

# 欧州の舶用品認証制度に関する調査

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# はじめに

船舶に搭載する舶用品は、海上人命安全条約(SOLAS 条約)等の国際条約や国際標準 化機構(ISO)の標準等に基づいて旗国が定めた要件に適合することが必要であり、通常 は、船舶に搭載する前に旗国の認証を取得しておくことが求められている。

舶用品の認証は、欧州においては、EU 指令により共通認証制度が設立されているものの、基本的にはそれぞれの旗国が独自に行っている。このため、ある舶用品を多くの国の船舶に搭載可能とするためには、それに応じた数の国から認証を取得することが必要となる。

舶用品の認証制度は、それぞれの国によって、適用する要件、適合性を確認するための 試験方法、試験データを取得すべき試験機関、事業者の製造能力の確認方法等が異なって いるのが現状である。このため、主要国の舶用品の認証制度を調査し、それらを比較する ことによって、多くの国からの認証を効率的に取得することが可能となる。

加えて、認証された舶用品に不具合が発生した際の各国の対応を明らかにしておくことにより、万が一の際のリスクを見積もることができ、当該国の市場への参入判断の一つとすることができる。

以上の観点から、他の主要国の認証制度との比較検討の基礎として活用していくため、 欧州における舶用品の認証制度を調査し、我が国の舶用品の海外市場への展開の一助とす べく、本調査を実施するものである。

# A Study on the European Type Approval System for Marine Equipment

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# 1. INTRODUCTION

- 1.1 In December 2011 ERS was commissioned to undertake a review of the European type approval system of marine equipment, aimed at:
  - Facilitating Japanese machinery manufacturers entry into the European market.; and
  - Advising the Japanese Ministry of Transport to harmonize its type approval system with the European one, as far as practicable, in order to facilitate foreign manufacturers to access the Japanese market.
- 1.2 This report follows a structure based on information provided by the client.
  Specifically, it provides detailed information on the following points:
  - Relationship between the Administration and Notified bodies;
  - Summary of the prototype approval method (Module B) and preparation by applicants;
  - Summary of the method to confirm the identically of a product with the prototype (Modules D, E, F) and preparation by applicants;
  - Role of the Administration in the system, especially, in case of occurrence of non-conformity; and
  - Recognition of another type approval system and of a product approved under such a system.



1.3 The table below shows the list of equipment specified by the client to be used as a representative example in the study.

Table 1

Item	MED 96/98 Number	
	(7th Amendment)	
Rocket parachute flares	A.1/1.8	
Hand flares	A.1/1.9	
Inflatable life rafts	A.1/1.12	
Oil-filtering equipment	A.1/2.1	
Non-combustible materials	A.1/3.13	
Up-holstered furniture	A.1/3.20	
Radar Reflector, Passive	A.1/4.39	
BNWAS	A.1/4.57	
EPIRB	A.1/5.6	

1.4 It was also specified that the following member states and Notified Bodies be used as representative examples:

Table 2

Country	Notified Body			
UK	Lloyd's Register Verification Limited			
	Germanisher Lloyd SE			
Germany	Berufsgenossenschaft	für	Transport	und
	Verkehrswirtschaft			
Italy	Registro Italiano Navale			
Norway	Det Norske Veritas AS			



# Methodology

- 1.5 Wherever possible, information was gleamed from public information sources, such as the following websites:
  - www.europa.eu the European Commission website.
  - www.mared.org MarED is the co-ordination group for the Notified Bodies assigned by the Member States to carry out the conformity assessment procedures referred to in the MED.
  - www.emsa.europa.eu A European agency established to ensure a
    high, uniform and effective level of maritime safety, maritime security
    as well as prevention of and response to pollution by ships within the
    EU.
  - http://ec.europa.eu/enterprise/newapproach/nando/ A European
     Commission database of Notified Bodies.
  - www.lr.org Lloyds Register, a group in charge of assessing business processes and products to internationally recognised standards.
     Appointed as a MED Notified Body by the UK authorities.
  - <a href="http://www.dft.gov.uk/mca/">http://www.dft.gov.uk/mca/</a> An agency which implements the UK
    Government's maritime safety policy in the UK and works to prevent
    the loss of life on the coast and at sea.
  - <a href="http://www.rina.org/en/index.aspx">http://www.rina.org/en/index.aspx</a> An organisation that offers assessment, control, certification and research services related to materials, design, technology, products and plants as well as undertaking tasks entrusted by governmental bodies and other authorities.



