



Maritime &  
Coastguard  
Agency

MERCHANT SHIPPING NOTICE

# MSN 1735 (M+F) Amendment 7

---

---

## 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 6*

---

---

### 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 2012/32/EC of 25 October 2012. 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 6. It has effect from 30 November 2013.
- This Notice implements Commission Directive 2012/32/EC of 25 October 2012.
- 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 7 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, 2009/26/EC of 6 April 2009, 2010/68/EU of 22 October 2010 and 2011/75/EU of 2 September 2011 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 2012/32/EU, published in the Official Journal of the European Communities<sup>1</sup> No. L 312/1, 10.11.2012 and are required to be transposed into UK law by 30 November 2013.
- 2.2 On 30 November 2013 the updates in Annex A.2 of Directive 2012/32/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 30 November 2013. MSN 1735 (M+F) Amendment 6 is revoked as from 30 November 2013.
- 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 30 November 2013 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 6.
- 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 7, 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 8083 9636  
Fax : +44 (0) 23 8032 9371  
e-mail: MTU@mcga.gov.uk

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

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

File Ref: MS 107/008/0089

Published: November 2013  
Please note that all addresses and  
telephone numbers are correct at time of publishing



© Crown Copyright 2013

***Safer Lives, Safer Ships, Cleaner Seas***



## 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<br>1 Frying Pan Alley<br>London E1 7HR<br>Tel: 0207 377 2453<br>Fax: 0207 247 3255   |
| Bureau Veritas<br>Head of Department Technology Equipment<br>67/71 Boulevard du Chateau<br>92200 Neuilly-sur-Seine<br>France<br>Tel. + 33 1 55 24 75 73<br>Fax. + 33 1 55 24 70 45                      |
| Det Norkse Veritas<br>1st Floor, 14 Mitchell Point Road<br>Ensign Way<br>Ensign Business Park<br>SO31 4RF<br>Tel: 02380 745940<br>Fax: 02380 745941<br>Email: ruk540@dnv.com                            |
| Germanischer Lloyd<br>Vorsetzen 35<br>20459 Hamburg<br>Germany<br>Tel: 0049 40 36149 319<br>Fax: 0049 40 36149 7399   |
| Lloyd's Register<br>71 Fenchurch Street<br>London EC3M 4BS<br>Tel: 0207 423 2566<br>Fax: 0207 423 2053  |
| RINA Services S.p.A.<br>North Wing, 1st Floor 2 Charlotte Place<br>29-31 Kingston Crescent<br>SO14 0TB SOUTHAMPTON<br>Tel:+44 23 80332271<br>Fax: +44 23 80331744<br>E-mail southampton.office@rina.org |
| TUV SUD BABT<br>Octagon House,<br>Concorde Way,<br>Segensworth North<br>Fareham, PO15 5RL<br>Hampshire<br>Tel: 01932 251200<br>Fax: 01932 251201<br>Email: contact@babt.com                             |



The Nominated Bodies listed in Column 1 in the Table A may undertake type approval of any of the categories of equipment listed in Column 2 of that table.

The Nominated Bodies listed in Column 1 in the Table B may undertake type approval only of the categories of equipment listed in Column 2 of that table.

**TABLE A**

| Column 1  | Column 2  |
|---|---|
| <b>NOMINATED BODY</b>   | <b>EQUIPMENT CATEGORY</b>   |
| ABS Europe Ltd<br>Bureau Veritas<br>Det Norkse Veritas<br>Germanischer Lloyd AG<br>Lloyd's Register<br>RINA Services S.p.A. | Life saving appliances<br>Marine Pollution prevention equipment<br>Fire Protection Equipment<br>Marine Engineering equipment<br>Crew accommodation equipment<br>Equipment required under COLREG 72<br>Bulk carrier safety equipment<br>SOLAS Chapter II-1 equipment |

