

## I

(Acts whose publication is obligatory)

**COMMISSION DIRECTIVE 2001/53/EC**  
**of 10 July 2001**  
**amending Council Directive 96/98/EC on marine equipment**  
 (Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community, and in particular Article 80(2) thereof,

Having regard to Council Directive 96/98/EC of 20 December 1996 on marine equipment <sup>(1)</sup>, as amended by Commission Directive 98/85/EC <sup>(2)</sup>, and in particular Article 17, the first and second indents thereof,

Whereas:

- (1) For the purposes of Directive 98/96/EC, the international conventions, including the 1974 SOLAS Convention, and testing standards are those, together with their amendments, in force on the date of the adoption of that Directive.
- (2) Amendments to the SOLAS Convention and to other international conventions and new testing standards have entered into force since the adoption of that Directive or will enter into force shortly.
- (3) New rules regarding the equipment to be placed on board ships have been laid down by those instruments.
- (4) Directive 96/98/EC should be amended accordingly.
- (5) The measures provided for in this Directive are in accordance with the opinion of the Committee set up by Article 12 of Council Directive 93/75/EEC <sup>(3)</sup>,

HAS ADOPTED THIS DIRECTIVE:

*Article 1*

Directive 96/98/EC is hereby amended as follows:

1. Article 2 is amended as follows:

In points (c), (d) and (n), the words 'on 1 January 1999' are replaced by 'on 1 January 2001'.

2. Annex A is replaced by the text in the Annex to this Directive.

*Article 2*

Equipment listed as 'new item' under the heading 'item designation' of Annex A.1, and manufactured before the date referred to in Article 3(1), may be placed on the market and on board a Community ship, the certificates of which were issued by or on behalf of a Member State in accordance with international conventions, during the two years following that date if it was manufactured in accordance with procedures for type-approval already in force within the territory of that Member State before the date of the adoption of this Directive.

*Article 3*

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than six months after its date of entry into force. They shall forthwith notify the Commission thereof.

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 provisions of national law, which they adopt in the field covered by this Directive.

<sup>(1)</sup> OJ L 46, 17.2.1997, p. 25.

<sup>(2)</sup> OJ L 315, 25.11.1998, p. 14.

<sup>(3)</sup> OJ L 247, 5.10.1993, p. 19.

*Article 4*

Done at Brussels, 10 July 2001.

*For the Commission*

Loyola DE PALACIO

*Vice-President*

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Communities*.

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## ANNEX

## ANNEX A

## ANNEX A.1: EQUIPMENT FOR WHICH DETAILED TESTING STANDARDS ALREADY EXIST IN INTERNATIONAL INSTRUMENTS

## Notes applicable to the whole of Annex A.1

- 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.
- 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.
- Column 5: for the purpose of identifying correctly the relevant standards, the test reports and the appropriate type-approval certificates shall specify the applied standard and its version as identified in the column.
- Column 5: where two sets of testing standards are indicated (separated by a “;”), each set fulfils all the testing requirements to meet IMO performance standards. Thus the testing of an item based on one of the sets is sufficient to demonstrate compliance with the requirements of the relevant international instruments.
- Column 6: where module H appears, module H plus design-examination certificate is to be understood.

## 1. Life-saving appliances

| Item No | Item designation  | Regulation SOLAS 74 as amended where “type-approval” is required | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO  | Testing standards  | Modules for conformity assessment |       |       |       |   |   |
|---------|---|--|--|--|-----------------------------------|-------|-------|-------|---|---|
|         |   |  |  |  | B + C                             | B + D | B + E | B + F | G | H |
| 1       | 2   | 3  | 4  | 5  | 6                                 |       |       |       |   |   |
| A.1/1.1 | Lifebuoys   | Regulation III/4, Regulation X/3                                 | Regulation III/7.1 and III/34, IMO Resolution MSC.48 (66), MSC.36 (63) 8.1.3, 8.3 (1994 HSC Code)  | IMO Resolution MSC.81 (70)   |                                   | X     | X     | X     |   |   |
| A.1/1.2 | Position-indicating lights for life-saving appliances<br>(a) For survival craft and rescue boats<br>(b) For lifebuoys<br>(c) For life jackets | Regulation III/4, Regulation X/3                                 | Regulation III/7.1.3, III/22.1.2, III/22.3.1, III/32.1, III/32.2 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.3 and 8.10 (1994 HSC Code), IMO MSC/Circ. 885 | IMO Resolution MSC.81 (70), and, for battery requirements, as specified in EN 394 (1993) |                                   | X     | X     | X     |   |   |
| A.1/1.3 | Lifebuoys self-activating smoke signals   | Regulation III/4, Regulation X/3                                 | Regulation III/7.1.3 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.3.4 (1994 HSC Code)   | IMO Resolution MSC.81 (70)   |                                   | X     | X     | X     |   |   |
| A.1/1.4 | Life jackets  | Regulation III/4, Regulation X/3                                 | Regulation III/7.2 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.3 (1994 HSC Code)   | IMO Resolution MSC.81 (70), and, for battery requirements, as specified in EN 394 (1993) |                                   | X     | X     | X     |   |   |

| 1        | 2  | 3                                | 4   | 5                          | 6 |   |   |   |  |  |
|----------|--|----------------------------------|---|----------------------------|---|---|---|---|--|--|
| A.1/1.5  | Immersion suits and anti-exposure suits — insulated or not insulated | Regulation III/4, Regulation X/3 | Regulation III/7.3, III/22.4, III/32.3 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.3 (1994 HSC Code)                        | IMO Resolution MSC.81 (70) |   | X | X | X |  |  |
| A.1/1.6  | Immersion suits and anti-exposure suits classified as life jackets   | Regulation III/4, Regulation X/3 | Regulation III/7.3, III/22.4, III/32.3 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.3 (1994 HSC Code)                        | IMO Resolution MSC.81 (70) |   | X | X | X |  |  |
| A.1/1.7  | Thermal protective aids  | Regulation III/4                 | Regulation III/7.3, III/22.4, III/32.3 and III/34, IMO Resolution MSC.48 (66)   | IMO Resolution MSC.81 (70) |   | X | X | X |  |  |
| A.1/1.8  | Rocket parachute flares (pyrotechnics)                               | Regulation III/4, Regulation X/3 | Regulation III/6.3 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.2.3 (1994 HSC Code)  | IMO Resolution MSC.81 (70) |   | X |   | X |  |  |
| A.1/1.9  | Hand flares (pyrotechnics)   | Regulation III/4                 | Regulation III/34, IMO Resolution MSC.48 (66)   | IMO Resolution MSC.81 (70) |   | X |   | X |  |  |
| A.1/1.10 | Buoyant smoke signals (pyrotechnics)                                 | Regulation III/4                 | Regulation III/34, IMO Resolution MSC.48 (66)   | IMO Resolution MSC.81 (70) |   | X |   | X |  |  |
| A.1/1.11 | Line-throwing appliances (pyrotechnics)                              | Regulation III/4, Regulation X/3 | Regulation III/18 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.8 (1994 HSC Code)   | IMO Resolution MSC.81 (70) |   | X |   | X |  |  |
| A.1/1.12 | Inflatable life-rafts  | Regulation III/4, Regulation X/3 | Regulation III/21.1, III/31.1 and III/34, IMO Resolution MSC.48 (66), IMO MSC/Circ. 811, IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.10 (1994 HSC Code)     | IMO Resolution MSC.81 (70) |   | X |   |   |  |  |
| A.1/1.13 | Rigid life-rafts   | Regulation III/4, Regulation X/3 | Regulation III/21.1, III/31.1.1.2 and III/34, IMO Resolution MSC.48 (66), IMO MSC/Circ. 811, IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.10 (1994 HSC Code) | IMO Resolution MSC.81 (70) |   | X |   |   |  |  |

| 1        | 2  | 3                                | 4   | 5                          | 6 |   |   |   |   |  |
|----------|--|----------------------------------|---|----------------------------|---|---|---|---|---|--|
| A.1/1.14 | Automatically self-righting life-rafts                             | Regulation III/4, Regulation X/3 | Regulation III/26.2.4 and III/34, IMO Resolution MSC.48 (66), IMO MSC/Circ. 809 (1), IMO MSC/Circ. 811, IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.10 (1994 HSC Code)    | IMO Resolution MSC.81 (70) |   | X |   |   |   |  |
| A.1/1.15 | Canopied reversible life-rafts                                     | Regulation III/4, Regulation X/3 | Regulation III/26.2.4 and III/34, IMO Resolution MSC.48 (66), IMO MSC/Circ. 809 (1), IMO MSC/Circ. 811, IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.10 (1994 HSC Code)    | IMO Resolution MSC.81 (70) |   | X |   |   |   |  |
| A.1/1.16 | Float-free arrangements for life-rafts (hydrostatic release units) | Regulation III/4, Regulation X/3 | Regulation III/13.4.2, III/26.2.2 and III/34, IMO Resolution MSC.48 (66), IMO MSC/Circ. 811, IMO Resolution MSC.36 (63) 8.1 and 8.6 (1994 HSC Code)                     | IMO Resolution MSC.81 (70) |   | X | X | X |   |  |
| A.1/1.17 | Lifeboats  | Regulation III/4, Regulation X/3 | Regulation III/21.1, III/31.1.1.1, III/31.1.2.1, III/31.1.6, III/31.1.7 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 and 8.10 (1994 HSC Code) | IMO Resolution MSC.81 (70) |   | X |   |   | X |  |
| A.1/1.18 | Rigid rescue boats   | Regulation III/4, Regulation X/3 | Regulation III/21.2, III/31.2 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code)  | IMO Resolution MSC.81 (70) |   | X |   |   | X |  |
| A.1/1.19 | Inflated rescue boats  | Regulation III/4, Regulation X/3 | Regulation III/21.2, III/31.2 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.5, 8.7 and 8.10 (1994 HSC Code)                                 | IMO Resolution MSC.81 (70) |   | X |   |   | X |  |
| A.1/1.20 | Fast rescue boats  | Regulation III/4, Regulation X/3 | Regulation III/26.3 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code), IMO MSC/Circ. 809 (1)                                       | IMO Resolution MSC.81 (70) |   | X |   |   | X |  |
| A.1/1.21 | Launching appliances using fall and winch (davits)                 | Regulation III/4, Regulation X/3 | Regulation III/23, III/33 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.7 (1994 HSC Code)   | IMO Resolution MSC.81 (70) |   | X | X | X | X |  |