- <a href="http://www.mit.gov.it/mit/site.php">http://www.mit.gov.it/mit/site.php</a> The Italian Ministry of Infrastructure and Transport. They have responsibility for Maritime transport.
- www.sjofartsdir.no The Norwegian Maritime Authority, an organisation which is part of the Ministry of Foreign Affairs (and also works with the Ministry of Environment) and is the authority on Norwegian Maritime matters.
- <a href="http://www.dnv.co.uk/">http://www.dnv.co.uk/</a> A classification society appointed as a Notified
   Body by the Norwegian Authorities for the MED.
- <a href="http://www.bsh.de/">http://www.bsh.de/</a> The Federal Maritime and Hydrographic Agency is a German federal authority under the jurisdiction of the Federal Ministry of Transport, Building and Urban Development.
- <a href="http://www.bsh-cert.de/">http://www.bsh-cert.de/</a> BSH-Cert is a German notified body for the MED.
- <a href="http://www.bg-verkehr.de/">http://www.bg-verkehr.de/</a> A German notified body for the MED.
- <a href="http://www.gl-group.com/en/group/index.php">http://www.gl-group.com/en/group/index.php</a> A German notified body for the MED.
- 1.6 The following documents were collected from these websites and are used extensively in this report.
  - Marine Equipment Directive 96/98/EC
  - 2011-75-EU (MED 7th Amendment)
  - Rules for the Certification of Marine Equipment in accordance with European Directive 96/98/EC and Subsequent Amendments
  - Merchant Shipping Notice 1734 (M+F)



- Merchant Shipping Notice 1734 (M+F) Amendment 5.
- 1.7 However, despite ERS performing a comprehensive search of publically available documentation, there remained areas of the research briefing where a lack of information meant further research was needed (the limited amount of English language information proved particularly problematic in some instances).
- 1.8 In an attempt to fill these gaps, ERS then directly contacted a number of relevant organisations. While not all of these requests (or follow up requests) for information were successful a number of organisations did provide advice and guidance on particular areas. These emails have been used throughout the report. The table below summarises this stage of the research:

Table 3

Country	Organisation	Response
UK	Lloyd's Register Verification Limited	No
	Marine and Coastguard Agency	No
	Federal Maritime and Hydrographic Agency	Yes
Germany	Germanisher Lloyd SE	Yes
	Berufsgenossenschaft für Transport und	Yes
	Verkehrswirtschaft	
Italy Ministry of Infrastructure and Transport		No
	Registro Italiano Navale	Yes
Norway	Norwegian Maritime Agency	Yes
	Det Norske Veritas AS	No
EU	MARED	Yes

1.9 Yet, despite the best efforts of ERS to retrieve information from either websites, publically available documentation or through direct correspondence with administrations and notified bodies, there still remains areas of the research brief where no information was available.



1.10 Note that while the version of the MED currently in effect is the 6th amendment, the product numbers provided by JETRO correspond to the 7th amendment, which shall be applied from 5 October 2012. Therefore it is the 7th amendment that provides the basis of this report. This difference is particularly relevant to item A.1/4.57 (BNWAS) which moved from Annex A.2 to A.1, a change which has significant implications for product approval.



# 2. RELATIONSHIP BETWEEN THE ADMINISTRATION AND NOTIFIED BODIES

# Marine Equipment Directive Overview

- 2.1 The Marine Equipment Directive (MED) outlines information regarding the designation and inspection of Notified Bodies. It also outlines their responsibilities.
- 2.2 Article 9 of the MED requires that Member States notify the European commission and other member states, of the bodies they have designated to carry out testing procedures together with the specific tasks which those notified bodies have been designated to carry out and the identification numbers assigned to them beforehand by the Commission.
- 2.3 The NANDO information system on the European Commission website contains information regarding the designated Notified Bodies.

Table 4

Country	Notifying Authority
UK	Department for Transport / Maritime and Coastguard Agency
Germany	Federal Ministry of Transport, Building and Urban Development
	Ministry of Economic Development - General Directorate for
Italy	Market, Competition, Consumer, Supervision and Technical
	Standards
Norway	Ministry of Trade and Industry



# **Key Features of the Marine Equipment Directive**

- 2.4 The MED requires Member States to ensure notified bodies that assess the compliance of equipment with testing standards are: "independent, efficient and professionally competent to carry out their tasks".
- 2.5 The Directive outlines the minimum requirement to be taken into account by Member States when designating Notified Bodies. Organizations wishing to be designated as a Notified Body are to submit complete information to the Member State showing how they comply with these criteria. For information, these criteria are presented overleaf.



# Minimum criteria to be taken into account by Member States for the designation of bodies

- 1. Notified bodies must fulfill the requirements of the relevant EN 45000 series.
- 2. A notified body must be independent and must not be controlled by manufacturers or by suppliers.
- 3. A notified body must be established within the territory of the Community.
- 4. Where type-approvals are issued by a notified body on behalf of a Member State, the Member State must ensure that the qualifications, technical experience and staffing of the notified body are such as will enable it to issue type approvals which comply with the requirements of this Directive and to guarantee a high level of safety.
- 5. A notified body must be in a position to provide maritime expertise.
- 6. A notified body is entitled to perform conformity-assessment procedures for any economic operator established within or outwith the Community.
- 7. A notified body may perform conformity-assessment procedures in any Member State or State outwith the Community using either its home-based means or the personnel of its branch office abroad.
- 8. If a subsidiary of a notified body performs conformity-assessment procedures, all documents relating to the conformity-assessment procedures must be issued by and in the name of the notified body and not in the name of the subsidiary.
- 9. A subsidiary of a notified body which is established in another Member State may, however, issue documents relating to conformity-assessment procedures if it is notified by that Member State.



