC Code) 14.	— — — — —	Reg. IV/10, IMO Res. A.570 (14), IMO Res. A.808 (19), IMO Res. A.694 (17), IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 14, IMO Res. MSC.97(73)-(2000 HSC Code) 14, IMO MSC/Circ.862, IMO COMSAR Circ.32.	— — — — —	IMO MSC/Circ.862, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-13 (2003). Or, IMO MSC/Circ.862, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-13 (2003).	B + D B + E B + F

6. **Equipment required under COLREG 72**

No.	Item designation	Regulation COLREG 72	Regulations of	Testing standards	Modules for

		where "type approval" is required	**COLREG and the relevant resolutions and circulars of the IMO, as applicable**		**conformity assessment**
1	**2**	**3**	**4**	**5**	**6**
A.1/6.1	Navigation lights	—	— COLREG Annex I/14. — IMO Res. A.694(17), — IMO Res. MSC.253(83)	— EN 14744 (2005) including AC (2006), EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — EN 14744 (2005) including AC (2006), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	B + D B + E B + F G

7. **Bulk carrier safety equipment**

No items in Annex A.1.

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

No.	**Item designation**	**Regulation SOLAS 74, as**	**Regulations of SOLAS 74, as**	**Testing standards**	**Modules for**

		amended, where "type approval" is required	**amended, and the relevant resolutions and circulars of the IMO, as applicable**		**conformity assessment**
1	**2**	**3**	**4**	**5**	**6**
A.1/8.1	Water level detectors	— Reg. II-1/22-1, — Reg. II-1/25, — Reg. XII/12.	— Reg. II-1/25, Reg. XII/12, IMO Res.A.1021(26), — IMO Res. MSC.188(79), — IMO MSC.1/ Circ 1464 Rev.1	— IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), IEC 60529 Ed.2.2 (2001), — IMO Res. MSC.188(79), — IMO MSC.1/ Circ. 1291.	B + D B + E B + F

ANNEX A.2

EQUIPMENT FOR WHICH NO DETAILED TESTING STANDARDS EXIST IN INTERNATIONAL INSTRUMENTS

1. **Life-saving appliances**

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

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

1	2	3	4	5	6
A.2/1.1	Radar reflector for liferafts	— Reg. III/4, — Reg. III/34, — Reg. X/3.	— IMO Res. MSC.48(66)-(LSA Code).		
A.2/1.2	Immersion suit materials	Deliberately left blank			
A.2/1.3	Float-free launching appliances for survival craft	Deliberately left blank			
A.2/1.4	Embarkation ladders	Moved to A.1/1.29			
A.2/1.5	Public address & general emergency alarm system (when used as fire alarm device item A.1/3.53 shall apply)	— Reg. III/6.	— IMO Res. A.1021(26), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.48(66)-(LSA Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO MSC/Circ.808.		

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	Testing standards	Modules for conformity assessment

			and circulars of the IMO, applicable		
1	2	3	4	5	6
A.2/2.1	NO_x analyser of Chemilunescent detector (CLD) or heated cheminulescent detector type (HCLD) type for use in on board direct measurement	Moved to A.1/2.8			
A.2/2.2	On board exhaust gas cleaning systems	Moved to A.1/2.10			
A.2/2.3	Equipment using other equivalent methods to reduce on board NO_x emissions	— Annex VI, Reg. 4.	— Annex VI, Reg. 4		
A.2/2.4	Equipment using other technological methods to limit SO_x emissions	— IMO Res. MEPC.176(58) (Revised MARPOL Annex VI, Reg. 4), — IMO Res. MEPC.184(59).	— IMO Res. MEPC.176(58) (Revised MARPOL Annex VI, Reg. 4).	—	
A.2/2.5	On board NO_x analysers using a measurement method other than the Direct Measurement and	Deliberately left blank as this sort of equipment is included into A.1/2.8			

	Monitoring Method of the NO_x 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	Moved to A.1/3.51			

	fire alarm systems components for control stations, service spaces, accommodation spaces, machinery spaces and unattended machinery spaces									
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-2/10,	—	Reg. II-2/10,	—	IMO Res. MSC.36(63)-(1994 HSC Code) 7,	—	EN 60079 series.	
		—	Reg. X/3,	—	IMO Res. MSC.98(73)-(FSS Code) 3.	—	IMO Res. MSC.97(73)-(2000 HSC Code) 7,			
		—	IMO Res. MSC.98(73)-(FSS Code), 3.							
A.2/3.9	Protective clothing resistant to chemical attack	—	Reg. II-2/19.	—	Reg. II-2/19,	—	IMO Res. MSC.36(63)-(1994 HSC Code) 7,	—	EN 943-1 (2002) including AC (2005), EN 943-2 (2002), EN ISO	