| 1        | 2  | 3                                | 4   | 5   | 6 |   |   |   |   |  |
|----------|--|----------------------------------|---|---|---|---|---|---|---|--|
| A.1/1.22 | Float-free launching appliances for survival craft   | Moved to Annex A.2               |   |   |   |   |   |   |   |  |
| A.1/1.23 | Launching appliances for free-fall lifeboats   | Regulation III/4, Regulation X/3 | Regulation III/33 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.7 (1994 HSC Code)                                       | IMO Resolution MSC.81 (70)                |   |   |   |   | X |  |
| A.1/1.24 | Life-raft launching appliances   | Regulation III/4, Regulation X/3 | Regulation III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.7 (1994 HSC Code)  | IMO Resolution MSC.81 (70)                |   | X | X | X | X |  |
| A.1/1.25 | Fast rescue boat launching appliances  | Regulation III/4, Regulation X/3 | Regulation III/26.3.2 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code), IMO MSC/Circ. 809 <sup>(1)</sup>              | IMO Resolution MSC.81 (70)                |   | X | X | X |   |  |
| A.1/1.26 | Release mechanism for<br>(a) Lifeboats and rescue boats and<br>(b) Life-rafts<br>Launched by a fall or falls | Regulation III/4, Regulation X/3 | Regulation III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 and 8.5 (1994 HSC Code)   | IMO Resolution MSC.81 (70)                |   | X | X | X |   |  |
| A.1/1.27 | Marine evacuation systems  | Regulation III/4, Regulation X/3 | Regulation III/15, III/26.2.1 and III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1, 8.7 and 8.10 (1994 HSC Code)                          | IMO Resolution MSC.81 (70)                |   | X |   |   | X |  |
| A.1/1.28 | Means of rescue  | Regulation III/4, Regulation X/3 | Regulation III/26.4 and III/34, IMO Resolution MSC.48 (66), IMO MSC/Circ. 810 <sup>(2)</sup> , IMO Resolution MSC.36 (63) 8.1, 8.5 and 8.10 (1994 HSC Code) | IMO Resolution MSC.81 (70), MSC/Circ. 810 |   | X |   |   |   |  |
| A.1/1.29 | Embarkation ladders  | Regulation III/4, Regulation X/3 | Regulation III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code)   | IMO Resolution MSC.81 (70)                |   | X | X | X |   |  |

| 1        | 2  | 3                                | 4   | 5  | 6 |   |   |   |   |  |
|----------|--|----------------------------------|---|--|---|---|---|---|---|--|
| A.1/1.30 | Retro-reflective materials   | Regulation III/4                 | Regulation III/34, IMO Resolution MSC.48 (66)   | IMO Resolution A.658 (16), Annex 2   |   | X | X | X |   |  |
| A.1/1.31 | Survival craft two-way VHF radio telephone apparatus                 | Moved to Annex A.1, section 5    |   |  |   |   |   |   |   |  |
| A.1/1.32 | 9 GHz SAR transponder (SART)   | Moved to Annex A.1, section 4    |   |  |   |   |   |   |   |  |
| A.1/1.33 | Radar reflector for lifeboats and rescue boats                       | Regulation III/4, Regulation X/3 | Regulation III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code) | IMO Resolution A.384 (X), EN ISO 8729 (1998);<br>IMO Resolution A.384 (X), ISO 8729 (1997) |   | X | X | X | X |  |
| A.1/1.34 | Compass for lifeboats and rescue boats                               | Moved to Annex A.1, section 4    |   |  |   |   |   |   |   |  |
| A.1/1.35 | Portable fire-extinguishing equipment for lifeboats and rescue boats | Moved to A.1, section 3          |   |  |   |   |   |   |   |  |
| A.1/1.36 | Lifeboat/rescue boat propulsion engine                               | Regulation III/4                 | Regulation III/34, IMO Resolution MSC.48 (66)   | IMO Resolution MSC.81 (70)   |   | X | X | X |   |  |
| A.1/1.37 | Rescue boat propulsion engine-outboard motor                         | Regulation III/4                 | Regulation III/34, IMO Resolution MSC.48 (66)   | IMO Resolution MSC.81 (70)   |   | X | X | X |   |  |
| A.1/1.38 | Searchlights for use in lifeboats and rescue boats "new item"        | Regulation III/4, Regulation X/3 | Regulation III/34, IMO Resolution MSC.48 (66), IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code) | IMO Resolution MSC.81 (70)   |   | X | X | X |   |  |
| A.1/1.39 | Open reversible life-rafts "new item"                                | Regulation III/4, Regulation X/3 | IMO Resolution MSC.36 (63) 8.1, 8.5, 8.7 and 8.10 (1994 HSC Code)                             | IMO Resolution MSC.36 (63), Annex 10 (1994 HSC Code)                                       |   | X |   |   |   |  |

(<sup>1</sup>) MSC Circ. 809 is only applicable if the equipment is to be fitted on ro-ro passenger ships.

(<sup>2</sup>) MSC Circ. 810 is only applicable if the equipment is to be fitted on ro-ro passenger ships.

## 2. Marine-pollution prevention

| Item No | Item designation   | Regulation Marpol 73/78 as amended where "type-approval" is required | Applicable regulations of Marpol 73/78, as amended, and the relevant resolutions and circulars of the IMO | Testing standards            | Modules for conformity assessment |       |       |       |   |   |
|---------|--|--|---|------------------------------|-----------------------------------|-------|-------|-------|---|---|
|         |  |  |   |                              | B + C                             | B + D | B + E | B + F | G | H |
| 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, Regulation 16(4) and (5)                                    | Annex I, Regulation 16(1) and (2)   | IMO Resolution MEPC 60 (33)  |                                   | X     | X     | X     |   |   |
| A.1/2.2 | Oil/water interface detectors  | Annex I, Regulation 15(3)(b)   | Annex I, Regulation 15(3)(b)  | IMO Resolution MEPC 5 (XIII) |                                   | X     | X     | X     |   |   |
| A.1/2.3 | Oil-content meters   | Annex I, Regulation 16(4) and (5)                                    | Annex I, Regulation 16(1) and (2)   | IMO Resolution MEPC 60 (33)  |                                   | X     | X     | X     |   |   |
| 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.) | Item deleted   |   |                              |                                   |       |       |       |   |   |
| A.1/2.5 | Oil discharge monitoring and control system for an oil tanker  | Annex I, Regulation 15(3)(a)   | Annex I, Regulation 15(3)   | IMO Resolution A.586 (14)    |                                   | X     | X     | X     |   |   |
| A.1/2.6 | Sewage treatment plants  | Annex IV, Regulation 8(1)(b)   | Annex IV, Regulation 8(1)(b)  | IMO Resolution MEPC 2 (VI)   |                                   | X     | X     | X     | X |   |
| A.1/2.7 | Shipboard incinerators   | Annex VI, Regulation 16(2)(a)  | Annex VI, Regulation 16(2)(a)   | IMO Resolution MEPC 76 (40)  |                                   | X     | X     | X     | X |   |

## 3. Fire protection

| Item No | Item designation       | Regulation SOLAS 74 as amended where "type-approval" is required | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO | Testing standards   | Modules for conformity assessment |       |       |       |   |   |
|---------|------------------------|--|---|---|-----------------------------------|-------|-------|-------|---|---|
|         |                        |  |   |   | B + C                             | B + D | B + E | B + F | G | H |
| 1       | 2                      | 3  | 4   | 5   | 6                                 |       |       |       |   |   |
| A.1/3.1 | Primary deck coverings | Regulation II-2/34.8, II-2/49.3                                  | Regulation II-2/34.8, II-2/49.3   | IMO Resolution MSC 61 (67), Annex 1, Parts 2 and 6, Annex 2 |                                   | X     |       |       |   |   |