**TABLE B**

| Column 1              | Column 2   |
|-----------------------|--|
| <b>NOMINATED BODY</b> | <b>EQUIPMENT CATEGORY</b>                            |
| TUV SUD BABT          | Navigation Equipment<br>Radiocommunication Equipment |

**ANNEX**

**EQUIPMENT FOR WHICH NO DETAILED TESTING STANDARDS EXIST IN INTERNATIONAL INSTRUMENTS**



Commission Directive 2012/32/EU of 25 October 2012 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, 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,<br>-Reg. III/34,<br>-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,<br>-Reg. III/34.                                      | Reg. III/13,<br>-Reg. III/16,<br>-Reg. III/26,<br>-Reg. III/34,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 8,<br>-IMO Res. MSC.48(66)-(LSA Code) I, IV, VI,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 8. |                   |                                   |
| A.2/1.4 | Embarkation ladders                                | Moved to A.1/1.29  |   |                   |                                   |

|         |   |              |   |                   |  |
|---------|---|--------------|---|-------------------|--|
| A.2/1.5 | Public address and general emergency alarm system<br><br>(when used as fire alarm device item A.1/3.53 shall apply) | -Reg. III/6. | -IMO Res. A.1021(26),<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.48(66)-(LSA Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code),<br>-IMO MSC/Circ.808. | -ISO 27991 (2008) |  |
|---------|---|--------------|---|-------------------|--|

## 2. Marine pollution prevention

| No.     | Item designation  | Regulation MARPOL 73/78, as amended, where "type approval" is required | Regulations of MARPOL 73/78, as amended, and the relevant resolutions and circulars of the IMO, applicable | Testing standards | Modules for conformity assessment |
|---------|---|--|--|-------------------|-----------------------------------|
| 1       | 2   | 3  | 4  | 5                 | 6                                 |
| A.2/2.1 | On board NOx monitoring and recording devices                   | Moved to A.1/2.8   |  |                   |                                   |
| A.2/2.2 | On board exhaust gas cleaning systems                           | Moved to A.1/2.10  |  |                   |                                   |
| A.2/2.3 | Equipment using other equivalent methods to reduce on board NOx | -Annex VI, Reg. 4.   | -Annex VI, Reg. 4.   |                   |                                   |



|                       |   |  |   |  |  |
|-----------------------|---|--|---|--|--|
|                       | emissions   |  |   |  |  |
| A.2/2.4               | Equipment using other technological methods to limit SOx emissions  | - IMO Res. MEPC. 176(58)- (Revised Marpol Annex VI, Reg.4),<br>- IMO Res. MEPC. 184(59). | - IMO Res. MEPC. 176(58)- (Revised Marpol Annex VI, Reg.4). |  |  |
| A.2/2.5<br>(new item) | On board NOx analysers<br><br>using a measurement method other than the direct measurement and monitoring method of the NOx Technical Code 2008 | IMO Res. MEPC.176(58) - (Revised MARPOL Annex VI, Reg. 4)                                | -IMO Res. MEPC.176(58) - (Revised MARPOL Annex VI, Reg. 4)  |  |  |

### 3. Fire protection equipment

| No.     | Item designation                             | Regulation SOLAS 74, as amended, where “type approval” is required | Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable | Testing standards | Modules for conformity assessment |
|---------|--|--|---|-------------------|-----------------------------------|
| 1       | 2  | 3  | 4   | 5                 | 6                                 |
| A.2/3.1 | Non-portable and transportable extinguishers | Moved to A.1/3.52  |   |                   |                                   |

|         |   |                   |
|---------|---|-------------------|
| A.2/3.2 | Nozzles for fixed pressure water-spraying fire-extinguishing systems for special category spaces, ro-ro cargo spaces, ro-ro spaces and vehicle spaces | Moved to A.1/3.49 |
| A.2/3.3 | Cold-weather starting of generator sets (starting devices)  | Moved to A.2/8.1  |
| A.2/3.4 | Dual purpose type nozzles (spray/jet type)  | Moved to A.1/3.55 |

