

# MSN 1735 Amendment 5 (M+F)

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## Type - Approval of Marine Equipment (UK Nominated Bodies)

**Notice to all Manufacturers, Shipbuilders, Shipowners, Ship Operators and Managers, Designers and Marine Consultants, Masters and Officers of Merchant Ships, Skippers of Fishing Vessels and Owners of Yachts and Pleasure Crafts**

*This Notice amends Merchant Shipping Notice No. MSN 1735 (M+F) and revokes MSN 1735 (M+F) Amendment 4 and MSN 1735 (M+F) Amendment 4 CORRECTION*

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### PLEASE NOTE:-

Where this document provides guidance on the law it should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel and you should consider seeking independent legal advice if you are unsure of your own legal position.

### Summary

This Notice implements changes to the listing of equipment in Annex A.2 of the European Council Directive 96/98/EC of 20 December 1996 on marine equipment made by EU Commission Directive 2010/68/EC of 22 October 2010. The changes apply where no detailed internationally agreed testing standard exists. Equipment listed in the amended Annex A.2. will continue to be type approved by the UK's Nominated Bodies until international standards are agreed and the products are transferred to Annex A.1 of the Marine Equipment Directive and into MSN 1734 (M+F).

#### Key Points

- This Notice further amends MSN 1735 (M + F) and revokes and replaces MSN 1735 (M + F) Amendment 4 and MSN 1735 (M+F) Amendment 4 CORRECTION. It has effect from 10 December 2011.
- This Notice implements Commission Directive 2010/68/EC of 22 October 2010
- This Notice updates the United Kingdom's designated Nominated Body contact list

## 1. Introduction

- 1.1 The Merchant Shipping (Delegation of Type Approval) Regulations 1996 (S.I. 1996 No 147) provide for Nominated Bodies to undertake the "type approval" of marine equipment,

of a safety or pollution prevention nature, for use on board United Kingdom ships. This legislation was supplemented by The Merchant Shipping (Marine Equipment) Regulations 1999 (SI 1999 No.1957) which implemented the European Council (EC) Directive 96/98/EC of 20 December 1996 on marine equipment ("the MED"). This introduced EU Notified Bodies for type approval of MED Annex A.1 listed marine equipment (see MSN 1734 (M+F) as amended by MSN 1734 amendment 5 for further details).

- 1.2 Commission Directives 98/85/EC, of 11 November 1998, 2001/53/EC of 10 July 2001, 2002/75/EC of 2 September 2002, 2008/67/EC of 30 June 2008 and 2009/26/EC of 6 April 2009 further amended the list of marine equipment for which no agreed international standard existed but which require type approval.

## **2. Amendment to MED Directive and to MSN 1735 (M+F) Annex A.2**

- 2.1 In response to changes to the testing standards developed by those organisations listed in Article 2(n) of the MED, the European Commission has again issued an amending Directive that updates the list of equipment for which no agreed international testing standards currently exist. These updates are set out in Annex A.2 of Directive 2010/68/EU, published in the Official Journal of the European Communities<sup>1</sup> No. L 305. 20.11.2010 and are required to be transposed into UK law by 10 December 2011
- 2.2 On 10 December 2011 the updates in Annex A.2 of Directive 2010/68/EC are implemented in UK law by Annex A.2 of this MSN, which replaces Annex A.2 of MSN 1735 (M + F). The previous Annex A.2 to MSN 1735 (M+F) is revoked and replaced by the new Annex A.2. of this Notice as from 10 December 2011. MSN 1735 (M+F) Amendment 4 and MSN 1735 (M+F) Amendment 4 Correction is revoked as from 10 December 2011.
- 2.3 Annex A.2 of this MSN also includes a list of "other" marine equipment some of which requires type approval as a consequence of (but not limited to) one or more of the following regulations:

Statutory Instrument 99 No. 1644 The Merchant Shipping (Implementation Schedule for Bulk Carriers) Regulations ~ Merchant Shipping Additional Safety Measures for Bulk Carriers) Regulations) 1999

Statutory Instrument 1996 No. 75 The Merchant Shipping (Distress Signals and Prevention of Collisions) Regulations

Statutory Instrument 1997 No. 1509 The Merchant Shipping (Cargo Ship Construction) Regulations