| 1        | 2   | 3   | 4   | 5  | 6 |   |   |   |   |  |
|----------|---|---|---|--|---|---|---|---|---|--|
| A.1/3.2  | Portable fire extinguishers   | Regulation II-2/6.1,<br>Regulation X/3                          | Regulation II-2/6, IMO Resolution A.602 (15), (IMO Resolution MSC.36 (63) 7.7.7 and 7.8.4.1.3 (1994 HSC Code) | EN 3-1 (1996), 3-2 (1996), 3-3 (1994), 3-4 (1996), 3-5 (1996) + AC (1997), 3-6 (1995) + A1 (1999)                            |   | X | X | X |   |  |
| A.1/3.3  | Fireman's outfit: protective clothing   | Regulation II-2/17.1.1.1,<br>Regulation X/3                     | Regulation II-2/17.1.1.1, IMO Resolution MSC. 36 (63) 7.10.3.1.1 (1994 HSC Code), IMO MSC/Circ. 847           | EN 469 (1995), EN 531/A1 (1998), EN 1486 (1996), ISO 15538 (2001)  |   | X |   |   |   |  |
| A.1/3.4  | Fireman's outfit: boots   | Regulation II-2/17.1.1.2,<br>Regulation X/3                     | Regulation II-2/17.1.1.2, IMO Resolution MSC.36 (63) 7.10.3.1.2 (1994 HSC Code)                               | EN 344 (1992) + AC (1993) + A1 (1997), EN 344-2 (1996), EN 345 (1992) + A1 (1997), EN 345-2 (1996) Class 2, IEC 60903 (1993) |   | X |   |   |   |  |
| A.1/3.5  | Fireman's outfit: gloves  | Regulation II-2/17.1.1.2,<br>Regulation X/3                     | Regulation II-2/17.1.1.2, IMO Resolution MSC.36 (63) 7.10.3.1.2 (1994 HSC Code), IMO MSC/Circ. 847            | EN 659 (1996), EN 60903 (1993), EN 60903 + A.11 (1997)   |   | X |   |   |   |  |
| A.1/3.6  | Fireman's outfit: helmet  | Regulation II-2/17.1.1.3,<br>Regulation X/3                     | Regulation II-2/17.1.1.3, IMO Resolution MSC.36 (63) 7.10.3.1.3 (1994 HSC Code)                               | EN 443 (1997)  |   | X |   |   |   |  |
| A.1/3.7  | Self-contained, compressed-air-operated breathing apparatus                               | Regulation II-2/17.1.2,<br>Regulation X/3                       | Regulation II-2/17.1.2.2, IMO Resolution MSC.36 (63) 7.10.3.2.2 (1994 HSC Code)                               | EN 137 (1993), EN 136 (1998)   |   | X |   |   |   |  |
| A.1/3.8  | Air-supplied breathing apparatus for use with a smoke helmet or smoke mask                | Regulation II-2/17.1.2,<br>Regulation X/3                       | Regulation II-2/17.1.2.1, IMO Resolution MSC.36 (63) 7.10.3.2.1 (1994 HSC Code)                               | EN 138 (1994)  |   | X |   |   |   |  |
| A.1/3.9  | Sprinkler systems equivalent to that referred to in SOLAS Regulation II-2/12              | Regulation II-2/36.1.2,<br>II-2/36.2, II-2/41-2.5,<br>II-2/52.2 | Regulation II-2/12, II-2/36.1.2, II-2/36.2, II-2/41-2.5, II-2/42.5.2 and II-2/52.2                            | IMO Resolution A.800 (19)  |   | X |   |   | X |  |
| A.1/3.10 | Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces | Item transferred to Annex A.2                                   |   |  |   |   |   |   |   |  |
| A.1/3.11 | "A" and "B" Class divisions, fire integrity   | Regulation II-2/3.3.5,<br>II-2/3.4.4                            | Regulation II-2/3.3.5, II-2/3.4.4, II-2/16.11   | IMO Resolution A.754 (18), IMO Resolution MSC.61 (67), Annex 1, Part 3, and Annex 2  |   | X | X | X |   |  |

| 1        | 2   | 3   | 4  | 5   | 6 |   |   |   |  |  |
|----------|---|---|--|---|---|---|---|---|--|--|
| A.1/3.12 | Devices to prevent the passage of flame into the cargo tanks in oil tankers | Regulation II-2/59.1.5, II-2/59.1.9.4, II-2/59.2                                | Regulation II-2/59.1.5, II-2/59.1.9.4, II-2/59.2   | IMO MSC/Circ. 677   |   | X | X | X |  |  |
| A.1/3.13 | Non-combustible materials   | Regulation II-2/3.1, Regulation X/3   | Regulation II-2/3.1, IMO Resolution MSC.36 (63) 7.2.4 (1994 HSC Code)  | IMO Resolution A.799 (19), IMO Resolution MSC.61 (67), Annex 1, Part 1, and Annex 2                             |   | X | X | X |  |  |
| A.1/3.14 | Materials other than steel for pipes penetrating "A" or "B" Class division  | Regulation II-2/18.2.1  | Regulation II-2/18.2.1   | IMO Resolution A.753 (18), IMO Resolution A.754 (18), IMO Resolution MSC 61 (67), Annex 1, Part 3               |   | X | X | X |  |  |
| A.1/3.15 | Materials other than steel for pipes conveying oil or fuel oil              | Regulation II-2/15.2.8, II-2/18.2.2, Regulation X/3                             | Regulation II-2/15.2.8, II-2/18.2.2, IMO Resolution MSC.36 (63) 7.5.4 (1994 HSC Code)  | IMO Resolution A.753 (18)   |   | X | X | X |  |  |
| A.1/3.16 | Fire doors  | Regulation II-2/30.2, II-2/31.1.1 and II-2/47                                   | Regulation II-2/30.2, II-2/31.1.1, II-2/47   | IMO Resolution A.754 (18), IMO Resolution MSC 61 (67), Annex 1, Part 3  |   | X | X | X |  |  |
| A.1/3.17 | Fire door control systems   | Regulation II-2/30.4.15, Regulation X/3   | Regulation II-2/30.4.15, IMO Resolution MSC.36 (63) 7.9.3.3 (1994 HSC Code)  | IMO Resolution MSC 61(67), Annex 1, Part 4  |   | X | X | X |  |  |
| A.1/3.18 | Surface materials and floor coverings with low flame-spread characteristics | Regulation II-2/3.8, II-2/34.3, II-2/34.7, II-2/49.1, II-2/49.2, Regulation X/3 | Regulation II-2/3.8, II-2/3.23.4, II-2/3.23.5, II-2/16.1.1, II-2/32.1.4.3.1, II-2/34.2, II 2/34.3, II-2/49.1, II-2/50.3.1, II-2/34.7, IMO Resolution MSC.36 (63) 7.4.3.4 and 7.4.3.6 (1994 HSC Code) | IMO Resolution A.653 (16), IMO Resolution MSC.61 (67), Annex 1, Parts 2 and 5, and Annex 2, ISO 1716 (1973) (1) |   | X | X | X |  |  |
| A.1/3.19 | Draperies, curtains and other suspended textile materials and films         | Regulation II-2/3.23.3, II-2/26.2, Regulation X/3                               | Regulation II-2/3.23.3, II-2/26.2, IMO Resolution MSC.36 (63) 7.4.3.3.3 (1994 HSC Code)  | IMO Resolution MSC 61 (67), Annex 1, Part 7   |   | X | X | X |  |  |
| A.1/3.20 | Upholstered furniture   | Regulation II-2/3.23.6, II-2/26.2, Regulation X/3                               | Regulation II-2/3.23.6, II-2/26.2, II-2/34.6, IMO Resolution MSC.36 (63) 7.4.3.3.4 (1994 HSC Code)   | IMO Resolution A.652 (16), IMO Resolution MSC 61 (67), Annex 1, Part 8  |   | X | X | X |  |  |

| 1        | 2  | 3   | 4   | 5  | 6 |   |   |   |  |  |
|----------|--|---|---|--|---|---|---|---|--|--|
| A.1/3.21 | Bedding components   | Regulation II-2/3.23.7, II-2/26.2, Regulation X/3                       | Regulation II-2/3.23.7, II-2/26.2, IMO Resolution MSC.36 (63) 7.4.3.3.5 (1994 HSC Code) | IMO Resolution A.688 (17), IMO Resolution MSC 36 (67), Annex 1, Part 9   |   | X | X | X |  |  |
| A.1/3.22 | Fire dampers   | Regulation II-2/16.11.1   | Regulation II-2/16.2, II-2/32, II-2/48  | IMO Resolution A.754 (18), IMO Resolution MSC 61 (67), Annex 1, Part 3   |   | X | X | X |  |  |
| A.1/3.23 | Non-combustible duct penetrations through "A" class divisions  | Item transferred to A.1/3.26  |   |  |   |   |   |   |  |  |
| A.1/3.24 | Electric cable transits through "A" class divisions  | Item transferred to A.1/3.26  |   |  |   |   |   |   |  |  |
| A.1/3.25 | Windows and side scuttles  | Regulation II-2/33  | Regulation II-2/33, MSC/Circ. 847   | IMO Resolution A.754 (18), IMO Resolution MS 61 (67), Annex 1, Part 3, ISO 614 (1989), ISO 1095 (1989), ISO 1751 (1993), ISO 3254 (1989), ISO 3903 (1993), ISO 3904 (1994) |   | X | X | X |  |  |
| A.1/3.26 | Penetrations through "A" class divisions by pipes, trunks, etc. "new item"   | Regulation II-2/18.1.1  | Regulation II-2/18.1.1  | IMO Resolution A.754 (18), IMO Resolution MSC 61 (67), Annex 1, Part 3   |   | X | X | X |  |  |
| A.1/3.27 | Penetrations through "B" class divisions by electric cables, pipes, trunks, ducts, ventilation terminals, lighting fixtures, etc. "new item" | Regulation II-2/18.1.2  | Regulation II-2/18.1.2  | IMO Resolution A.754 (18), IMO Resolution MSC.61 (67), Annex 1, Part 3   |   | X | X | X |  |  |
| A.1/3.28 | Sprinkler systems (limited to sprinkler heads and to the method of automatic sprinkling and signalling) "new item"                           | Regulation II-2/12.3, II-2/36.1.2, II-2/36.2, II-2/41-2.5 and II-2/52.2 | Regulation II-2/12., II-2/36.1.2, II-2/36.2, II-2/41-2.5 and II-2/52.2                  | ISO 6182-1 (1993), ISO 6182-2 (1993), ISO 6182-3 (1993), ISO 6182-4 (1993), ISO 6182-5 (1995)  |   | X | X | X |  |  |