|         |   |  |   |   |  |
|---------|---|--|---|---|--|
| A.2/3.5 | Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, machinery spaces and unattended machinery spaces | Moved to A.1/3.51  |   |   |  |
| A.2/3.6 | Smoke detectors   | Moved to A.1/3.51  |   |   |  |
| A.2/3.7 | Heat detectors  | Moved to A.1/3.51  |   |   |  |
| A.2/3.8 | Electric safety lamp  | -Reg. II-2/10,<br>-Reg. X/3,<br>-IMO Res. MSC.98(73)-(FSS Code) 3. | -Reg. II-2/10,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 7,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 7,<br>-IMO Res. MSC.98(73)-(FSS Code), 3. | -IEC 60079 series.  |  |
| A.2/3.9 | Protective clothing resistant to chemical attack  | -Reg. II-2/19.   | -Reg. II-2/19,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 7,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 7.  | -EN 943-1 (2002) including AC (2005),<br>-EN 943-2 (2002),<br>-EN ISO 6529 (2001),<br>-EN ISO 6530 (2005),<br>-EN 14605 (2005) including A1(2009),<br>-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,<br>-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.   | -EN 13565-1 (2003) including A1 (2007). |  |
| A.2/3.24 | Portable foam applicator units   | -Reg. II-2/10,<br>-Reg. II-2/20,<br>-Reg. X/3. | -Reg. II-2/10,<br>-Reg. II-2/20,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 7,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 7,<br>-IMO Res. MSC.98(73)-(FSS Code) 4,<br>-IMO MSC.1/Circ.1239,<br>-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,<br>-IMO MSC.1/Circ.1276.   |   |  |
| A.2/3.27 | Fixed gas fire extinguishing systems (CO2) components.       | -Reg. II-2/10,<br>-Reg. X/3. | -Reg. II-2/10,<br>-Reg. II-2/20,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 7,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 7,<br>-IMO Res. MSC.98(73)-(FSS Code) 5,<br>-IMO MSC.1/Circ.1313,<br>-IMO MSC.1/Circ.1318. | <p>Electrical automatic control and delay devices:<br/>-EN 12094-1 (2003).</p> <p>Non-electrical automatic control and delay devices:<br/>-EN 12094-2 (2003).</p> <p>Manual triggering and stop devices:<br/>-EN 12094-3 (2003).</p> <p>Container valve assemblies and their actuators:<br/>-EN 12094-4 (2004).</p> <p>High and low pressure selector valves and their actuators:<br/>-EN 12094-5 (2006).</p> <p>Non-electrical disable devices :<br/>-EN 12094-6 (2006).</p> <p>Nozzles for CO2 systems:<br/>-EN 12094-7 (2000)<br/>including A1 (2005).</p> |  |

|          |  |                   |  |  |  |
|----------|--|-------------------|--|--|--|
|          |  |                   |  | <p>Connectors:<br/>-EN 12094-8 (2006).</p> <p>Pressure gauges and pressure switches:<br/>-EN 12094-10 (2003).</p> <p>Mechanical weighing devices:<br/>-EN 12094-11 (2003).</p> <p>Check valves and non-return valves:<br/>-EN 12094-13 (2001) including AC (2002).</p> <p>Odorising devices for CO2 low pressure systems:<br/>-EN 12094-16 (2003).</p> |  |
| A.2/3.28 | <p>Medium expansion foam fire extinguishing systems components - Fixed deck foam for tankers</p> | 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. |  |  |
| A.2/3.32 | Dry chemical powder extinguishing systems   | Moved to A.1/3.62 |                |  |  |

#### 4. Navigation equipment

Notes applicable to section 4: Navigation equipment

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

Column 5:

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

- a) IEC 61162-1 ed4.0 (2010-11) - Part 1: Single talker and multiple listeners
- b) IEC 61162-2 ed1.0 (1998-09) - Part 2: Single talker and multiple listeners, high-speed transmission
- c) IEC 61162-3 ed1.1 Consol. with am1 (2010-11) - Part 3: Serial data instrument network
  - IEC 61162-3 ed1.0 (2008-05) - Part 3: Serial data instrument network
  - IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 - Part 3: Serial data instrument network
- d) IEC 61162-400 ed1.0 (2001-11) - Part 400: Multiple talkers and multiple listeners - Ship systems interconnection - Introduction and general principles
  - IEC 61162-401 ed1.0 (2001-11) - Part 401: Multiple talkers and multiple listeners - Ship systems interconnection - Application profile
  - IEC 61162-402 ed1.0 (2005-09) - Part 402: Multiple talkers and multiple listeners - Ship systems interconnection - Documentation and test requirements
  - IEC 61162-410 ed1.0 (2001-11) - Part 410: Multiple talkers and multiple listeners - Ship systems interconnection - Transport profile requirements and basic transport profile

- IEC 61162-420 ed1.0 (2001-11) - Part 420: Multiple talkers and multiple listeners - Ship systems interconnection - Companion standard requirements and basic companion standards
- IEC 61162-450 ed1.0 (2011-06) - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection

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

- a) EN 61162-1 (2011) - Part 1: Single talker and multiple listeners
- b) EN 61162-2 (1998) - Part 2: Single talker and multiple listeners, high-speed transmission
- c) EN 61162-3 (2008) - Part 3: Serial data instrument network
  - EN 61162-3-am1 (2010) Amendment 1 - Part 3: Serial data instrument network
- d) EN 61162-400 (2002) - Part 400: Multiple talkers and multiple listeners - Ship systems interconnection - Introduction and general principles
  - EN 61162-401 (2002) - Part 401: Multiple talkers and multiple listeners - Ship systems interconnection - Application profile
  - EN 61162-402 (2005) - Part 402: Multiple talkers and multiple listeners - Ship systems interconnection - Documentation and test requirements
  - EN 61162-410 (2002) - Part 410: Multiple talkers and multiple listeners - Ship systems interconnection - Transport profile requirements and basic transport profile
  - EN 61162-420 (2002) - Part 420: Multiple talkers and multiple listeners - Ship systems interconnection - Companion standard requirements and basic companion standards
  - EN 61162-450 (2011) - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection

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

|          |  |                   |
|----------|--|-------------------|
| A.2/4.6  | Night vision equipment for high speed craft                    | Moved to A.1/4.43 |
| A.2/4.7  | Track control system   | Moved to A.1/4.33 |
| A.2/4.8  | Electronic chart display and information system (ECDIS).       | Moved to A.1/4.30 |
| A.2/4.9  | Electronic chart display and information system (ECDIS) backup | Moved to A.1/4.30 |
| A.2/4.10 | Raster chart display system (RCDS)                             | Moved to A.1/4.30 |

|          |                                   |   |   |   |  |
|----------|-----------------------------------|---|---|---|--|
| A.2/4.11 | Combined GPS/GLONASS equipment    | -Reg. V/18,<br>-Reg. X/3,<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code). | -Reg. V/19,<br>-IMO Res. A.694(17),<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code),<br>-IMO Res. MSC.115(73),<br>-IMO Res. MSC.191(79). | -EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-EN 61108-1 (2003),<br>-EN 61108-2 (1998),<br>-EN 61162 series,<br>-EN 62288 (2008).<br><br>or<br><br>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-IEC 61108-1 (2003),<br>-IEC 61108-2 (1998),<br>-IEC 61162 series,<br>-IEC 62288 Ed.1.0(2008). |  |
| A.2/4.12 | DGPS, DGLONASS equipment          | Moved to A.1/4.44, A.1/4.50 and A.1/4.51  |   |   |  |
| A.2/4.13 | Gyro compass for high speed craft | Moved to A.1/4.31   |   |   |  |
| A.2/4.14 | Voyage data recorder (VDR)        | Moved to A.1/4.29   |   |   |  |