			MSC.97(73)-(2000 HSC Code) 7.	— 6529 (2001), — EN ISO 6530 (2005), — EN 14605 (2005) including A1(2009), — IMO MSC/ Circ.1120.	
A.2/3.10	Low-location lighting systems	Moved to A.1/3.40			
A.2/3.11	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces	Moved to A.1/3.10			
A.2/3.12	Equivalent fixed gas fire extinguishing systems for machinery spaces and cargo pump rooms	Moved to A.1/3.45			
A.2/3.13	Compressed airline breathing apparatus (High Speed Craft)	Item deleted			
A.2/3.14	Fire hoses (reel type)	Moved to A.1/3.56			
A.2/3.15	Sample extraction smoke detection systems components	Moved to A.1/3.63			
A.2/3.16	Flame detectors	Moved to A.1/3.51			

A.2/3.17	Manual call points	Moved to A.1/3.51				
A.2/3.18	Alarm devices	Moved to A.1/3.53				
A.2/3.19	Fixed water based local application fire fighting systems components for use in category “A” machinery spaces.	Moved to A.1/3.48				
A.2/3.20	Upholstered furniture	Moved to A.1/3.20				
A.2/3.21	Paint lockers and flammable liquid lockers fire extinguishing systems components	— Reg. II-2/10.	—	Reg. II-2/10, IMO MSC.1/ Circ.1239.		
A.2/3.22	Galley Exhaust Duct Fixed Fire Extinguishing Systems components	Moved to A.1/3.68				
A.2/3.23	Helicopter Deck Fire Extinguishing Systems components	Moved to A.1/3.67				
A.2/3.24	Portable Foam Applicator Units	— Reg. II-2/10, — Reg. II-2/20, — Reg. X/3.	— — —	Reg. II-2/10, Reg. II-2/20, IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-		

			— (2000 HSC Code), 7, — IMO Res. MSC.98(73)- (FSS Code), 4, — IMO MSC.1/ Circ.1239, — IMO MSC.1/ Circ.1313.		
A.2/3.25	C class Divisions	Moved to A.1/3.64			
A.2/3.26	Gaseous Fuel Systems Used for Domestic Purposes (components)	— Reg. II-2/4.	— Reg. II-2/4, — IMO MSC.1/ Circ.1276.		
A.2/3.27	Fixed Gas Fire Extinguishing Systems (CO_2) components.	— Reg. II-2/10, — Reg. X/3.	— Reg. II-2/10, — Reg. II-2/20, — IMO Res. MSC.36(63)- (1994 HSC Code), 7, — IMO Res. MSC.97(73)- (2000 HSC Code), 7, — IMO Res. MSC.98(73)- (FSS Code), 5, — IMO MSC.1/ Circ.1313,	Electrical automatic control and delay devices: — EN 12094-1 (2003). Non-electrical automatic control and delay devices: — EN 12094-2 (2003). Manual triggering and stop devices: — EN 12094-3 (2003). Container valve assemblies and their actuators:	

			— IMO MSC.1/ Circ.1318, — IMO MSC.1/ Circ.1456	— EN 12094-4 (2004). High and low pressure selector valves and their actuators: — EN 12094-5 (2006). Non-electrical disable devices: — EN 12094-6 (2006). Nozzles for CO_2 systems: — EN 12094-7 (2000) including A1 (2005). Connectors: — EN 12094-8 (2006). Pressure gauges and pressure switches: — EN 12094-10 (2003). Mechanical weighing devices: — EN 12094-11 (2003). Check valves and non-return valves: — EN 12094-13 (2001) including AC (2002).

				Odorizing devices for CO_2 low pressure systems: — EN 12094-16 (2003).	
A.2/3.28	Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers	Moved to A.1/3.57			
A.2/3.29	Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck Protection.	Moved to A.1/3.58			
A.2/3.30	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	Moved to A.1/3.59			
A.2/3.31	Water Spraying Hand Operated System	— Reg. II-2/10, — Reg. II-2/19.	— Reg. II-2/10, — Reg. II-2/19.		
A.2/3.32	Dry chemical powder extinguishing systems	Moved to A.1/3.62			
A.2/3.33 New item	Fire hoses with diameter > 52 mm	— Reg. II-2/10, — Reg. X/3.	— Reg. II-2/10, — IMO Res. MSC.36(63)-		

			— (1994 HSC Code) 7, — IMO Res. MSC.97(73)- (2000 HSC Code) 7.		