- 2.6 Article 9 of the MED, requires Member States to notify the Commission and other Member States of the organizations they have designated as Notified Bodies, as well as specifying the specific tasks the organizations have been designated to carry out. This information is presented on the European Commission 'New approach Notified and Designated Organisations (NANDO) Information System' website.
- 2.7 While the MED states that Member States (or organizations acting on their behalf) should audit Notified Bodies, it makes no reference to any instructions that can or should be issued. Similarly, the MED makes no reference to a personnel exchange system between the administration and Notified Body.
- 2.8 Each country has appointed a range of Notified Bodies to perform tasks related to MED These organizations, and details of the work they carry out, are listed as Annex 6.
- 2.9 In the **United Kingdom**, SI 1999 no. 1957 outlines information for the UK Government designating notified bodies. Essentially, this document states that for an organization to be designated as a Notified Body, it needs to satisfy the minimum criteria specified in Annex C of the Directive. In the UK, 10 notified bodies have been designated.
- 2.10 In **Germany**, 3 notified bodies have been designated. National Legislation, specifically Article 3 of "Schiffsausrüstungsverordnung" (or Marine Equipment Regulation), states that the Notified Body should fulfill additionally the requirements of IMO Resolution A.739(18) and A.789(19) as applicable.
- 2.11 According to Article 4.8 of the Marine Equipment Regulation, BSH is the competent authority for monitoring notified bodies on marine equipment in Germany.



- 2.12 Both BMVBS (Federal Ministry of Transport, Building and Urban Development) or BSH can give general instructions concerning the implementation of MED or testing procedures if necessary. In order, to establish and maintain the necessary independence of Notified Bodies according to EN 45000 series, neither BMVBS nor BSH will intervene regarding individual decisions in type approval or quality assurance procedures. If BSH notice a possible non-conformity of a product, approved by a Notified Body in Germany, BMVBS/BSH will ask for clarification and further actions if necessary. There is no personnel exchange in Germany between the Administration and a Notified Body.
- 2.13 In **Italy**, 5 notified bodies have been designated.
- 2.14 In Norway, the Norwegian Maritime Agency state that in Norway the only instruction that can be issued to a Notified Body is for them to retrieve a MED certificate. There is no personnel exchange in Norway between the Administration and a Notified Body. In Norway, 3 notified bodies have been designated.



# 3. SUMMARY OF THE PROTOTYPE APPROVAL METHOD (MODULE B) AND PREPARATION BY APPLICANTS

# Marine Equipment Directive Overview

- 3.1 As outlined in the MED, EC Type Examination (Module B) includes all the procedures relative to the type approval. This module is always required and is to be considered preliminary to the Production Certification Modules.
- 3.2 Annex B of the directive outlines in more detail the requirements for this stage.

#### **Fees and Timescale**

- 3.3 The fee necessary for obtaining a prototype approval and length of time required to complete the application process varies according to the Notified Body and the item in question.
- 3.4 For example, **BGV** fees differ per item. They state they are a non-profit Government agency and quote the following as examples (other items are approximately the same price):
  - Non-combustible materials 500euros
  - Upholstered furniture 420euros
- 3.5 Other organisations say that they are unable to provide costs. For example,
  GL state that more information is required before they can provide costs, this information should include the following:
  - General description of the product
  - Manuals for installation, use and maintenance
  - Assembly manufacturing drawings, material lists and schemes of components



- Test reports
- Description of quality assurance system or copy of ISO 9001 certificate.
- 3.6 **RINA** state that they are unable to provide information on fees as they calculated on a case by case basis.

# **Standard/Testing Protocols**

# **United Kingdom**

- 3.7 Information issued by the relevant UK Body (the MCA) states that there is no standard or testing protocol other than those listed in A.1 of the Directive necessary to be taken into account.
- 3.8 Specifically, MSN 1734, states that the products must satisfy the "applicable international standards". This is defined to mean the equipment satisfies the product testing standards specified in Annex A of MED and has been manufactured in accordance with the EC conformity-assessment procedure as set out in Annex B and has been labelled with the mark of conformity, identification number and the last two digits of the year in which the mark was affixed as shown in Annex C to this Notice.

# Italy

3.9 Correspondence with RINA confirms that all equipment included in Annex A.1 is to be certified according to the Directive with no further requirement from the Italian Administration.

What kind of test result is acceptable for a prototype approval? Is there a restriction or a standard on test facilities? Is a test report produced by a test facility in Japan acceptable? Is an attendance of personnel of a notified body (or the Administration) necessary?

# **MED** requirements



3.10 The test result necessary for prototype approval varies depending on the equipment in question. The test results required for type approval are outlined in the Directive.

# **United Kingdom**

- 3.11 As outlined above, an acceptable test result has to meet the test result has to meet the test result outlined in Annex A of the MED.
- 3.12 As outlined in Marine shipping notice MSN 1734, "type approval tests are to be conducted at a United Kingdom Accreditation Services (UKAS) or equivalent National Body accredited laboratory unless no such laboratory is available. In that instance, an alternative laboratory recognized by the Notified Body as offering suitable and satisfactory guarantees of technical application of EN 45001 or ISO/IEC Guide 25 may be used".
- 3.13 The notice also states that a Notified Body will agree with the applicant the location where the examination and necessary tests are to be carried out.