Statutory Instrument 1998 No. 1012 The Merchant Shipping (Fire Protection Large Ships) Regulations

Statutory Instrument 1997 No. 1508 The Merchant Shipping (Crew Accommodation) Regulations

Statutory Instrument 1998 No. 2070 The Merchant Shipping (Radio Installations) Regulations

Statutory Instrument 1999 No. 2205 The Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations

Statutory Instrument 1999 No. 2721 The Merchant Shipping (Life Saving Appliances for Ships) Regulations

Statutory Instrument 2000 No. 1850 The Merchant Shipping (EPIRB Registration) Regulations

Statutory Instrument 2002 No. 1473 The Merchant Shipping (Safety of Navigation) Regulations

Statutory Instrument 2004 No. 302 The Merchant Shipping (High Speed Craft) Regulations

Statutory Instrument 2008 No.2924 The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations

### **3. Update to UK's Nominated Bodies.**

3.1 On 10 December 2011 Section 8 of MSN 1735 (Information about Type Approvals) is revoked and replaced by the Amending Section 8 in this MSN. The amending Section 8 contains an updated contact list of UK Nominated Bodies approved to undertake type approval of the equipment listed. This replaces the original Section 8 in MSN 1735 (M+F) and revokes MSN 1735 (M+F) Amendment 4.

3.2 For equipment which is not listed in Annex A.2 to this MSN, or in MSN 1734 (M + F) as amended by MSN 1734 (M + F) amendment 5, and which requires to be type approved, contact the MCA at:

Marine Technology Branch  
Maritime and Coastguard Agency  
Spring Place  
105 Commercial Place  
Southampton SO15 1EG  
Tel: 023 80329 100  
Email: MTU@mcga.gov.uk

<sup>1</sup>The Official Journals may be obtained from:

The Stationery Office Ltd, Customer Services, PO Box 29, Norwich NR3 1GN; or from the EUR-Lex website (<http://eur-lex.europa.eu/en/index.htm>)

## More Information

Marine Technology Branch  
Maritime and Coastguard Agency  
Bay 2/27  
Spring Place  
105 Commercial Road  
Southampton  
SO15 1EG

Tel : +44 (0) 23 8032 9100  
Fax : +44 (0) 23 8032 9371  
e-mail: [MTU@mcga.gov.uk](mailto:MTU@mcga.gov.uk)

General Inquiries: [infoline@mcga.gov.uk](mailto:infoline@mcga.gov.uk)

MCA Website Address: [www.mcga.gov.uk](http://www.mcga.gov.uk)

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## **Amending Section 8 - Information about Type Approvals**

8.1. Information concerning Type Approved Marine Equipment and how to obtain type approval for equipment listed in the Annex A.2. is available from:

ABS Europe Ltd  
1 Frying Pan Alley  
London E1 7HR  
Tel: 0207 377 2453  
Fax: 0207 247 3255

Bureau Veritas Marine Division  
Head of Department Technology Equipment  
67/71 Boulevard du Chateau  
92200 Neuilly-sur-Seine  
France  
Tel. + 33 1 55 24 75 73  
Fax. + 33 1 55 24 70 45

Det Norkse Veritas  
1st Floor, 14 Mitchell Point Road  
Ensign Way  
Ensign Business Park  
SO31 4RF  
Tel: 02380 745940  
Fax: 02380 745941

Germanischer Lloyd AG  
Vorsetzen 35  
20459 Hamburg  
Germany  
Tel: 0049 40 36149 319  
Fax: 0049 40 36149 7399

London Design Support Services  
Lloyds Register EMEA  
71 Fenchurch Street  
London EC3M 4BS  
Tel: 0207 423 2566  
Fax: 0207 423 2053

QINETIQ Ltd.  
Cody Technology Park  
Building A5 Room 1005  
Ivley Road  
Farnborough GU14 0LX  
Tel: 01252 394 009 or 01252 394 236  
Fax: 01252 397 058

Registro Internazionale Navale (RINa Spa)  
4<sup>th</sup> Floor, Kingston House  
29-31 Kingston Crescent  
Portsmouth  
PO2 8AA  
Tel: 02392 666320  
Fax: 02392 666845