4. **Navigation equipment**

Notes applicable to section 4: Navigation equipment

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

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

Column 5:

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

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

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

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

No.	**Item designation**	**Regulation SOLAS 74, as amended, where "type approval" is required**	**Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable and ITU recommendations, as applicable**	**Testing standards**	**Modules for conformity assessment**
1	2	3	4	5	6
A.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	Moved to A.1/4.30			

	Information System (ECDIS).	
A.2/4.9	Electronic Chart Display and Information System (ECDIS) backup	Moved to A.1/4.30
A.2/4.10	Raster Chart Display System (RCDS)	Moved to A.1/4.30
A.2/4.11	Combined GPS/ GLONASS equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code). — Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code), IMO Res. MSC.97(73)-(2000 HSC Code), IMO Res. MSC.115(73), — IMO Res. MSC.191(79). — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61108-1 (2003), EN 61108-2 (1998), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61108-1 (2003),

				— IEC 61108-2 (1998), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).
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	— Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— IMO Res. A.382(X), — IMO Res. A.694(~~17~~), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000	— ISO 1069 (1973), — ISO 25862(2009), — EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or,	

				HSC Code).	—	ISO 1069 (1973), — ISO 25862(2009), — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).
A.2/4.20	Track control system for — high-speed craft	— Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	—	IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code), IMO Res. MSC.97(73)-(2000 HSC Code), IMO Res. MSC.191(79).	— — —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed. 2.0 (2014-07).
A.2/4.21	Chart facilities for	Moved to A.1/4.45				

	shipborne radar	
A.2/4.22	Transmitting heading device THD (Gyroscopic method)	Moved to A.1/4.46
A.2/4.23	Transmitting heading device THD (Magnetic method)	Moved to A.1/4.2
A.2/4.24	Thrust indicator	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code). — Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO Res. MSC.191(79).
A.2/4.25	Lateral thrust, pitch and mode indicators	— Reg. V/18, — Reg. X/3, — Reg. V/19,

EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed. 2.0 (2014-07).

EN 60945 (2002) including

		— IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— IMO Res. A.694(17), IMO Res. MSC.~~36~~(63)-(1994 HSC Code),— IMO Res. MSC.97(73)-(2000 HSC Code),— IMO Res. MSC.191(79).		IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 series, — IEC 62288 Ed. 2.0 (2014-07).
A.2/4.26	Rate-of-turn indicator	Moved to A.1/4.9				
A.2/4.27	Rudder angle indicator	Moved to A.1/4.20				
A.2/4.28	Propeller revolution indicator	Moved to A.1/4.21				
A.2/4.29	Pitch indicator	Moved to A.1/4.22				
A.2/4.30	Bridge equipment system	Deliberately left blank				
A.2/4.31	Bearing Device	Moved to A.1/4.54				
A.2/4.32	Bridge Navigational Watch Alarm	Moved to A.1/4.57				

	System (BNWAS)									
A.2/4.33	Track control system (working at ship's speed from 30 knots and above)	Deliberately left blank								
A.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	Deliberately left blank								
A.2/4.35	Galileo Receiver	Moved to A.1/4.56								
A.2/4.36	AIS SART equipment	Moved to A.1/4.55								
A.2/4.37 (new item)	Electronic Inclinometer	—	Reg. V/18-7.	—	IMO Res. A.694(17),	—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series. Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 Series.			
				—	IMO Res. MSC.191(79),					
				—	IMO Res. MSC.363(92),					
				—	IMO MSC.1/ Circ.982,					
				—	IMO MSC.~~1~~/ Circ.1228,					
A.2/4.38 Ex A.1/4.11	Loran-C equipment	—	Reg. V/18,	—	Reg. V/19,	—	EN 60945 (2002) including IEC 60945			
		—	Reg. X/3,	—	IMO Res. A.694(17),					
		—	IMO Res.							

			MSC.~~36~~(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	IMO Res. A.818(19), IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.~~97~~(73)-(2000 HSC Code) 13, IMO Res. MSC.191(79).		Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61162 series, IEC 62288 Ed. 2.0 (2014-07).
A.2/4.39 Ex A.1/4.12	Chayka equipment	— — — — —	Reg. V/18, Reg. X/3, IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— — — — —	Reg. V/19, IMO Res. A.694 (17), IMO Res. A.818 (19), IMO Res. MSC.~~36~~(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC	— — — — —	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 series, IEC 62288 Ed. 2.0 (2014-07). Or, IEC 60945 (2002) including IEC

			Code) 13, — IMO Res. MSC.~~19~~1(79).	— IEC 62288 Ed. 2.0 (2014-07).	60945 Corrigendum 1 (2008), IEC 61162 series,

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 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07) — Part 3: Serial data instrument network

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

  — IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 — Part 3: Serial data instrument network

  — IEC 61162-3-am2 ed1.0 (2014-07) Amendment 2 — Part 3: Serial data instrument network

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

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

— EN 61162-1 (2011) — Part 1: Single talker and multiple listeners

— EN 61162-2 (1998) — Part 2: Single talker and multiple listeners, high-speed transmission