| 1        | 2  | 3  | 4   | 5  | 6 |   |   |   |   |  |
|----------|--|--|---|--|---|---|---|---|---|--|
| A.1/3.29 | Fire hoses<br>“new item”   | Regulation II-2/4.7.1,<br>Regulation X/3 | Regulation II-2/4.7.1, IMO Resolution<br>MSC.36 (63) 7.7.8.5 (1994 HSC<br>Code)   | EN 671-2 (1994)  |   | X | X | X |   |  |
| A.1/3.30 | Oxygen analysis and gas<br>detection equipment<br>“new item”                           | Regulation VI/3.1                        | Regulation II-2/59.5, II-2/59.4.4.1,<br>II-2/62.17, II-2/59.5, Regulation<br>VI/3.1, MSC/Circ. 774 (Fixed<br>installations) | EN 50104 (1999) Oxygen, EN<br>50054 (1991), EN 50057 (1999)<br>Combustible gases |   | X | X | X |   |  |
| A.1/3.31 | Fixed sprinkler systems for<br>high speed craft<br>“new item”                          | Regulation X/3                           | IMO Resolution MSC.36 (63) 7.13.1<br>(1994 HSC Code), MSC/Circ. 912   | IMO Resolution MSC.44 (65), IMO<br>Resolution A.800 (19)                         |   | X | X | X | X |  |
| A.1/3.32 | Fire restricting materials<br>(except furniture) for high<br>speed craft<br>“new item” | Regulation X/3                           | IMO Resolution MSC.36 (63) 7.2.2<br>(1994 HSC Code)   | IMO Resolution MSC.40 (64), IMO<br>Resolution MSC.90 (71)                        |   | X | X | X |   |  |
| A.1/3.33 | Fire restricting materials for<br>furniture for high speed craft<br>“new item”         | Regulation X/3                           | IMO Resolution MSC.36 (63) 7.2.2<br>(1994 HSC Code)   | IMO Resolution MSC.40 (64), IMO<br>Resolution MSC.90 (71)                        |   | X | X | X |   |  |
| A.1/3.34 | Fire resisting divisions for<br>high speed craft<br>“new item”                         | Regulation X/3                           | IMO Resolution MSC.36 (63) 7.2.1<br>(1994 HSC Code)   | IMO Resolution MSC.45 (65)   |   | X | X | X |   |  |
| A.1/3.35 | Fire doors on high speed<br>craft<br>“new item”  | Regulation X/3                           | IMO Resolution MSC.36 (63) 7.2.1,<br>7.4.2.6 (1994 HSC Code)  | IMO Resolution MSC.45 (65)   |   | X | X | X |   |  |

| 1                       | 2  | 3                                | 4  | 5   | 6 |   |   |   |  |  |
|-------------------------|--|----------------------------------|--|---|---|---|---|---|--|--|
| A.1/3.36                | Fire dampers on high speed craft<br>"new item"   | Regulation X/3                   | IMO Resolution MSC.36 (63) 7.6.4 (1994 HS Code)  | IMO Resolution MSC.45 (65)  |   | X | X | X |  |  |
| A.1/3.37                | Penetrations through fire resisting divisions on high speed craft by pipes, ducts, controls, electric cables, etc.<br>"new item"                                   | Regulation X/3                   | IMO Resolution MSC.36 (63) 7.4.2.6 (1994 HSC Code)   | IMO Resolution MSC.45 (65)  |   | X | X | X |  |  |
| A.1/3.38<br>Ex A.1/1.35 | Portable fire-extinguishing equipment for lifeboats and rescue boats   | Regulation III/4, Regulation X/3 | Regulation III/34, IMO Resolution MSC.48 (66), IMO Resolution A.602 (15), IMO Resolution MSC.36 (63) 8.1.2 (1994 HSC Code) | EN 3-1 (1996), 3-2 (1996), 3-3 (1994), 3-4 (1996), 3-5 (1996) + AC (1997), 3-6 (1995) + A1 (1999) |   | X | X | X |  |  |
| A.1/3.39                | Alternative arrangements for halon fire extinguishing systems in machinery spaces and pump rooms – equivalent water based fire extinguishing systems<br>"new item" | Regulation II-2/5.3, II-2/63.1.1 | Regulation II-2/5.3, II-2/63.1.1   | IMO MSC/Circ. 668, IMO MSC/Circ. 728  |   | X | X | X |  |  |

(<sup>1</sup>) Where the surface material is required to have a certain maximum calorific value, this shall be measured in accordance with ISO 1716.

#### 4. Navigation equipment

Notes for Annex A.1, section 4, Navigation equipment

Column 4: ITU recommendations cited are those referred to in the international conventions and the relevant resolutions and circulars of the IMO.

Column 5: Wherever reference is made to EN/IEC 61162, the relevant product testing standard shall be verified to define the applicable part of EN/IEC 61162.

| Item No | Item designation | Regulation SOLAS 74 as amended where "type-approval" is required | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO | Testing standards  | Modules for conformity assessment |       |       |       |   |   |
|---------|------------------|--|---|--|-----------------------------------|-------|-------|-------|---|---|
|         |                  |  |   |  | B + C                             | B + D | B + E | B + F | G | H |
| 1       | 2                | 3  | 4   | 5  | 6                                 |       |       |       |   |   |
| A.1/4.1 | Magnetic compass | Regulation V/12 (r)  | Regulation V/12 (b), IMO Resolution A.382 (X), IMO Resolution A.694 (17)                              | ISO 449 (1997), ISO 694 (2000), ISO 1069 (1973), ISO 2269 (1992), EN 60945 (1997);<br>ISO 449 (1997), ISO 694 (2000), ISO 1069 (1973), ISO 2269 (1992), IEC 60945 (1996) |                                   | X     | X     | X     | X |   |

| 1       | 2  | 3                                       | 4  | 5   | 6 |   |   |   |   |  |
|---------|--|---|--|---|---|---|---|---|---|--|
| A.1/4.2 | Transmitting magnetic heading device (previously electro-magnetic compass) | Regulation V/12 (r),<br>Regulation X/3  | Regulation V/12 (b), IMO Resolution MSC.86 (70), Annex 2, IMO Resolution MSC.36 (63) 13.2 (1994 HSC Code), IMO Resolution A.694 (17)   | ISO 11606 (2000), EN 60945 (1997), EN 61162;<br>ISO 11606 (2000), IEC 60945 (1996), IEC 61162                   |   | X | X | X | X |  |
| A.1/4.3 | Gyro compass   | Regulation V/12 (r)                     | Regulation V/12 (d), IMO Resolution A.424 (XI), IMO Resolution A.694 (17)  | EN ISO 8728 (1997), EN 60945 (1997), EN 61162;<br>ISO 8728 (1997), IEC 60945 (1996), IEC 61162                  |   | X | X | X | X |  |
| A.1/4.4 | Radar equipment  | Regulation V/12 (r)                     | Regulation V/12 (g), Regulation V/12 (h), IMO Resolution A.278 (VIII),<br>IMO Resolution A.477 (XII), as amended by IMO Resolution MSC 64 (67), Annex 4, IMO Resolution A.694 (17), ITU-R M.628-3 (11/93), ITU-R M.1177- (10/97) | EN 60936-1 (2000), EN 60945 (1997), EN 61162;<br>IEC 60936-1 (2000), IEC 60945 (1996), IEC 61162                |   | X | X | X | X |  |
| A.1/4.5 | Automatic radar plotting aid (ARPA)  | Regulation V/12 (r)                     | Regulation V/12 (j), IMO Resolution A.823 (19), IMO Resolution A.694 (17)  | EN 60872-1 (1998), EN 61162;<br>EC 60872-1 (1998), EC 61162   |   | X | X | X | X |  |
| A.1/4.6 | Echo-sounding equipment  | Regulation V/12 (r),<br>Regulation X/3  | Regulation V/12 (k), IMO Resolution MSC.36 (63) 13.4 (1994 HSC Code), IMO Resolution A.224 (VII), as amended by IMO Resolution MSC74 (69), Annex 4, IMO Resolution A.694 (17)  | EN ISO 9875 (1997), EN 60945 (1997), EN 61162;<br>ISO 9875 (2000), IEC 60945 (1996), IEC 61162                  |   | X | X | X | X |  |
| A.1/4.7 | Speed and distance measuring equipment (SDME)                              | Regulation V/12 (r),<br>Regulation X/3  | Regulation V/12 (c), IMO Resolution A.824 (19), IMO Resolution MSC.36 (63) 13.3 (1994 HSC Code), IMO Resolution A.694 (17)   | EN 61023 (1999), EN 61162;<br>IEC 61023 (1999), IEC 61162   |   | X | X | X | X |  |
| A.1/4.8 | Rudder angle, rpm, pitch indicator   | Item split in three. See A.1/4.20/21/22 |  |   |   |   |   |   |   |  |
| A.1/4.9 | Rate-of-turn indicator   | Regulation V/12 (r),<br>Regulation X/3  | Regulation V/12 (n), IMO Resolution MSC.36 (63) 13.7.1 (1994 HSC Code), IMO Resolution A.526 (13), IMO Resolution A.694 (17)   | IMO Resolution A.526 (13), EN 60945 (1997), EN 61162;<br>IMO Resolution A.526 (13), IEC 60945 (1996), IEC 61162 |   | X | X | X | X |  |