**ANNEX A.2. EQUIPMENT FOR WHICH NO DETAILED TESTING STANDARDS EXIST IN INTERNATIONAL INSTRUMENTS**

Commission Directive 2010/68/EU of 22 October 2010 amending Council Directive 96/98/EC on marine equipment

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 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/1.1	Radar reflector for liferafts	-Reg. III/4, -Reg. III/34, -Reg. X/3.	-IMO Res. MSC.48(66)-(LSA Code).		
A.2/1.2	Immersion suit materials	Deliberately left blank			
A.2/1.3	Float-free launching appliances for survival craft	-Reg. III/4, -Reg. III/34.	Reg. III/13, -Reg. III/16, -Reg. III/26, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.		
A.2/1.4	Embarkation ladders	Moved to A.1/1.29			

1	2	3	4	5	6
A.2/1.5	Public address and general emergency alarm system  (when used as fire alarm device item A.1/3.53 shall apply)	-Reg. III/6.	-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 where "type approval" is required	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO, applicable	Testing standards	Modules for conformity assessment
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1	2	3	4	5	6
A.2/2.1	On board NOx monitoring and recording devices	Moved to A.1/2.8			
A.2/2.2	On board exhaust gas cleaning systems	-Annex VI, Reg. 13, -Annex VI, Reg. 14.	-Annex VI Reg. 13, -Annex VI Reg. 14.	-IMO Res. MEPC.170(57).	
A.2/2.3	Other equivalent methods to	-Annex VI, Reg. 13.	-Annex VI, Reg. 13.		

1	2	3	4	5	6
	reduce on board NOx emissions				
A.2/2.4	Other technological methods to limit SOx emissions	Moved to A.1/2.9			

3. Fire protection equipment

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

1	2	3	4	5	6
A.2/3.4	Dual purpose type nozzles (spray/jet type)	Moved to A.1/3.55			
A.2/3.5	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, machinery spaces and unattended machinery spaces	Moved to A.1/3.51			
A.2/3.6	Smoke detectors	Moved to A.1/3.51			
A.2/3.7	Heat detectors	Moved to A.1/3.51			
A.2/3.8	Electric safety lamp	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code).	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO Res. MSC.98(73)-(FSS Code), 3.	-IEC Publication 79.	
A.2/3.9	Protective clothing resistant to chemical attack	-Reg. II-2/19.	-Reg. II-2/19, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-EN 943-1 (2002), -EN 943-1 (2002) including AC (2005), -EN 943-2 (2002), -EN ISO 6529 (2003), -EN ISO 6530 (2005), -EN 14605 (2005), -IMO MSC/Circ.1120.	
A.2/3.10	Low-location lighting systems	Moved to A.1/3.40			

1	2	3	4	5	6
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	-Reg. II-2/7, -Reg. II-2/19, -Reg. II-2/20, -IMO Res. MSC.98(73)-(FSS Code) 10.	-Reg. II-2/7, -Reg. II-2/19, -Reg. II-2/20, -IMO Res. MSC.98(73)-(FSS Code) 10.	-IMO Res. MSC.98(73)-(FSS Code) 10.	
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			

1	2	3	4	5	6
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 Res. MSC.98(73)-(FSS Code), -IMO MSC.1/Circ.1239.		
A.2/3.22	Galley Exhaust Duct Fixed Fire Extinguishing Systems components	-Reg. II-2/9.	-Reg. II-2/9.		
A.2/3.23	Helicopter Deck Fire Extinguishing Systems components	-Reg. II-2/18.	-Reg. II-2/18, -IMO MSC.1/Circ.1239.	-EN 13565-1 (2003) including A1 (2007).	
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.		

1	2	3	4	5	6
A.2/3.25	C class Divisions	-Reg. II-2/3.	-Reg. II-2/3.	-IMO Res. A.653(16), -IMO Res. A.799(19), -IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 1 and Part 5 or Annex 2, -ISO 1716 (2002).	
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 (CO2) components.	-Reg. II-2/5, -Reg. II-2/10, -Reg. X/3.	-Reg. II-2/5, -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) 7.	-EN 12094-1 (2003), -EN 12094-2 (2003), -EN 12094-3 (2003), -EN 12094-4 (2004), -EN 12094-5 (2006), -EN 12094-6 (2006), -EN 12094-7 (2000) including A1 (2005), -EN 12094-8 (2006), -EN 12094-10 (2003), -EN 12094-11 (2003), -EN 12094-13 (2001) including AC (2002), -EN 12094-16 (2003).	