#### Germany

- 3.14 GL states that where testing is carried out in a laboratory, it should be approved by the national authority (see attached) or be a facility accredited to the relevant tests. Where the laboratory is not accredited, the test will have to be witnessed by the Notified Body.
- 3.15 **BGV** state that the test is performed as required and to the standards fixed in the latest MED. The manufacturer should inform BGV about the intended test facilities. Generally, they ask that the facilities should have an accreditation for the type of products tested. Further, as required by IMO, the manufacturer has to use an IMO notified fire lab (as per FO.1/Circ.41). In case of large fire tests, the test lab has to invite a national competent authority for participation



as per FTP code requirement. BGV can be performed anywhere in the world, assuming that the facilities are accredited (or they are sure that they work as per the accreditation requirements).

# Italy

3.16 RINA confirms that test results are to comply with the requirement stated in Annex 1 of the MED. RINA may accept tests carried out at labs accredited to ISO 17021 by a national accreditation body or recognized by an Administration. Accreditation/recognition is meant for the specific testing standard which is to be listed in the accreditation/recognition certificate. Attendance of RINA technician during the type tests is to be evaluated on a case by case basis.

Equipment already approved by another country (other than EU Member States, USA, and EFTA countries)

# Germany

3.17 GL state that placed on board an EC ship has to be approved according to the MED (and/or MRA). Test reports, used for other approvals, issued by testing laboratories which are accredited or recognised or acceptable to the Notified Body based on further criteria, may be accepted independently of their date for the conformity assessment.

# Italy

3.18 **RINA** state that type tests might not be repeated depending on the lab having performed the tests. Technical documentation is to be verified by RINA.



# Validity period for the prototype approval and revocation of approval

3.19 The MED makes gives no validity period for prototype approval nor does it mention the scenario in which an approval may be revoked.

# **United Kingdom**

- 3.20 MSN 1734 states the prototype approval will be valid for valid for a period of up to 5 years.
- 3.21 Whilst the legislation doesn't explicitly state the conditions under which an approval may be revoked it does mention that the certificate refers only to equipment identical to that assessed.
- 3.22 It is also a condition of issue of the certificate that a manufacturer shall consult with the Notified Body prior to the incorporation of any alteration to the build standard of the equipment for which the type approval certificate was originally issued.

#### Germany

- 3.23 **GL** states that their prototype approval has a validity period of five years. They comment that, providing the relevant standards and equipment haven't changed, the approval certificate can be renewed without re-testing.
- 3.24 If the relevant regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.
- 3.25 **BGV** states that their prototype approval is generally valid for 5 years.
- 3.26 The approval may be revoked, if the test report has been faked/manipulated or (as in the case of Chemical protection suits) the item is moved from Annex A.1 of the MED to Annex A.2.



# Italy

- 3.27 **RINA** state that approval is valid for 5 years, unless a different duration is specified in the reference standard.
- 3.28 **RINA** may suspend and/or withdraw a certificate in the event of serious non-compliance on the part of the Manufacturer for example:
  - significant non-conformities of the manufactured product or in the manufacturing process, with respect to the technical documentation submitted to RINA;
  - serious shortcomings detected in service;
  - significant changes made to the product without notifying RINA;
  - unpaid fees.
- 3.29 Certification may also be withdrawn in the event of changes to the applicable standards and/or requirements which the Manufacturer is, or deems he is, unable to comply with.
- 3.30 Both the Ministry of Transport and Infrastructure and the European Commission are to be notified of such withdrawals.

# Permitted changes to the prototype design or material MED requirements

- 3.31 Annex B of the MED states that with regards to Module B, the applicant must inform the notified body that holds the technical documentation concerning the EC type-examination certificate of all modifications to the approved product.
- 3.32 Modifications must receive additional approval where such changes may affect compliance with the requirements or the prescribed conditions for use



of the product. Such additional approval must be given in the form of an addition to the original EC type-examination certificate.

# **United Kingdom**

- 3.33 MSN 1734 states that "if any modifications are made to equipment in respect of which an EC type-examination certificate has been issued, the applicant shall inform the Notified Body that issued the certificate".
- 3.34 "If any modifications are such that they may affect the equipment's compliance with applicable international standards, the Notified Body shall satisfy itself, by further examinations and tests if necessary, that the equipment as modified complies with the applicable international standards and, if so satisfied, shall approve the modifications to the equipment and issue an addition to the original EC type examination certificate in respect thereof".

# Germany

- 3.35 **GL** states that the manufacturer should inform the Notified Body of any modifications or changes to the approved equipment.
- 3.36 **BGV** states that changes to the prototype are generally not allowed. If 'cosmetic' changes are envisaged then they ask that manufacturers inform them beforehand about their intentions using the application for modification form (See attached).

#### Italy

3.37 **RINA** states that the manufacturer of the ship is to inform the Notified body about any change to the product. Depending on the modification, recertification may be required for the product. This process will be based on a full or partial reassessment (to be decided on a case by case basis.