| 1                       | 2  | 3   | 4   | 5  | 6 |   |   |   |   |  |
|-------------------------|--|---|---|--|---|---|---|---|---|--|
| A.1/4.10                | Direction finder                                 | Item deleted  |   |  |   |   |   |   |   |  |
| A.1/4.11                | Loran-C equipment                                | Regulation V/12 (r),<br>Regulation X/3                | Regulation V/12 (p), IMO Resolution MSC.36 (63) 13.6 (1994 HSC Code), IMO Resolution A.694 (17), IMO Resolution A.818 (19)  | EN 61075 (1993), EN 60945 (1997) EN 61162;<br>IEC 61075 (1991), IEC 60945 (1996), IEC 61162  |   | X | X | X | X |  |
| A.1/4.12                | Chayka equipment                                 | Regulation V/12 (r),<br>Regulation X/3                | Regulation V/12 (p), IMO Resolution MSC.36 (63) 13.6 (1994 HSC Code), IMO Resolution A.818 (19), IMO Resolution A.694 (17)  | EN 61075 (1993), EN 60945 (1997), EN 61162;<br>IEC 61075 (1991), IEC 60945 (1996), IEC 61162 |   | X | X | X | X |  |
| A.1/4.13                | Decca navigator equipment                        | Item deleted  |   |  |   |   |   |   |   |  |
| A.1/4.14                | GPS equipment                                    | Regulation V/12 (r),<br>Regulation X/3                | Regulation V/12 (p), IMO Resolution MSC.36 (63) 13.6 (1994 HSC Code), IMO Resolution A.819 (19), IMO Resolution A.694 (17)  | EN 61108-1 (1996), EN 61162;<br>IEC 61108-1 (1994), IEC 61162                                |   | X | X | X | X |  |
| A.1/4.15                | GLONASS equipment                                | Regulation V/12 (r),<br>Regulation X/3                | Regulation V/12 (p), IMO Resolution MSC.36 (63) 13.6 (1994 HSC Code), IMO Resolution MSC.53 (66), IMO Resolution A.694 (17)   | EN 61108-2 (1998), EN 61162;<br>IEC 61108-2 (1998), IEC 60945 (1996), IEC 61162              |   | X | X | X | X |  |
| A.1/4.16                | Heading control system HCS (formerly auto-pilot) | Regulation V/18.7                                     | Regulation V/19.2.8.2, IMO Resolution A.342 (IX), as amended by IMO Resolution MSC.64 (67), Annex 3, IMO Resolution A.694 (17)  | ISO 11674 (2000), IEC 60945 (1997), EN 61162;<br>ISO 11674 , IEC 60945 (1996), IEC 61162     |   | X | X | X | X |  |
| A.1/4.17                | Mechanical pilot hoist                           | Regulation V/17 (b)                                   | Regulation V/17 (f), IMO Resolution A.889 (21), IMO MSC/Circ. 773   | ISO 799 (1986)   |   | X | X | X |   |  |
| A.1/4.18<br>Ex A.1/1.32 | 9 GHz SAR transponder (SART)                     | Regulation III/4, Regulation IV/14 and Regulation X/3 | Regulation III/6.2.2, Regulation IV/7.1.3, IMO Resolution MSC.36 (63) 8.2.1.2 (1994 HSC Code), IMO Resolution A.530 (13), IMO Resolution A.802 (19), IMO Resolution A.694 (17), ITU-R M.628-3 (11/93) | EN 61097-1 (1993), EN 60945 (1997);<br>IEC 61097-1 (1992), IEC 60945 (1996)                  |   | X | X | X |   |  |

| 1                       | 2  | 3                                      | 4  | 5  | 6 |   |   |   |   |  |
|-------------------------|--|--|--|--|---|---|---|---|---|--|
| A.1/4.19                | Radar equipment for high speed craft<br>"new item"                     | Regulation X/3                         | IMO Resolution MSC.36 (63) 13.5 (1994 HSC Code), IMO Resolution A.278 (8), IMO Resolution A.820 (19), IMO Resolution A.694 (17), ITU-R M.628-3 (11/93), ITU-R M.1177-1 (10/97) | EN 60936-2 (1999), EN 61162; IEC 60936-2 (1998), IEC 61162 |   | X | X | X |   |  |
| A.1/4.20<br>Ex A.1/4.8  | Rudder angle indicator   | Regulation V/12 (r),<br>Regulation X/3 | Regulation V/12 (m), IMO Resolution MSC.36 (63) 13.7.2 (1994 HSC Code)<br>IMO Resolution A.694 (17)  | EN 60945 (1997);<br>IEC 60945 (1996)                       |   | X | X | X | X |  |
| A.1/4.21<br>Ex A.1/4.8  | Rpm indicator  | Regulation V/12 (r)                    | Regulation V/12 (m), IMO Resolution A.694 (17)   | EN 60945 (1997);<br>IEC 60945 (1996)                       |   | X | X | X | X |  |
| A.1/4.22<br>Ex A.1/4.8  | Pitch indicator  | Regulation V/12 (r)                    | Regulation V/12 (m), IMO Resolution A.694 (17)   | EN 60945 (1997);<br>IEC 60945 (1996)                       |   | X | X | X | X |  |
| A.1/4.23<br>Ex A.1/1.34 | Compass for lifeboats and rescue boats                                 | Regulation III/4, Regulation X/3       | Regulation III/34, IMO Resolution MSC.36 (63) 8.1 (1994 HSC Code), IMO Resolution MSC.48 (66) 4.4.8.5  | ISO 613 (2000), ISO 10316 (1990)                           |   | X | X | X |   |  |
| A.1/4.24                | Automatic radar plotting aid (ARPA) for high speed craft<br>"new item" | Regulation X/3                         | IMO Resolution MSC.36 (63) 13.5.3 (1994 HSC Code), IMO Resolution A.823 (19), IMO Resolution A.694 (17)  | EN 60872-1 (1998), EN 61162; IEC 60872-1 (1998), IEC 61162 |   | X | X | X |   |  |
| A.1/4.25                | Automatic tracking aid (ATA)<br>"new item"                             | Regulation V/12 (r)                    | Regulation V/12 (i), IMO Resolution MSC.64 (67), Annex 4, Appendix 1, IMO Resolution A.694 (17)  | EN 60872-2 (1999), EN 61162; IEC 60872-2 (1999), IEC 61162 |   | X | X | X |   |  |
| A.1/4.26                | Automatic tracking aid (ATA) for high speed craft<br>"new item"        | Regulation X/3                         | IMO Resolution MSC.36 (63) 13.5.3 (1994 HSC Code), IMO Resolution MSC.64 (67), Annex 4, Appendix 1, IMO Resolution A.694 (17)  | EN 60872-2 (1999), EN 61162; IEC 60872-2 (1999), IEC 61162 |   | X | X | X |   |  |
| A.1/4.27                | Electronic plotting aid (EPA)<br>"new item"                            | Regulation V/12 (r)                    | Regulation V/12 (i), IMO Resolution MSC.64 (67), Annex 4, Appendix 2, IMO Resolution A.694 (17)  | EN 60872-3 (1999), EN 61162; IEC 60872-3 (1999), IEC 61162 |   | X | X | X |   |  |

## 5. Radio-communication equipment

Notes for Annex A.1, section 5, Radio-communication equipment

Column 4: ITU recommendations cited are those referred to in the international conventions and the relevant resolutions and circulars of the IMO.

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

Column 5: Wherever reference is made to EN/IEC 61162, the relevant product testing standard shall be verified to define the applicable part of EN/IEC 61162.

| Item No | Item designation   | Regulation SOLAS 74 as amended where "type-approval" is required | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO  | Testing standards   | Modules for conformity assessment |       |       |       |   |   |  |
|---------|--|--|--|---|-----------------------------------|-------|-------|-------|---|---|--|
|         |  |  |  |   | B + C                             | B + D | B + E | B + F | G | H |  |
| 1       | 2  | 3  | 4  | 5   | 6                                 |       |       |       |   |   |  |
| A.1/5.1 | VHF radio capable of transmitting and receiving DSC and radiotelephony | Regulation IV/14, Regulation X/3                                 | Regulation IV/7.1.1, IMO Resolution MSC.36 (63) 14.6.1.1 (1994 HSC Code), IMO Resolution A.385 (X), IMO Resolution A.524 (13), IMO Resolution A.803 (19), as amended by IMO Resolution MSC.68 (68), Annex 1, IMO Resolution A.694 (17), ITU-R M.489-2 (10/95), ITU-R M. 493-9 (10/97), ITU-R M.541-8 (10/97), ITU-R M.689-2 (11/93), IMO MSC/Circ. 862 | ETS 300 162-1 (2000-12), EN 300 338 (V1.2.1 1999.04), EN 300 828 (V1.1.1 1998-03), IMO MSC/Circ. 862, EN 61162;<br>IEC 61097-3 (1994), IEC 61097-7 (1996), IEC 60945 (1996), IMO MSC/Circ. 862, IEC 61162 |                                   | X     | X     | X     | X |   |  |
| A.1/5.2 | VHF DSC watch-keeping receiver   | Regulation IV/14, Regulation X/3                                 | Regulation IV/7.1.2, IMO Resolution MSC.36 (63) 14.6.1.2 (1994 HSC Code), IMO Resolution A.803 (19), IMO Resolution MSC.68 (68), Annex 1, IMO Resolution A.694 (17), ITU-R M.489-2 (10/95), ITU-R M.493-9 (10/97), ITU-R M.541-8 (10/97)   | EN 300 338 (V1.2.1 1999-04), EN 301 033 (V1.1.1 1998-08), EN 300 828 (V1.1.1 1998-03), EN 60945 (1997);<br>IEC 61097-3 (1994), IEC 61097-8 (1998), IEC 60945 (1996)                                       |                                   | X     | X     | X     | X |   |  |
| A.1/5.3 | Navtex receiver  | Regulation IV/14, Regulation X/3                                 | Regulation IV/7.1.4, IMO Resolution MSC.36 (63) 14.6.1.4 (1994 HSC Code), IMO Resolution A.525 (13), IMO Resolution A.694 (17), ITU-R M.540-2 (06/90), ITU-R M.625-3 (10/95)   | ETS 300 065 V1.1.3 (2001-5), EN 301 011 V1.1.1 (1998-09);<br>IEC 61097-6 (1995), IEC 60945 (1996)   |                                   | X     | X     | X     | X |   |  |
| A.1/5.4 | EGC receiver   | Regulation IV/14, Regulation X/3                                 | Regulation IV/7.1.5, IMO Resolution MSC.36 (63) 14.6.1.5 (1994 HSC Code), IMO Resolution A.570 (14), IMO Resolution A.664 (16), IMO Resolution A.694 (17)  | ETS 300 460 Ed. 1 (1997-11) + A1 (1997-11), EN 300 829 V1.1.1 (1998-03);<br>IEC 61097-4 (1994), IEC 60945 (1996)  |                                   | X     | X     | X     | X |   |  |