1	2	3	4	5	6
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-2/10, -IMO Res. A.800(19).		
A.2/3.32 (new item)	Dry chemical powder extinguishing systems	-Reg. II-2/1.	-Reg. II-2/1, -International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk: Chapter 11.		

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.

No.	Item designation	Regulation SOLAS 74 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/4.1	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.2	Heading control system for high speed craft (formerly auto-pilot)	Moved to A.1/4.40			
A.2/4.3	Transmitting heading device THD (GNSS method)	Moved to A.1/4.41			
A.2/4.4	Daylight signalling lamp	Moved to A.1/4.52			
A.2/4.5	Searchlight for high speed craft	Moved to A.1/4.42			

1	2	3	4	5	6
A.2/4.6	Night vision equipment for high speed craft	Moved to A.1/4.43			
A.2/4.7	Track control system	Moved to A.1/4.33			
A.2/4.8	Electronic Chart Display and Information System (ECDIS).	Moved to A.1/4.30			
A.2/4.9	Electronic Chart Display and Information System (ECDIS) backup	Moved to A.1/4.30			
A.2/4.10	Raster Chart Display System (RCDS)	Moved to A.1/4.30			

1	2	3	4	5	6
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.74(69), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61108-1 (2003), -EN 61108-2 (1998), -EN 61162 series, -EN 62288 (2008).  Or -IEC 60945 (2002), -IEC 61108-1 (2003), -IEC 61108-2 (1998), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).	
A.2/4.12	DGPS, DGLONASS equipment	Moved to A.1/4.44, A.1/4.50 and A.1/4.51			
A.2/4.13	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.14	Voyage data recorder (VDR)	Moved to A.1/4.29			

1	2	3	4	5	6
A.2/4.15	Integrated navigation system	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.86(70), -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61162 series, -EN 61924 (2006), -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 series, -IEC 61924 (2006), -IEC 62288 Ed.1.0(2008).	
A.2/4.16	Integrated bridge system	Deliberately left blank			
A.2/4.17	Radar target enhancer	-Reg. V/18, -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.164(78), -ITU-R M 1176 (10/95).	-EN 60945 (2002).  Or  -IEC 60945 (2002).	
A.2/4.18	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).	-EN 60945 (2002), -EN 61162 series. Or, -IEC 60945 (2002), -IEC 61162 series.	

1	2	3	4	5	6
A.2/4.19	Magnetic compass for high speed craft	-Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-IMO Res. A.382(X), -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	- ISO 1069 (1973), - ISO 25862 (2009), - EN 60945 (2002),  Or  - ISO 1069 (1973), - ISO 25862 (2009), - IEC 60945 (2002).	
A.2/4.20	Track control system for - high-speed craft	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61162 series, -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).	
A.2/4.21	Chart facilities for shipborne radar	Moved to A.1/4.45			
A.2/4.22	Transmitting heading device THD (Gyroscopic method)	Moved to A.1/4.46			

1	2	3	4	5	6
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).	-EN 60945 (2002), -EN 61162 series, -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).	
A.2/4.25	Lateral thrust, pitch and mode indicators	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61162 series, -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).	
A.2/4.26	Rate-of-turn indicator	Moved to A.1/4.9			
A.2/4.27	Rudder angle indicator	Moved to A.1/4.20			

1	2	3	4	5	6
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	Integrated bridge system	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 15, -IMO Res. MSC.64(67), -IMO Res. MSC.97(73)-(2000 HSC Code) 15, -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61162 Series, -EN 61209 (1999), -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 Series, -IEC 61209 (1999), -IEC 62288 Ed.1.0(2008).	
A.2/4.31	Bearing Device	-Reg. V/18.	-Reg. V/19.	-EN 60945 (2002).  Or  -IEC 60945 (2002).	