|          |                              |  |   |   |  |
|----------|------------------------------|--|---|---|--|
| A.2/4.15 | Integrated navigation system | <p>-Reg. V/18,<br/>         -Reg. X/3,<br/>         -IMO Res. MSC.36(63)-(1994 HSC Code) 13,<br/>         -IMO Res. MSC.97(73)-(2000 HSC Code) 13.</p> | <p>-Reg. V/19,<br/>         -IMO Res. A.694(17),<br/>         -IMO Res. MSC.36(63)-(1994 HSC Code) 13,<br/>         -IMO Res. MSC.86(70),<br/>         -IMO Res. MSC.97(73)-(2000 HSC Code) 13,<br/>         -IMO Res. MSC.191(79).</p> | <p>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br/>         -EN 61162 series,<br/>         -EN 61924 (2006),<br/>         -EN 62288 (2008).</p> <p>or</p> <p>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br/>         -IEC 61162 series,<br/>         -IEC 61924 (2006),<br/>         -IEC 62288 Ed.1.0(2008).</p> |  |
| 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                  | <ul style="list-style-type: none"> <li>-Reg. V/18,</li> <li>-Reg. X/3,</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul> | <ul style="list-style-type: none"> <li>-Reg. V/19,</li> <li>-IMO Res. A.694(17),</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.86(70),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>-IMO Res. MSC.191(79).</li> </ul> | <ul style="list-style-type: none"> <li>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>-EN 61162 series,</li> <li>-EN 62288 (2008).</li> </ul> <p style="text-align: center;">or</p> <ul style="list-style-type: none"> <li>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>-IEC 61162 series,</li> <li>-IEC 62288 Ed.1.0(2008).</li> </ul> |  |
| A.2/4.19 | Magnetic compass for high - speed craft | <ul style="list-style-type: none"> <li>-Reg. X/3,</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>                      | <ul style="list-style-type: none"> <li>-IMO Res. A.382(X),</li> <li>-IMO Res. A.694(17),</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>  | <ul style="list-style-type: none"> <li>-ISO 1069 (1973),</li> <li>-ISO 25862(2009),</li> <li>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul> <p style="text-align: center;">or</p> <ul style="list-style-type: none"> <li>-ISO 1069 (1973),</li> <li>-ISO 25862(2009),</li> <li>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>         |  |



|          |   |  |  |   |  |
|----------|---|--|--|---|--|
| A.2/4.20 | Track control system for<br>- high-speed craft      | -Reg. X/3,<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code). | -IMO Res. A.694(17),<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code),<br>-IMO Res. MSC.191(79). | -EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-EN 61162 series,<br>-EN 62288 (2008).<br><br>or<br><br>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-IEC 61162 series,<br>-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  |  |   |  |
| A.2/4.23 | Transmitting heading device THD (magnetic method)   | Moved to A.1/4.2   |  |   |  |

|          |   |  |  |  |  |
|----------|---|--|--|--|--|
| A.2/4.24 | Thrust indicator                          | <p>-Reg. V/18,<br/>         -Reg. X/3,<br/>         -IMO Res. MSC.36(63)-(1994 HSC Code),<br/>         -IMO Res. MSC.97(73)-(2000 HSC Code).</p> | <p>-Reg. V/19,<br/>         -IMO Res. A.694(17),<br/>         -IMO Res. MSC.36(63)-(1994 HSC Code),<br/>         -IMO Res. MSC.97(73)-(2000 HSC Code),<br/>         -IMO Res. MSC.191(79).</p> | <p>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br/>         -EN 61162 series,<br/>         -EN 62288 (2008).</p> <p>or</p> <p>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br/>         -IEC 61162 series,<br/>         -IEC 62288 Ed.1.0(2008).</p> |  |
| A.2/4.25 | Lateral thrust, pitch and mode indicators | <p>-Reg. V/18,<br/>         -Reg. X/3,<br/>         -IMO Res. MSC.36(63)-(1994 HSC Code),<br/>         -IMO Res. MSC.97(73)-(2000 HSC Code).</p> | <p>-Reg. V/19,<br/>         -IMO Res. A.694(17),<br/>         -IMO Res. MSC.36(63)-(1994 HSC Code),<br/>         -IMO Res. MSC.97(73)-(2000 HSC Code),<br/>         -IMO Res. MSC.191(79).</p> | <p>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br/>         -EN 61162 series,<br/>         -EN 62288 (2008).</p> <p>or</p> <p>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br/>         -IEC 61162 series,<br/>         -IEC 62288 Ed.1.0(2008).</p> |  |