— EN 61162-3 (2008) — Part 3: Serial data instrument network

  — EN 61162-3-am1 (2010) Amendment 1 — Part 3: Serial data instrument network

  — IEC 61162-3-am2 ed1.0 (2014-07) Amendment 2 — Part 3: Serial data instrument network

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

No.	Item designation	Regulation SOLAS 74, as amended, where	Regulations of SOLAS 74, as amended, and the	Testing standards	Modules for conformity assessment

		"type approval" is required	**relevant resolutions and circulars of the IMO, as applicable and ITU recommendations, as applicable**		
1	2	3	4	5	6
A.2/5.1	VHF EPIRB	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).	— Reg.IV/8, — IMO Res. A.662(16), — IMO Res. A.694(17), — IMO Res. A.805(19), — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — ITU-R M.489-2 (10/95), — ITU-R M.693-1 (03/12).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	
A.2/5.2	Radio reserve source of energy	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994	— Reg. IV/13, — IMO Res. A.694(17), — IMO Res. A.702(17),	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	

			HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).		— IMO Res. MSC.36(63)-(1994 HSC Code), IMO Res. MSC.97(73)-(2000 HSC Code), — IMO COMSAR Circ.16, — IMO COMSAR Circ.32.		Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).				
A.2/5.3	Inmarsat-F SES	Moved to A.1/5.19.									
A.2/5.4	Distress panel	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).		— Reg. IV/6, IMO Res. A.694(17), IMO Res. MSC.36(63)-(1994 HSC Code),— IMO Res. MSC.97(73)-(2000 HSC Code), — IMO MSC/Circ. 862, — IMO COMSAR Circ.32.		EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).				
A.2/5.5	Distress alarm or alert panel	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994		— Reg. IV/6, IMO Res.A.694(17), IMO Res. MSC.36(63)-(1994		EN 60945 (2002) including IEC 60945 Corrigendum					

			HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code).		HSC Code), — IMO Res. MSC.97(73)-(2000 HSC Code), — IMO MSC/Circ.862, — IMO COMSAR Circ.32.		1 (2008). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).	
A.2/5.6	L- band EPIRB (INMARSAT)	Deliberately left blank								
A.2/5.7	Ship security alert system			— Reg. XI-2/6, — IMO Res. A.694(17), — IMO Res. MSC.147(77), — IMO MSC/Circ.1072.		—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), EN 61162 Series. Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — IEC 61162 Series.			
A.2/5.8 Ex A.1/5.16	Aeronautical two way VHF radio telephone apparatus	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC		— Reg. IV/7, — IMO Res. A.694(17), — IMO Res. MSC.36(63)-(1994		—	EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).			

			Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO Res. MSC.80(70), — IMO COMSAR Circ.32, — ICAO Convention, Annex 10, Radio - Regulations.	— ETSI EN 301 688 V1.1.1 (2000-07). Or, IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008). ETSI EN 301 688 V1.1.1 (2000-07).

6. **Equipment required under COLREG 72**

No.	Item designation	Regulation COLREG 72 where "type approval" is required	Regulations of COLREG and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	**2**	**3**	**4**	**5**	**6**
A.2/6.1	Navigation lights	Moved to A.1/6.1.			
A.2/6.2	Sound signal appliances	— COLREG 72 Annex III/3.	— COLREG 72 Annex III/3, — IMO Res. A.694(17).	— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008), Whistles — COLREG

				72 Annex III/1 (Performance), — Bells or Gongs — COLREG 72 Annex III/2 (Performance). Or, — IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), — Whistles — COLREG 72 Annex III/1 (Performance), — Bells or Gongs — COLREG 72 Annex III/2 (Performance).	

7. **Bulk carrier safety equipment**

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

1	2	3	4	5	6
A.2/7.1	Loading instrument	— Reg. XII/11, — 1997 SOLAS Conference Res. 5.	— Reg. XII/11, — 1997 SOLAS Conference Res. 5.	IMO MSC.1/Circ 1229.	
A.2/7.2	Water level detectors on bulk carriers	Item deleted			

8. SOLAS Chapter II-1 equipment

No.	**Item designation**	**Regulation SOLAS 74, as amended, where "type approval" is required**	**Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable**	**Testing standards**	**Modules for conformity assessment**
1	**2**	**3**	**4**	**5**	**6**
A.2/8.1	Cold-weather starting of generator sets (starting devices)	— Reg. II-1/44, — Reg. X/3.	— Reg. II-1/44, — IMO Res. MSC.36(63)-(1994 HSC Code) 12, — IMO Res. MSC.97(73)-(2000 HSC Code) 12. — IMO MSC.1/Circ 1464 Rev.1.		

(**1**) OJ L 46, 17.2.1997, p. 25.

(**2**) OJ L 304, 14.11.2013, p. 1.

(**3**) OJ L 220, 25.7.2014, p. 1.