# 4. SUMMARY OF THE METHOD TO CONFIRM THE IDENTITY OF A PRODUCT WITH THE PROTOTYPE (MODULES D, E, F) AND PREPARATION BY APPLICANTS

# Marine Equipment Directive Overview

- 4.1 Following on from Type approval, the second stage of the certification process requires compliance with production control modules.
- 4.2 Whilst a range of modules fall under this stage of MED certification, only Modules D, E and F are to be considered in this research. The aims of these modules are summarized below (note that more information regarding the Modules is available in Annex B of the MED).

#### Module D

4.3 Module D (Production Quality Assurance) consists of the verification by the Notified Body of the quality assurance system applied by the Manufacturer for production, inspection and testing during fabrication and on the finished product in order to obtain the reasonable presumption that the marketed products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards.

#### Module E

4.4 Module E (Product Quality Assurance) consists of the verification by the Notified Body of the quality control system applied by the Manufacturer for the testing of the finished product in order to obtain the reasonable presumption that the marketed products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards.



# Module F

4.5 Module F (Product Verification) consists of the examination and testing by the Notified Body of each single product or of products sampled on a statistical basis for each homogeneous production in order to ascertain that the products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards.

# Germany

4.6 Note that **BGV** states that it does not conduct Module F certification due to the process requiring more manpower than they have available. Therefore, unless otherwise stated, all BGV information in this section refers to Modules D and/or E.

How much fee is necessary for the confirmation of a product with prototype (Modules D, E, F) and how long time does it take from the application?

### Germany

- 4.7 As with Module B approval, **GL** states that further information is required before they can provide detail regarding time scales of fees. Again, this information should include:
  - General description of the product
  - Manuals for installation, use and maintenance
  - Assembly manufacturing drawings, material lists and schemes of components
  - Test reports
  - Description of quality assurance system or copy of ISO 9001 certificate.



- 4.8 **BGV** states that it does not charge lump-sum prices for surveillance audits. Instead they charge per hour. Each man-hour is charged at 100euros with the travelling times charged at 30euros an hour. The tests are carried out by a product specialist (who normally carries out the type approval tests) and a quality specialist (an auditor). These can be the same person.
- 4.9 The time between application and certification varies depending on factors such as the location of the manufacture's premises, availability of staff and whether the audit reveals concerns or deficiencies – but it can be less than a week.
- 4.10 **BGV** states that it always tries to schedule jobs to minimize travel time and therefore reduce costs.

# Italy

4.11 As with prototype approval, **RINA** state that fees are calculated on a case by case basis.

# What is the validity period for the approval?

4.12 The MED gives no direction as to the period for which Modules D, E, and F should be valid.

#### Germany

- 4.13 GL states that modules D and E have a validity period of five years each.
  Module F has no validity period.
- 4.14 **BGV** states that modules D and E are valid for three years each, although annual audits have to be carried out.

# Italy



4.15 **RINA** states that modules D and E have are valid for three years each. The validity of Module is unlimited.

With regard to Modules D and E, what is the requirement for the approval? Is the requirement for the approval identical with that of ISO9000? Is it necessary to have a management system of ISO9000 itself certified by notified body or other bodies?

# Marine Equipment Directive Overview

4.16 The quality system required for Module D has to fulfil the requirements described in Annex B of the directive. Information of particular relevance is reproduced copied overleaf.



#### Module D

The quality system must ensure that the products conform to type as described in the EC type-examination certificate.

All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality-system documentation must permit a consistent interpretation of the quality programmes, plan, manuals and records.

It must, in particular, include an adequate description of:

the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality;

the manufacturing, quality-control and quality-assurance techniques, processes and systematic actions that will be used,

the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out,

the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.,

the means of monitoring the achievement of the required product quality and the effective operation of the quality system.

4.17 Module E quality system requirements are also described in Annex B of the directive. Information of particular relevance is reproduced below.



# Module E

Under the quality system, each product must be examined and appropriate tests must be carried out in order to ensure its compliance with the relevant requirements of the international instruments. All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. That quality-system documentation must ensure common understanding of the quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

the quality objectives and the organizational structure, responsibilities and

powers of the management with regard to product quality,

the examinations and tests that will be carried out after manufacture,

the means of monitoring the effective operation of the quality system,

the quality records, such as inspection reports and test data, calibration

data, qualification reports of the personnel concerned, etc.



# Germany

- 4.18 **GL** states that an ISO9001 certification is not mandatory but is recommended. GL also state that a combination of ISO 9001:2008 certification and MED conformity assessment by GL would lead to a reduction of time and costs.
- 4.19 **BGV** states that a quality system certification is not necessary, as long as the manufacturers system ensures the quality aims as required by the directive are met.