|          |                                |   |   |  |  |
|----------|--------------------------------|---|---|--|--|
| A.2/4.26 | Rate-of-turn indicator         | Moved to A.1/4.9  |   |  |  |
| A.2/4.27 | Rudder angle indicator         | Moved to A.1/4.20   |   |  |  |
| A.2/4.28 | Propeller revolution indicator | Moved to A.1/4.21   |   |  |  |
| A.2/4.29 | Pitch indicator                | Moved to A.1/4.22   |   |  |  |
| A.2/4.30 | Bridge equipment system        | -Reg. V/18,<br>-Reg. X/3,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 13,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 13. | -Reg. V/19,<br>-IMO Res. A.694 (17),<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 15,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 15,<br>-IMO Res. MSC.191(79),<br>-IMO SN.1/Circ.288. | -EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-EN 61162 series,<br>-EN 61209 (1999),<br>-EN 62288 (2008).<br><br>or<br>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-IEC 61162 Series,<br>-IEC 61209 (1999),<br>-IEC 62288 Ed.1.0(2008). |  |
| A.2/4.31 | Bearing Device                 | Moved to A.1/4.54   |   |  |  |

|          |   |                           |  |   |  |
|----------|---|---------------------------|--|---|--|
| A.2/4.32 | Bridge navigational watch alarm system (BNWAS)                            | Moved to A.1/4.57         |  |   |  |
| A.2/4.33 | Track control system<br>(working at ship's speed from 30 knots and above) | -Reg. V/18,<br>-Reg. X/3. | -Reg. V/19,<br>-IMO Res. A.694 (17),<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code),<br>-IMO Res. MSC.191(79).                   | -EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-EN 61162 Series,<br>-EN 62288 (2008).<br><br>or<br><br>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-IEC 61162 Series,<br>-IEC 62288 Ed.1.0(2008). |  |
| A.2/4.34 | Equipment with long range identification and tracking (LRIT) capability   | -Reg. V/19                | -Reg. V/19,<br>-IMO Res. A.694(17),<br>-IMO Res. A.813(19),<br>-IMO Res. MSC.202(81),<br>-IMO Res. MSC.211(81),<br>-IMO Res. MSC.263(84),<br>-IMO MSC.1/Circ 1307. | -EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-EN 61162 Series.<br><br>or<br><br>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br>-IEC 61162 Series.  |  |

|          |                    |                   |
|----------|--------------------|-------------------|
| A.2/4.35 | Galileo receiver   | Moved to A.1/4.56 |
| A.2/4.36 | AIS SART equipment | Moved to A.1/4.55 |

## 5. Radiocommunication equipment

Notes applicable to section 5: Radiocommunication equipment

Column 5:

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

- d) IEC 61162-1 ed4.0 (2010-11) - Part 1: Single talker and multiple listeners
- e) IEC 61162-2 ed1.0 (1998-09) - Part 2: Single talker and multiple listeners, high-speed transmission
- f) IEC 61162-3 ed1.1 Consol. with am1 (2010-11) - Part 3: Serial data instrument network
  - IEC 61162-3 ed1.0 (2008-05) - Part 3: Serial data instrument network
  - IEC 61162-3-am1 ed1.0 (2010-06) Amendment 1 - Part 3: Serial data instrument network
- d) IEC 61162-400 ed1.0 (2001-11) - Part 400: Multiple talkers and multiple listeners - Ship systems interconnection - Introduction and general principles
  - IEC 61162-401 ed1.0 (2001-11) - Part 401: Multiple talkers and multiple listeners - Ship systems interconnection - Application profile

- IEC 61162-402 ed1.0 (2005-09) - Part 402: Multiple talkers and multiple listeners - Ship systems interconnection - Documentation and test requirements
- IEC 61162-410 ed1.0 (2001-11) - Part 410: Multiple talkers and multiple listeners - Ship systems interconnection - Transport profile requirements and basic transport profile
- IEC 61162-420 ed1.0 (2001-11) - Part 420: Multiple talkers and multiple listeners - Ship systems interconnection - Companion standard requirements and basic companion standards
- IEC 61162-450 ed1.0 (2011-06) - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection

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

- d) EN 61162-1 (2011) - Part 1: Single talker and multiple listeners
- e) EN 61162-2 (1998) - Part 2: Single talker and multiple listeners, high-speed transmission
- f) EN 61162-3 (2008) - Part 3: Serial data instrument network
  - EN 61162-3-am1 (2010) Amendment 1 - Part 3: Serial data instrument network
- d) EN 61162-400 (2002) - Part 400: Multiple talkers and multiple listeners - Ship systems interconnection - Introduction and general principles
  - EN 61162-401 (2002) - Part 401: Multiple talkers and multiple listeners - Ship systems interconnection - Application profile
  - EN 61162-402 (2005) - Part 402: Multiple talkers and multiple listeners - Ship systems interconnection - Documentation and test requirements
  - EN 61162-410 (2002) - Part 410: Multiple talkers and multiple listeners - Ship systems interconnection - Transport profile requirements and basic transport profile

- EN 61162-420 (2002) - Part 420: Multiple talkers and multiple listeners - Ship systems interconnection - Companion standard requirements and basic companion standards
- EN 61162-450 (2011) - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection

| No.     | Item designation               | Regulation SOLAS 74 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.2/5.1 | VHF EPIRB                      | -Reg. IV/14,<br>-Reg. X/3,<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code). | -Reg.IV/8,<br>-IMO Res. A.662(16),<br>-IMO Res. A.694(17),<br>-IMO Res. A.805(19),<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code),<br>-ITU-R M.489-2 (10/95),<br>-ITU-R M.693 (06/90). | -EN 60945 (2002)<br>including IEC 60945<br>Corrigendum 1 (2008).<br><br>or<br><br>-IEC 60945 (2002)<br>including IEC 60945<br>Corrigendum 1 (2008). |                                   |
| A.2/5.2 | Radio reserve source of energy | -Reg. IV/14,<br>-Reg. X/3,<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code). | -Reg. IV/13,<br>-IMO Res. A.694(17),<br>-IMO Res. MSC.36(63)-(1994 HSC Code),<br>-IMO Res. MSC.97(73)-(2000 HSC Code),<br>-IMO COMSAR Circ.16,<br>-IMO COMSAR Circ.32.   | -EN 60945 (2002)<br>including IEC 60945<br>Corrigendum 1 (2008).<br><br>or<br><br>-IEC 60945 (2002)<br>including IEC 60945<br>Corrigendum 1 (2008). |                                   |
| A.2/5.3 | Inmarsat-F SES                 | Moved to A.1/5.19.   |  |   |                                   |