| 1        | 2   | 3                                | 4  | 5   | 6 |   |   |   |   |  |  |
|----------|---|----------------------------------|--|---|---|---|---|---|---|--|--|
| A.1/5.5  | HF marine safety information (MSI) equipment (HF NBDP receiver)           | Regulation IV/14, Regulation X/3 | Regulation IV/7.1.5, IMO Resolution MSC.36 (63) 14.6.1.5 (1994 HSC Code), IMO Resolution A.699 (17), IMO Resolution A.700 (17) IMO Resolution A.806 (19), IMO Resolution A.694 (17), ITU-R M.491-1 (07/86), ITU-R M.492-6 (10/95), ITU-R M.540-2 (06/90), ITU-R M.625-3 (10/95), ITU-R M.688 (06/90) | ETS 300 067 Ed.1 (1992-09) + A1 (1998-09), EN 60945 (1997), EN 61162;<br>IEC 61097-11 (2000), EN 61162  |   | X | X | X | X |  |  |
| A.1/5.6  | 406 MHz (Cospas-Sarsat)   | Regulation IV/14, Regulation X/3 | Regulation IV/7.1.6, IMO Resolution MSC.36 (63) 14.6.1.6 (1994 HSC Code), IMO Resolution A.662 (16), IMO Resolution A.696 (17), IMO Resolution A.810 (19), as amended by IMO Resolution MSC.56 (66), IMO Resolution A.694 (17), ITU-R M.633-1 (06/90), ITU-R M.690-1 (10/95), IMO MSC/Circ. 862      | ETS 300 066 V 1.3.1 (2001-01), EN 60945 (1997), MSC/Circ. 862 (1);<br>IEC 61097-2 (1994), IEC 60945 (1996), MSC/Circ. 862   |   | X | X | X | X |  |  |
| A.1/5.7  | L-band EPIRB (Inmarsat)   | Regulation IV/14, Regulation X/3 | Regulation IV/7.1.6, IMO Resolution MSC.36 (63) 14.6.1.6 (1994 HSC Code), IMO Resolution A.662 (16), IMO Resolution A.812 (19), IMO Resolution A.694 (17), ITU-R M.632-3 (02/97), ITU-R M.690-1 (10/95), IMO MSC/Circ. 862   | ETS 300 372 Ed.1 (1996-05), EN 60945 (1997), MSC/Circ. 862 (1);<br>IEC 61097-5 (1997), MSC/Circ. 862  |   | X | X | X | X |  |  |
| A.1/5.8  | 2 182 kHz watch receiver  | Item deleted                     |  |   |   |   |   |   |   |  |  |
| A.1/5.9  | Two-tone alarm generator  | Item deleted                     |  |   |   |   |   |   |   |  |  |
| A.1/5.10 | MF radio capable of transmitting and receiving DSC and radiotelephony (2) | Regulation IV/14, Regulation X/3 | Regulation IV/9.1.1, IV/10.1.2, IMO Resolution MSC.36 (63) 14.8.1.1 (1994 HSC Code), IMO Resolution A.804 (19), as amended by IMO Resolution MSC.68 (68), Annex 2, IMO Resolution A.694 (17), ITU-R M.1173 (10/95), ITU-R M.493-9 (10/97), ITU-R M.541-8 (10/97)                                     | ETS 300 338 V1.2.1 (1999-04), ETS 300 373 Ed.1 (1995-08) + A1 (1997-08), EN 60945 (1997) MSC/Circ. 862, EN 61162;<br>IEC 61097-3 (1994), IEC 61097-9 (1997), IEC 60945 (1996), MSC/Circ. 862, IEC 61162 |   | X | X | X | X |  |  |

| 1        | 2  | 3                                | 4   | 5  | 6 |   |   |   |   |  |
|----------|--|----------------------------------|---|--|---|---|---|---|---|--|
| A.1/5.11 | MF DSC watch-keeping receiver  | Regulation IV/14, Regulation X/3 | Regulation IV/9.1.2, IV/10.1.3, IMO Resolution MSC.36 (63) 14.8.1.2 (1994 HSC Code), IMO Resolution A.804 (19), as amended by IMO Resolution MSC.68 (68), Annex 2, IMO Resolution A.694 (17), ITU-R M.493-9 (10/97), ITU-R M.541-8 (10/97), ITU-R M.1173 (10/95)  | EN 301 033 V1.1.1 (1998-08), ETS 300 338 V1.2.1 (1999-04), EN 60945 (1997);<br>IEC 61097-3 (1994), IEC 61097-8 (1998), IEC 60945 (1996)  |   | X | X | X | X |  |
| A.1/5.12 | Inmarsat-B SES   | Regulation IV/14, Regulation X/3 | Regulation IV/10.1.1, IMO Resolution MSC.36 (63) 14.9.1.1 (1994 HSC Code), IMO Resolution A.570 (14), IMO Resolution A.808 (14), IMO Resolution A.694 (17), IMO MSC/Circ. 862   | IEC 61097-10 (1999), MSC/Circ. 862   |   | X | X | X | X |  |
| A.1/5.13 | Inmarsat-C SES   | Regulation IV/14, Regulation X/3 | Regulation IV/10.1.1, IMO Resolution MSC.36 (63) 14.9.1.1 (1994 HSC Code), IMO Resolution A.570 (14), IMO Resolution A.664 (16) (3), IMO Resolution A.807 (19), as amended by IMO Resolution MSC.68 (68), Annex 4, IMO Resolution A.694 (17), IMO MSC/Circ. 862   | ETS 300 460 ed.1 (1996-05) + A1 (1997-11), EN 300 829 V1.1.1 (1998-03), EN 61162, MSC Circ. 862;<br>IEC 61097-4 (1994), IEC 60945 (1996), IEC 61162, MSC/Circ. 862   |   | X | X | X | X |  |
| A.1/5.14 | MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony (4) | Regulation IV/14, Regulation X/3 | Regulation IV/10.2.1, IMO Resolution MSC.36 (63) 14.9.2.1 (1994 HSC Code), IMO Resolution A.806 (19), as amended by IMO Resolution MSC.68 (68), Annex 3, IMO Resolution A.694 (17), ITU-R M.476-5 (10/95), ITU-R M.491-1 (07/86), ITU-R M.492-6 (10/95), ITU-R M.493-9 (10/97), ITU-R M.541-8 (10/97), ITU-R M.625-3 (10/95), ITU-R M.1173 (10/95), IMO MSC/Circ. 862 | ETS 300 373 ed.1 (1995-08) + A 1 (1997-08), EN 300 338 V1.2.1 (1999-04), ETS 300 067 Ed.1 (1992-09) + A1 (1998-09), EN 60945 (1997), EN 61162, MSC/Circ. 862;<br>IEC 61097-3 (1994), IEC 61097-9 (1997), IEC 61097-11 (2000), IEC 60945 (1996), IEC 61162, MSC/Circ. 862 |   | X | X | X | X |  |
| A.1/5.15 | MF/HF DSC watch-keeping receiver   | Regulation IV/14, Regulation X/3 | Regulation IV/10.2.2, IMO Resolution MSC.36 (63) 14.9.2.2 (1994 HSC Code), IMO Resolution A.806 (19), as amended by IMO Resolution MSC.68 (68), Annex 3, IMO Resolution A.694 (17), ITU-R M.493-9 (10/97), ITU-R M.541-8 (10/97)  | EN 301 033 V1.1.1 (1998-08), ETS 300 338 V1.2.1 (1999-04), EN 60945 (1997);<br>IEC 61097-3 (1994), IEC 61097-8 (1998), IEC 60945 (1996)  |   | X | X | X | X |  |



| 1                      | 2  | 3   | 4 | 5 | 6 |  |  |  |  |  |  |
|------------------------|--|---|---|---|---|--|--|--|--|--|--|
| A.2/1.3<br>Ex A.1/1.22 | Float-free launching appliances for survival craft | Regulation III/4, IMO Resolution MSC 48(66) |   |   |   |  |  |  |  |  |  |

## 2. Marine-pollution prevention

p.m.

## 3. Fire protection

| Item No | Item designation   | Regulation SOLAS 74 as amended where "type-approval" is required        | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO                     | Testing standards   | Modules for conformity assessment |       |       |       |   |   |  |
|---------|--|---|---|---|-----------------------------------|-------|-------|-------|---|---|--|
|         |  |   |   |   | B + C                             | B + D | B + E | B + F | G | H |  |
| 1       | 2  | 3   | 4   | 5   | 6                                 |       |       |       |   |   |  |
| A.2/3.1 | Non-portable and transportable extinguishers   | Regulation II-2/6.1, II-2/7.1.3, II-2/7.2.3, II-2/7.3.1, Regulation X/3 | Regulation II-2/6.1, II-2/7.1.3, II-2/7.2.3, II-2/7.3.1, IMO Resolution MSC.36(63) 7.5.6.11.2, 7.5.6.11.3 (1994 HSC Code) | EN 1866 (1998) ISO 11601 (1999)                             |                                   |       |       |       |   |   |  |
| A.2/3.2 | Nozzles for fixed pressure, water-spraying, fire-extinguishing systems for special category spaces   | Regulation II-2/37.1.3, II-2/54.2.9, Regulation X/3                     | Regulation II-2/37.1.3, II-2/54.2.9, IMO Resolution MSC.36 (63) 7.8.2 (1994 HSC Code)                                     | IMO Resolution A 123 (V) (Performance)<br>IMO MSC/Circ. 914 |                                   |       |       |       |   |   |  |
| A.2/3.3 | Cold-weather starting of generator sets (starting devices)   | Regulation II-1/44.2, Regulation X/3                                    | Regulation II-1/44.2, IMO Resolution MSC.36 (63) 12.4 (1994 HSC Code)   |   |                                   |       |       |       |   |   |  |
| A.2/3.4 | Dual-purpose-type nozzles (spray/jet type)   | Regulation II-2/4.8.4, II-2/41-2.1.5, Regulation X/3                    | Regulation II-2/4.8.4, II-2/41-2.1.5<br>IMO Resolution MSC.36 (63) 7.7.8.6 (1994 HSC Code)                                |   |                                   |       |       |       |   |   |  |
| A.2/3.5 | Fixed fire detection and fire alarm systems for control stations, service spaces, accommodation spaces, machinery spaces and unattended machinery spaces | Regulation II-2/13, II-2/14.1, Regulation X/3                           | Regulation II-2/13, II-2/14.1, IMO Resolution MSC.36 (63) 7.7.1 (1994 HSC Code)   | EN 54-2 (1997) + AC (1999)<br>EN 54-4 (1997) + AC (1999)    |                                   |       |       |       |   |   |  |
| A.2/3.6 | Smoke detectors  | Regulation II-2/13.3.2, Regulation X/3                                  | Regulation II-2/13.3.2, IMO Resolution MSC 36 (63) 7.7.1 (1994 HSC Code)  | EN 54-7 (2000), pr EN 54-12, pr EN 54-15                    |                                   |       |       |       |   |   |  |