# Italy

- 4.20 According to MED rules issued by RINA 'For the purpose of issuing of Module D, the Manufacturer is to operate a quality system for production and final product inspection and testing of products already certified in accordance with Module B, at least equivalent to the harmonized standard EN ISO 9001:2000 in respect of those aspects dealt with in the previous harmonized standard EN ISO 9002:1994. This system is to be subject to surveillance by RINA'.
- 4.21 The same rules state that for Module E the manufacturer is 'to operate a quality system for final product inspection and testing at least equivalent to the harmonized standard EN ISO 9001:2000 in respect of those aspects dealt with in the previous harmonized standard EN ISO 9003:1994. This system is to be subject to surveillance by RINA'.



With regard to Modules D and E, does a notified body visit the production site to check the management system in situ? How about the case the manufactures have ISO9000 certification? Are annual audits conducted by the notified body? What is the procedure for the renewal of the approval?

# Marine Equipment Directive Overview

- 4.22 The MED states that for Modules D and E surveillance, the manufacturer must allow the notified body access for inspection purposes to the locations of manufacture, inspection and testing and storage.
- 4.23 The MED also states that for Module D, the notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.24 In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has taken place, with a test report.
- 4.25 The MED makes no reference to the procedure to be followed for renewal.

### Germany

- 4.26 GL confirms that the assessment procedure must include a visit to the manufacturer's production site and that surveillance audits are required. They mention that the audit for ISO 9001:2008 certification and MED conformity assessment could be combined.
- 4.27 GL states that to renew the certification the Notified body has to carry out a renewal audit. This is made after an application has been made by the manufacturer.



4.28 In respect of **BGV**, they state that a quality system certification is not necessary, as long as the manufacturer's system ensures the quality aims as required by the Directive are met. They may accept other notified body's audits if they are sure they are qualified and the scope of the products is the same (e.g. breathing apparatuses, which are as well falling under the Pressure Equipment Directive).

# Italy

- 4.29 The certification procedures applied by **RINA** vary according to whether or not manufactures have a quality system certified by RINA. The information below assumes that they do not have a quality system certified by RINA.
- 4.30 RINA state that Modules D and E are subject to surveillance by RINA.

  Chapter 4 in the attached RINA rules contains more information about the cycle of surveillance, both Modules are subject to an initial audit which takes place at the manufactures premises and then annual audits over a three year cycle (in addition, Module D is subject to six-monthly audits for complex or critical products decided on a case by case basis).
- 4.31 RINA reserves the right to pay unannounced visits to the Manufacturer's premises, carrying out tests or causing tests to be carried out to check that the quality system management is functioning correctly.
- 4.32 RINA state that upon completion of each three-year surveillance cycle the assessment of the quality management system is repeated for renewal of the certificate.
- 4.33 The potential for less information being required for some relaxation of the certificate.



4.34 When the manufacturer does have a quality system certified by RINA, has a quality system certified by a recognized organization other than RINA or produces products already certified by RINA in accordance with the MED Directive then there is the potential for either less information to be required or for certain aspects of the certification process to be relaxed.

With regard to Module F, what are the requirements for approval? How much samples are takes from the products?

# Marine Equipment Directive Overview

4.35 Module F requirements are described in Annex B of the directive. Information of particular relevance is reproduced overleaf.



#### Module F

The notified body must carry out the appropriate examinations and tests in order to check that the product complies with the requirements of the international instruments either by examination and testing of every product or by examination and testing of products on a statistical basis, at the choice of the manufacturer.

Verification by examination and testing of every product - All products must be individually examined and appropriate tests must be carried out in order to verify their conformity to type as described in the EC type-examination certificate. The notified body must affix its identification symbol or cause it to be affixed to each approved product and draw up a written certificate of conformity relating to the tests carried out.

The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificate of conformity on request to the flag Member State administration

Statistical Verification - The manufacturer must present his products in the form of homogeneous lots and must take all measures necessary to ensure that the manufacturing process ensures the homogeneity of each lot produced.

All products must be available for verification in the form of homogeneous lots. A random sample must be drawn from each lot. Products in a sample must be individually examined and appropriate tests must be carried out to ensure that they comply with the requirements of the international instruments which apply to them and to determine whether the lot is to be accepted or rejected.

In the case of accepted lots, the notified body must affix its identification symbol or cause it to be affixed to each product and must draw up a written certificate of conformity relating to the tests carried out. All products in the lot may be put on the market except those products from the sample which are found not to comply.

If a lot is rejected, the notified body or the competent authority must take appropriate measures to prevent that lot's being put on the market. In the event of frequent rejection of lots the notified body may suspend statistical verification.

The manufacturer may, under the responsibility of the notified body, affix the latter's identification symbol during the manufacturing process.

The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificates of conformity on request to the flag Member State administration.



## Germany

- 4.36 **GL** confirms that it uses the requirements for approval as outlined in Annex B of the MED.
- 4.37 Each sample taken by GL shall, as far as practical, consist of "a single type, grade, class, size and composition, manufactured under essentially the same conditions and at essentially the same time. The manufacturer is responsible for defining the composition of a lot in agreement with his chosen notified body. This may be in accordance with a suitable generic or specific standard, i.e. ISO 2859 or EN 3 Pt 6".
- 4.38 As stated above, **BGV** does not generally conduct Module F certification. However, they do state their concerns that the MED says nothing about the minimum standards that have to be met regarding the lot size and how much of each lot has to be tested.