|         |                               |  |  |   |  |
|---------|-------------------------------|--|--|---|--|
| A.2/5.4 | Distress panel                | <ul style="list-style-type: none"> <li>-Reg. IV/14,</li> <li>-Reg. X/3,</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul> | <ul style="list-style-type: none"> <li>-Reg. IV/6,</li> <li>-IMO Res. A.694(17),</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>-IMO MSC/Circ. 862,</li> <li>-IMO COMSAR Circ.32.</li> </ul> | <ul style="list-style-type: none"> <li>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>or</li> <li>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul> |  |
| A.2/5.5 | Distress alarm or alert panel | <ul style="list-style-type: none"> <li>-Reg. IV/14,</li> <li>-Reg. X/3,</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul> | <ul style="list-style-type: none"> <li>-Reg. IV/6,</li> <li>-IMO Res.A.694(17),</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>-IMO MSC/Circ.862,</li> <li>-IMO COMSAR Circ.32.</li> </ul>   | <ul style="list-style-type: none"> <li>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>or</li> <li>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul> |  |
| A.2/5.6 | L- band EPIRB (Inmarsat)      | Deliberately left blank  |  |   |  |

|                        |  |  |   |  |  |
|------------------------|--|--|---|--|--|
| A.2/5.7                | Ship security alert system                         |  | <ul style="list-style-type: none"> <li>-Reg. XI-2/6,</li> <li>-IMO Res. A.694(17),</li> <li>-IMO Res. MSC.147(77),</li> <li>-IMO MSC/Circ.1072.</li> </ul>  | <ul style="list-style-type: none"> <li>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>-EN 61162 series.</li> </ul> <p style="text-align: center;">or</p> <ul style="list-style-type: none"> <li>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>-IEC 61162 series.</li> </ul>                                  |  |
| A.2/5.8<br>Ex A.1/5.16 | Aeronautical two way VHF radio telephone apparatus | <ul style="list-style-type: none"> <li>-Reg. IV/14,</li> <li>-Reg. X/3,</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code) 14,</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code) 14.</li> </ul> | <ul style="list-style-type: none"> <li>-Reg. IV/7,</li> <li>-IMO Res. A.694(17),</li> <li>-IMO Res. MSC.36(63)-(1994 HSC Code) 14,</li> <li>-IMO Res. MSC.97(73)-(2000 HSC Code) 14,</li> <li>-IMO Res. MSC.80(70),</li> <li>-IMO COMSAR Circ.32,</li> <li>-ICAO Convention, Annex 10, Radio -Regulations.</li> </ul> | <ul style="list-style-type: none"> <li>-EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>-ETSI EN 301 688 V1.1.1 (2000-07).</li> </ul> <p style="text-align: center;">Or</p> <ul style="list-style-type: none"> <li>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>-ETSI EN 301 688 V1.1.1 (2000-07).</li> </ul> |  |

**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,<br>-IMO Res. A.694(17).   | -EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br><br>-Whistles - COLREG 72 Annex III/1 (Performance),<br><br>-Bells or Gongs - COLREG 72 Annex III/2 (Performance).<br><br>or<br><br>-IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),<br><br>-Whistles - COLREG 72 Annex III/1 (Performance),<br><br>-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,<br>-1997 SOLAS Conference Res. 5.                    | -Reg. XII/11,<br>-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,<br>-Reg. X/3.                                       | -Reg. II-1/44,<br>-IMO Res. MSC.36(63)-(1994 HSC Code) 12,<br>-IMO Res. MSC.97(73)-(2000 HSC Code) 12.    |                   |                                   |

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

**Other ~ Life saving appliances**

|                  |
|------------------|
| Item designation |
|------------------|

|  |
|--|
| Lifeboat equipment (oars, knives, matches, torches, electrical equipment, etc) |
| LSA gas inflation system   |
| LSA miscellaneous equipment (emergency life-line etc.)                         |
| Lifeboat manual pumps  |
| Emergency equipment lockers  |
| Sea anchors  |
| Survival craft first aid kits  |
| Survival craft rations and water   |
| Non-SOLAS liferafts, rescue boats and inflatable boats                         |
| 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 |