| 1                       | 2  | 3   | 4   | 5  | 6 |  |  |  |  |  |
|-------------------------|--|---|---|--|---|--|--|--|--|--|
| A.2/3.7                 | Heat detectors   | Regulation II-2/13.3,<br>Regulation X/3                 | Regulation II-2/13.3.3, IMO<br>Resolution MSC 36 (63) 7.7.1 (1994<br>HSC Code)        | EN 54-5 (2000), EN 54-6 (1982) +<br>A1 (1998), pr EN 54-15 |   |  |  |  |  |  |
| A.2/3.8                 | Electric safety lamp   | Regulation II-2/17.1.1.4,<br>Regulation X/3             | Regulation II-2/17.1.1.4, IMO<br>Resolution MSC.36 (63) 7.10.3.1.4<br>(1994 HSC Code) | IEC Publication 79   |   |  |  |  |  |  |
| A.2/3.9                 | Protective clothing resistant<br>to chemical attack  | Regulation II-2/54.2.6.1                                | Regulation II-2/54.2.6.1  | EN 368 (1992), EN 369 (1993), EN<br>463 (1994)             |   |  |  |  |  |  |
| A.2/3.10                | Low-location lighting systems  | Regulation II-2/28.1.10,<br>II-2/28.1.11, II-2/41-2.4.7 | Regulation II-2/28.1.10, II-2/28.1.11,<br>II-2/41-2.4.7                               | IMO Resolution A.752 (18), ISO/CD<br>15370                 |   |  |  |  |  |  |
| A.2/3.11<br>Ex A.1/3.10 | Nozzles for fixed pressure,<br>water-spraying fire-<br>extinguishing systems for<br>machinery spaces | Regulation II-2/10.1,<br>Regulation X/3                 | Regulation II-2/10.1, IMO Resolution<br>MSC.36 (63) 7.7.4 (1994 HSC Code)             |  |   |  |  |  |  |  |
| A.2/3.12                | Equivalent fixed gas<br>fire-extinguishing systems for<br>machinery spaces and cargo<br>pump rooms   | Regulation II-2/5.1.1.2,<br>Regulation X/3              | Regulation II-2/5.1.1.2, IMO<br>Resolution MSC.36 (63) 7.7.6.1<br>(1994 HSC Code)     | IMO MSC/Circ. 848  |   |  |  |  |  |  |
| A.2/3.13                | Compressed airline breathing<br>apparatus  | Regulation II-2/17.1.2,<br>Regulation X/3               | Regulation II-2/17.1.2, IMO<br>Resolution MSC 36 (63) 7.10.3.2.1<br>(1994 HSC Code)   | EN 139 (1994) + AC (1995) + A1<br>(1999)                   |   |  |  |  |  |  |
| A.2/3.14                | Fire hoses (reel type)   | Regulation II-2/4.7.1,<br>Regulation X/3                | Regulation II-2/4.7.1, IMO Resolution<br>MSC.36 (63) 7.7.8.5 (1994 HSC<br>Code)       | EN 671-1 (1994)  |   |  |  |  |  |  |
| A.2/3.15                | Sample extraction smoke<br>detection systems   | Regulation II-2/13-1                                    | Regulation II-2/13-1  |  |   |  |  |  |  |  |
| A.2/3.16                | Flame detectors  | Regulation II-2/13,<br>Regulation X/3                   | Regulation II-2/13, IMO Resolution<br>MSC.36 (63) 7.7.1 (1994 HSC Code)               | Pr EN 54-10  |   |  |  |  |  |  |
| A.2/3.17                | Manual call points   | Regulation II-2/13,<br>Regulation X/3                   | Regulation II-2/13, IMO Resolution<br>MSC.36 (63) 7.7.1 (1994 HSC Code)               | Pr EN 54-11  |   |  |  |  |  |  |

| 1        | 2  | 3                                     | 4  | 5                 | 6 |  |  |  |  |  |
|----------|--|---------------------------------------|--|-------------------|---|--|--|--|--|--|
| A.2/3.18 | Alarm devices  | Regulation II-2/13,<br>Regulation X/3 | Regulation II-2/13, IMO Resolution MSC.36 (63) 7.7.1 (1994 HSC Code) | Pr EN 54-3 (2000) |   |  |  |  |  |  |
| A.2/3.19 | Fixed water based local application fire fighting systems for use in category "A" machinery spaces | Regulation II-2/7.7 <sup>(1)</sup>    | Regulation II-2/7.7  | IMO MSC/Circ. 913 |   |  |  |  |  |  |

<sup>(1)</sup> Reference to SOLAS Chapter II is to SOLAS 1974 as amended by MSC 73 and entering into force on 1 July 2002.

#### 4. Navigation equipment

Notes for Annex A.2, 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: ITU recommendations cited are those referred to in the international conventions and the relevant resolutions and circulars of the IMO.

| Item No | Item designation   | Regulation SOLAS 74 as amended where "type-approval" is required                      | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO  | Testing standards   | Modules for conformity assessment |       |       |       |   |   |
|---------|--|---|--|---|-----------------------------------|-------|-------|-------|---|---|
|         |  |   |  |   | B + C                             | B + D | B + E | B + F | G | H |
| 1       | 2  | 3   | 4  | 5   | 6                                 |       |       |       |   |   |
| A.2/4.1 | Gyro compass for high speed craft  | Regulation X/3, IMO Resolution MSC.97 (73) 13.17.4 (2000 HSC Code)                    | IMO Resolution MSC.97 (73) 13.2.6 (2000 HSC Code), IMO Resolution A.821 (19), IMO Resolution A.694 (17)  | Future EN/ISO 16328, EN 60945 (1997), EN 61162;<br>ISO 16328 (1999), IEC 60945 (1996), IEC 61162  |                                   | X     | X     | X     |   |   |
| A.2/4.2 | Heading control system for high speed craft (formerly auto-pilot)                | Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)                    | IMO Resolution MSC.97 (73) 13.12 (2000 HSC Code), IMO Resolution A.822 (19), IMO Resolution A.694 (17)   | ISO project 16329, EN 60945 (1997), EN 61162;<br>ISO project 16329, IEC 60945 (1996), IEC 61162   |                                   | X     | X     | X     |   |   |
| A.2/4.3 | Transmitting heading device THD (GNSS method) (formerly electromagnetic compass) | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/19.2.5.1, IMO Resolution MSC.97 (73) 13.2.5 (2000 HSC Code), IMO Resolution A.382 (X), IMO Resolution MSC.116 (73), IMO Resolution A.694 (17) | Future ISO 22090-X, EN 60945 (1997), EN 61162;<br>Future ISO 22090-X, IEC 60945 (1996), IEC 61162 |                                   | X     | X     | X     |   |   |
| A.2/4.4 | Daylight signalling lamp   | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/19.2.2.2, IMO Resolution MSC.95 (72), IMO Resolution MSC.97(73) 13.9 (2000 HSC Code), IMO Resolution A.694 (17)                               | EN 60945 (1997);<br>IEC 60945 (1996)  |                                   | X     | X     | X     |   |   |

| 1        | 2  | 3   | 4   | 5   | 6 |   |   |   |  |  |
|----------|--|---|---|---|---|---|---|---|--|--|
| A.2/4.5  | Searchlight for high speed craft                               | Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)                    | IMO Resolution MSC.97 (73) 13.9 (2000 HSC Code), IMO Resolution A.694 (17)  | EN 60945 (1997) EN 61162; IEC 60945 (1996) IEC 61162  |   | X | X | X |  |  |
| A.2/4.6  | Night vision equipment for high speed craft                    | Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)                    | IMO Resolution MSC.97 (73) 13.10 (2000 HSC Code), IMO Resolution MSC.94 (72), IMO Resolution A.694 (17)   | Future EN 16273, EN 60945 (1997), EN 61162; Future ISO 16273, IEC 60945 (1996), IEC 61162               |   | X | X | X |  |  |
| A.2/4.7  | Track control system   | Regulation V/18.7, IMO Resolution MSC.97 (73) 13.17.4 (2000 HSC Code)                 | Regulation V/19.2.8.2, IMO Resolution MSC.97 (73) 13.12 (2000 HSC Code) IMO Resolution MSC.74 (69), Annex 2, IMO Resolution A.694 (17)  | Future EN 62065, EN 60945 (1997), EN 61162; Future IEC 62065, IEC 60945 (1996), IEC 61162               |   | X | X | X |  |  |
| A.2/4.8  | Electronic chart display and information system (ECDIS)        | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/19.2.1.4, IMO Resolution MSC.97 (73) 13.8 (2000 HSC Code) IMO Resolution A.817 (19), as amended by IMO Resolution MSC.64 (67), Annex 5, and by IMO Resolution MSC.86 (70), Annex 4, IMO Resolution A.694 (17)  | Future EN 61174 (2001), EN 60945 (1997), EN 61162; Future IEC 61174 (2001), IEC 60945 (1996), IEC 61162 |   | X | X | X |  |  |
| A.2/4.9  | Electronic chart display and information system (ECDIS) backup | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/19.2.1.5, IMO Resolution MSC.97 (73) 13.8 (2000 HSC Code), IMO Resolution A.817 (19), as amended by IMO Resolution MSC.64 (67), Annex 5, and by IMO Resolution MSC.86 (70), Annex 4, IMO Resolution A.694 (17) | Future EN 61174 (2001), EN 60945 (1997), EN 61162; Future IEC 61174 (2001), IEC 60945 (1996), IEC 61162 |   | X | X | X |  |  |
| A.2/4.10 | Raster chart display system (RCDS)                             | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/19.2.1.4, IMO Resolution MSC.97 (73) 13.8 (2000 HSC Code), IMO Resolution A.817 (19), as amended by IMO Resolution MSC.64 (67), Annex 5, and by IMO Resolution MSC.86 (70), Annex 4, IMO Resolution A.694 (17) | Future EN 61174, EN 60945 (1997), EN 61162; Future IEC 61174, IEC 60945 (1996), IEC 61162               |   | X | X | X |  |  |