## Italy

- 4.39 **RINA** rules split Module F verification into two sections 'verification of single products' and 'verification of product lots'.
- 4.40 Where RINA consider the products to be complex (i.e. composed of many parts of different origins assembled together) or not manufactured in a series, all items of certified equipment are to be individually examined and tested.
- 4.41 RINA rules state that upon completion the manufacture of one or more of these products, the Manufacturer is to contact RINA and request the testing of the items produced.
- 4.42 The appropriate examinations and tests in order to check that the product complies with the requirements of the international standards are carried out in the presence of a RINA Surveyor.



- 4.43 Each marked product is to be unequivocally identified by means of the serial number or other methods ensuring that it is impossible for a marked product which has not been tested to be put on the market.
- 4.44 Where RINA consider the products to be simple (i.e. not composed of many parts of different origins assembled together) and/or manufactured in series, they are to be presented for statistical verification in the form of homogeneous lots.
- 4.45 Upon completion of the manufacture of one or more lots the manufacturer is to contact RINA and request the testing of the items produced.
- 4.46 The appropriate examinations and tests in order to check that the product complies with the requirements of the international standards are carried out on a statistical basis in the presence of a RINA surveyor.
- 4.47 In general, a lot consists of those products of a single type, grade, class, dimensions and composition manufactured in the same conditions and during a reasonable period of time. It is the responsibility of the Manufacturer to establish the lot composition and to agree upon it with RINA. In general, the composition of the lot is to be established in accordance with the indication of specific standards, such as, for instance, ISO 2859 or EN 3 Pt 6. At least one random sample is drawn from each lot; the specimens are individually examined and appropriate tests are carried out to ensure that they comply with the requirements of the international instruments which apply to them. Prior to examination and testing, the sampling and acceptance criteria are to be agreed between the Manufacturer and RINA on a case-by-case basis taking into account the specific standards, such as those indicated above.



4.48 Subject to the satisfactory outcome of this examination and testing, a Product Verification Certificate (Module F) is issued and the Manufacturer is authorised to mark each item of equipment belonging to the approved lot. Each approved lot is to be unequivocally identified on the single products (or on their packaging), by means of the serial number or other methods (for example the period of manufacture) ensuring that it is impossible for marked products belonging to a lot which has not been subjected to the prescribed tests to be put on the market.



# 5 ROLE OF THE ADMINISTRATION IN THE SYSTEM, ESPECIALLY, IN CASE OF OCCURRENCE OF NON-CONFORMITY

## Marine Equipment Directive Overview

5.1 Article 13 of MED 96/98 contains information of most relevance to this section. This is reproduced below:

Where a Member State ascertains by inspection or otherwise that, notwithstanding the fact that it bears the mark, a piece of equipment referred to in Annex A.1, when correctly installed, maintained and used for its intended purpose, may compromise the health and/or safety of the crew, the passengers or, where applicable, other persons, or adversely affect the marine environment, it shall take all appropriate interim measures to withdraw that piece of equipment from the market or prohibit or restrict its being placed on the market or being used on board a ship for which it issues the safety certificates. The Member State shall immediately inform the other Member States and the Commission of that measure and indicate the reasons for its decision and, in particular, whether non-compliance with this Directive is due to:

- (a) failure to comply with Article 5 (1) and (2);
- (b) incorrect application of the testing standards referred to in Article 5 (1) and (2); or
- (c) shortcomings in the testing standards themselves. The Commission shall enter into consultation with the parties concerned as soon as possible. Where, after such consultation, the Commission finds that: the measures are justified, it shall immediately so inform the Member State which took the initiative and the other Member States; where the decision referred to in paragraph 1 is attributed to shortcomings in the testing standards, the Commission shall, after consulting the parties concerned, bring the matter before the Committee referred to in Article 18(1) within two months if the Member State which has taken the decision intends to maintain it, and shall initiate the regulatory procedure referred to in Article 18(2); the measures are unjustified, it shall immediately so inform the Member State which took the initiative and the manufacturer or his authorized representative established within the Community.



How does the Administration conduct market survey? How many types of products and how many pieces of products did it buy for survey? What is the budget for this activity? How does it decide the number of samples?

## Marine Equipment Directive Overview

- 5.2 Article 12 of the MED states that each Member State may take the measures necessary to ensure that sample checks are carried out on equipment bearing the mark which is on its market and which has not yet been placed on board, in order to ensure that it complies with this Directive. Sample checks which are not provided for in the modules for conformity assessment in Annex B shall be carried out at the expense of the Member State.
- After the installation of equipment which complies with this Directive on board a Community ship, evaluation by that ship's flag State administration of that equipment shall be permitted when operational on-board performance tests are required by international instruments for safety and/or pollution-prevention purposes, provided that they do not duplicate the conformity-assessment procedures already carried out. The flag State administration may require the manufacturer of the equipment, his authorized representative established within the Community or the person responsible for marketing the equipment within the Community to provide the inspection/testing reports.
- 5.4 The MED provides no further information as to the procedures or budget for this market survey.