1	2	3	4	5	6
A.2/4.32	Bridge Navigational Watch Alarm System (BNWAS)		-IMO Res. A.694(17), -IMO Res. MSC.128(75), -IMO MSC/Circ.982, -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 Series, -IEC 62288 Ed.1.0(2008).	
A.2/4.33	Track control system (working at ship's speed from 30 knots and above)	-Reg. V/18.	-Reg. V/19, -IMO Res. A.694 (17).	-EN 60945 (2002), -EN 61162 Series.  Or  -IEC 60945 (2002), -IEC 61162 Series.	
A.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	-Reg. V/19	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. A.813(19), -IMO Res. MSC.202(81), -IMO Res. MSC.211(81), -IMO Res. MSC.263(84), -IMO MSC.1/Circ 1307.	-EN 60945 (2002), -EN 61162 Series.  Or  -IEC 60945 (2002), -IEC 61162 Series.	

1	2	3	4	5	6
A.2/4.35	Galileo Receiver	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. A.813(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.233(82), -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008).  Or  -IEC 60945 (2002), -IEC 61162 Series, -IEC 62288 Ed.1.0(2008).	
A.2/4.36	AIS SART equipment	-Reg. III/4, -Reg. IV/14.	-Reg. III/6, -Reg. IV/7, -IMO Res. MSC.246(83), -IMO Res. MSC.247(83), -IMO Res. MSC.256(84).	-EN 60945 (2002), -EN 61162 Series,  Or  -IEC 60945 (2002), -IEC 61162 Series.	

5. Radiocommunication equipment

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

1	2	3	4	5	6
A.2/5.1	VHF EPIRB	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg.IV/8, -IMO Res. A.662(16), -IMO Res. A.694(17), -IMO Res. A.805(19), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -ITU-R M.489-2 (10/95), -ITU-R M.693 (06/90).	-EN 60945 (2002).  Or  -IEC 60945 (2002).	
A.2/5.2	Radio reserve source of energy	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg. IV/13, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO COMSAR Circ.16, -IMO COMSAR Circ.32.	-EN 60945 (2002).  Or  -IEC 60945 (2002).	
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).  Or  -IEC 60945 (2002).	

1	2	3	4	5	6
A.2/5.5	Distress alarm or alert panel	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg. IV/6, -IMO Res.A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO MSC/Circ.862, -IMO COMSAR Circ.32.	-EN 60945 (2002).  Or  -IEC 60945 (2002).	
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), -EN 61162 Series.  Or  -IEC 60945 (2002), -IEC 61162 Series.	
A.2/5.8 Ex. A.1/5.16	Aeronautical two way VHF radio telephone apparatus	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/7, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO Res. MSC.80(70), -IMO COMSAR Circ.32, -ICAO Convention, Annex 10, Radio -Regulations.	-ETSI EN 301 688 V1.1.1 (2000-07), -EN 60945 (2002).	

6. Equipment required under COLREG 72

No.	Item designation	Regulation COLREG 72 where	Regulations of COLREG and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity
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		"type approval" is required			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),  -Whistles - COLREG 72 Annex III/1 (Performance),  -Bells or Gongs - COLREG 72 Annex III/2 (Performance).  Or, -IEC 60945 (2002),  -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 where “type approval” is required	Regulations of SOLAS 74 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 where “type approval” is required	Regulations of SOLAS 74 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 Ex. A.2/3.3	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), -IMO Res. MSC.97(73)-(2000 HSC Code).		

9. Equipment not included in MED annexes and for which no details testing standards exist in international instruments

**Other ~ Life saving appliances**

<b>Item designation</b>
LSA gas inflation system
Non-SOLAS liferafts, rescue boats and inflatable boats
Lifejackets - inflatable (Adult/Child) to modified CAA specification - single compartment
Float free arrangements for Search and Rescue Transponder (SART)

**Other ~ Marine Pollution prevention equipment**

<b>Item designation</b>
Crude oil washing machines

**Other ~ Fire Protection Equipment**

<b>Item designation</b>
Hydrants (components)
Fire blankets

**Other ~ Marine Engineering equipment**

<b>Item designation</b>
Fuel and lube oil flexible pipes in machinery spaces and couplings

**Other ~ Crew accommodation equipment**

<b>Item designation</b>
Vacuum discharge piping systems
Thermostatic mixing valves
Plant used to produce drinking and/or fresh water