| 1        | 2   | 3   | 4  | 5  | 6 |   |   |   |  |  |  |
|----------|---|---|--|--|---|---|---|---|--|--|--|
| A.2/4.11 | Combined GPS/GLONASS equipment                            | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)         | Regulation V/19.2.1.6, IMO Resolution MSC.97 (73) 13.6 (2000 HSC Code), IMO Resolution MSC.74 (69), Annex 1, IMO Resolution A.694 (17)                     | Future EN 61108-3, EN 60945 (1997), EN 61162;<br>Future IEC 61108-3, IEC 60945 (1996), IEC 61162 |   | X | X | X |  |  |  |
| A.2/4.12 | DGPS, DGLONASS equipment                                  | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)         | Regulation V/19.2.1.6, IMO Resolution MSC.97 (73) 13.6 (2000 HSC Code), IMO Resolution MSC.64 (67), Annex 2, IMO Resolution A.694 (17)                     | Future EN 61108-4, EN 60945 (1997), EN 61162;<br>Future IEC 61108-4, IEC 60945 (1996), IEC 61162 |   | X | X | X |  |  |  |
| A.2/4.13 | Universal automatic identification system equipment (AIS) | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)         | Regulation V/2.4, IMO Resolution MSC.74 (69), Annex 3, IMO Resolution MSC.97 (73) 13.15 (2000 HSC Code), IMO Resolution A.694 (17), ITU-R M.1371-1 (10/00) | Future EN 61993-2, EN 60945 (1997), EN 61162;<br>Future IEC 61993-2, IEC 60945 (1996), IEC 61162 |   |   |   |   |  |  |  |
| A.2/4.14 | Voyage data recorder                                      | Regulation V/18.1, V/20.2, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/20, IMO Resolution A.861 (20), IMO Resolution MSC.97 (73) 13.16 (2000 HSC Code), IMO Resolution A.694 (17)                                    | EN 61996 (2000), EN 60945 (1997), EN 61162;<br>IEC 61996 (2000), IEC 60945 (1996), IEC 61162     |   |   |   |   |  |  |  |
| A.2/4.15 | Integrated navigation system                              | Regulation V/18.7, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.4 (2000 HSC Code)         | Regulation V/19.6, IMO Resolution MSC.86 (70), Annex 3, IMO Resolution A.694 (17)  | Future EN 61924, EN 60945 (1997), EN 61162;<br>Future IEC 61924, IEC 60945 (1996), IEC 61162     |   |   |   |   |  |  |  |
| A.2/4.16 | Integrated bridge system                                  | Regulation V/18.7, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.4 (2000 HSC Code)         | Regulation V19.6, IMO Resolution MSC.64 (67), Annex 1, IMO Resolution A.694 (17)   | EN 61209 (1999), EN 60945 (1997), EN 61162;<br>IEC 61209 (1999), IEC 60945 (1996), IEC 61162     |   |   |   |   |  |  |  |
| A.2/4.17 | Radar target enhancer                                     | Regulation V/18.7, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.4 (2000 HSC Code)         | ITU-R M.1176-(10/95), IMO Resolution A.694 (17)  | EN 60945 (1997);<br>IEC 60945 (1996)   |   |   |   |   |  |  |  |

| 1        | 2   | 3   | 4  | 5  | 6 |   |   |   |  |  |
|----------|---|---|--|--|---|---|---|---|--|--|
| A.2/4.18 | Sound reception system                              | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code) | Regulation V/19.2.1.8, IMO Resolution MSC.97 (73) 13.14 (2000 HSC Code), IMO Resolution MSC.86 (70), Annex 1, IMO Resolution A.694 (17)  | EN 60945 (1997), EN 61162; IEC 60945 (1996), IEC 61162   |   |   |   |   |  |  |
| A.2/4.19 | Magnetic compass for high speed craft               | Regulation X/3, IMO Resolution MSC.97 (73) 13.1.2 (2000 HSC Code)                     | IMO Resolution MSC.97 (73) 13.2 (2000 HSC Code), IMO Resolution A.382 (X), IMO Resolution A.694 (17)   | ISO 449 (1997), ISO 694 (2000), ISO 1069 (1973), ISO 2269 (1992), EN 60945 (1997);<br>ISO 449 (1997), ISO 694 (2000), ISO 1069 (1973), ISO 2269 (1992), IEC 60945 (1996) |   |   |   |   |  |  |
| A.2/4.20 | Track control system for high-speed craft           | IMO Resolution MSC.97 (73) 13.17.4 (2000 HSC Code)                                    | IMO Resolution MSC.97 (73) 13.12 (2000 HSC Code), IMO Resolution A.694 (17)  | EN 60945 (1997), EN 61162; IEC 60945 (1996), IEC 61162   |   |   |   |   |  |  |
| A.2/4.21 | Chart facilities for shipborne radar                | Regulation V/18.1, X/3, IMO Resolution MSC.97 (73) 13.17.1 (2000 HSC Code)            | Regulation V/19.2.3.2, IMO Resolution MSC.97 (73) 13.2 (2000 HSC Code), IMO Resolution A.817 (19), as amended by IMO Resolution MSC.64 (67), Annex 5, IMO Resolution A.477 (XII), as amended by IMO Resolution MSC 64 (67), Annex 4, IMO Resolution A.694 (17) | Future EN 60936-3 (2001), EN 60945 (1997), EN 61162;<br>Future IEC 60936-3 (2001), IEC 60945 (1996), IEC 61162   |   |   |   |   |  |  |
| A.2/4.22 | Transmitting heading device THD (gyroscopic method) | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.1.2 (2000 HSC Code)  | Regulation V/19.2.3.5, IMO Resolution MSC.97 (73) 13.2 (2000 HSC Code), IMO Resolution MSC.116 (73), IMO Resolution A.694 (17)   | Future ISO 22090-1, EN 60945 (1997), EN 61162;<br>Future ISO 22090-1, IEC 60945 (1996), IEC 61162  |   | X | X | X |  |  |
| A.2/4.23 | Transmitting heading device THD (magnetic method)   | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.1.2 (2000 HSC Code)  | Regulation V/19.2.3.5, IMO Resolution MSC.97 (73) 13.2 (2000 HSC Code), IMO Resolution MSC.86 (70), Annex 2, IMO Resolution MSC.116 (73), IMO Resolution A.694 (17)  | Future ISO 22090-2, EN 60945 (1997), EN 61162;<br>Future ISO 22090-2, IEC 60945 (1996), IEC 61162  |   |   |   |   |  |  |
| A.2/4.24 | Thrust indicator                                    | Regulation V/18.1, Regulation X/3, IMO Resolution MSC.97 (73) 13.1.2 (2000 HSC Code)  | Regulation V/19.2.5.4, IMO Resolution MSC.97 (73) 13.7.2 (2000 HSC Code), IMO Resolution A.694 (17)  |  |   |   |   |   |  |  |



## 6. Equipment required under Colreg 72

| Item No | Item designation        | Regulation Colreg 72 as amended where "type-approval" is required | Applicable regulations of Colreg 72, as amended, and the relevant resolutions and circulars of the IMO | Testing standards  | Modules for conformity assessment |       |       |       |   |   |
|---------|-------------------------|---|--|--|-----------------------------------|-------|-------|-------|---|---|
|         |                         |   |  |  | B + C                             | B + D | B + E | B + F | G | H |
| 1       | 2                       | 3   | 4  | 5  | 6                                 |       |       |       |   |   |
| A.2/6.1 | Navigation lights       | Annex I/14  | Annex I/14, IMO Resolution A.694 (17)  | EN 60945 (1997), Colreg 72 Annex I (Performance);<br>IEC 60945 (1996), Colreg 72 Annex I (Performance)   |                                   |       |       |       |   |   |
| A.2/6.2 | Sound signal appliances | Annex III/3   | Annex III/3, IMO Resolution A.694 (17)   | EN 60945 (1997), Whistles — Colreg 72 Annex III/1 (Performance), Bells or Gongs — Colreg 72 Annex III/2 (Performance);<br>IEC 60945 (1996), Whistles — Colreg 72 Annex III/1 (Performance), Bells or Gongs — Colreg 72 Annex III/2 (Performance) |                                   |       |       |       |   |   |

## 7. Bulk carrier safety equipment

| Item No | Item designation   | Regulation SOLAS 74 as amended where "type-approval" is required | Applicable regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO | Testing standards   | Modules for conformity assessment |       |       |       |   |   |
|---------|--------------------|--|---|---|-----------------------------------|-------|-------|-------|---|---|
|         |                    |  |   |   | B + C                             | B + D | B + E | B + F | G | H |
| 1       | 2                  | 3  | 4   | 5   | 6                                 |       |       |       |   |   |
| A.2/7.1 | Loading instrument | Regulation XII/11, 1997 SOLAS Conference Resolution 5            | Regulation XII/11, 1997 SOLAS Conference Resolution 5   | IACS Recommendation No 48 on loading instruments (SOLAS/CONF.4/7) |                                   |       |       |       |   |   |