#### Regulation 765/2008

5.5 In addition, Regulation 765/2008 provides a framework for the market surveillance of products to ensure that those products fulfill requirements providing a high level of protection of public interests.



## **United Kingdom**

- 5.6 The UK approach to market surveillance is outlined in the "Statutory Instrument 1999 no 1957 'The Merchant Shipping (Marine Equipment)

  Regulations 1999" and "Marine Guidance note MGN 178 (M+F)".
- 5.7 UK Market Surveillance does not involve the preproduction type-examination of the product; it only applies to products after they are placed on the market and before they are placed on board a ship. Sample checking of equipment for supply in the UK but not yet placed on board a ship will take place in the following ways:
- 5.8 By MCA personnel visiting chandlers, marine equipment suppliers and manufacturers storage facilities to inspect the products available, take details of the label or tally plate in particular to note details of the wheelmark, Notified Body identification number, year of application and all testing standards references. They will also make a general inspection of the product.
- 5.9 By owners, superintendents or masters of vessels reporting to the Maritime and Coastguard Agency any equipment they are offered which they consider does not meet the standards of the Marine Equipment Directive.
- 5.10 By ships' chandlers or other marine equipment outlets reporting equipment not in compliance with the MED, especially when labels or tally plates are missing or incomplete.
- 5.11 Equipment can be evaluated after installation on board a UK ship providing that only operational performance tests required by the international instruments for safety and/or pollution prevention are conducted and do not duplicate the conformity-assessment procedures already carried out. This aspect of market surveillance will be carried out by:



- 5.12 MCA surveyors undertaking safety surveys or general inspections.
- 5.13 Owners, superintendents or masters reporting problems with equipment after installation and MCA carrying out follow up inspections.
- 5.14 Classification Society surveyors conducting safety surveys on behalf of the MCA and reporting their findings to the MCA who will carry out follow up action.

## Germany

- 5.15 **BSH** state that their market surveillance differs according to whether it is active or reactive. 'Active' according to Regulation (EC) No. 765/2008 means BSH draw up a market surveillance programme each year. BSH decides what kind of monitoring should be carried out depending on the information they receive from economic operators, notified bodies and the media etc. One possibility is to check the relevant documents like Declaration of Conformity or the relevant certificates. Another possibility is the technical verification of products. The number of products depends on the requirements of the international instruments and the relevant testing standards listed in Annex A.1 of the MED and the scheduled scope of testing. Usually the testing scope covers only a part of the type approval procedure as market surveillance activities should only be carried out randomly.
- 5.16 'Reactive' market surveillance relies on concrete information of product deficiencies. Depending on the nature of the deficiency, BSH decides whether the technical documents or the product itself should be tested.
- 5.17 Presently BSH has a budget of 400.000 € per year for these activities.

## Norway



- 5.18 The Norwegian Maritime Authority comment that their market surveillance is based either on received reports of non conformance or own findings from inspections.
- 5.19 They comment that there types and quantities of products involved in the market varies on a case by case basis.
- 5.20 There is no specific budget allowance designated for market surveillance in Norway.

When the Administration is notified that an approved product that is not in conformity to the requirement in the Directive is in the market, what does it do? Is there a procedure for such a case?

## Marine Equipment Directive Overview

- 5.21 Article 13 of the MED outlines the procedure for when a members state ascertains that equipment is not in conformity with the directive. The key points of this article are:
- 5.22 The member state takes all appropriate interim measure to withdraw the piece of equipment from the market or prohibit or restrict its being placed on the market or being used on board a ship for which it issues the safety certificates.
- 5.23 The member state immediately informs the other member states and the Commission of that measure and indicate the reasons for its decision.
- 5.24 The Commission shall enter into consultation with the parties concerned as soon as possible to ascertain whether the measures are justified or not.
- 5.25 The Commission ensures that the Member States are kept informed of the progress and outcome of this procedure.



## **United Kingdom**

- The UK's approach to non-conformity is outlined in the "Statutory Instrument 1999 no 1957 'The Merchant Shipping (Marine Equipment) Regulations 1999". This document states that should equipment be defective it may be withdrawn from the market, be prohibited from being placed on the market, or restrict the extent to which it can be placed or prohibit the equipment being used on board ships for which the UK Government he issues safety certificates in accordance with the relevant international conventions, or restrict the extent to which it may be so used.
- 5.27 Before issuing any direction, prohibition or restriction on equipment, a written notice of intention will be served and shall provide the manufacturer or his authorized representative (as appropriate) with an opportunity to make representations to him on the proposed direction, prohibition or restriction.
- 5.28 Any direction, prohibition or restriction issued shall be given in writing to the manufacturer of the equipment, or his authorized representative in the Community. Any direction, prohibition or restriction may be withdrawn if the Government is satisfied that the equipment no longer compromises health and safety or the environment.

#### Germany

- 5.29 In Germany the procedure is laid down in Art. 20 and 21 of Regulation (EC)

  No: 765/2008, Art 13 of the MED and national law in Germany.
- 5.30 The market surveillance measures taken should be based on the interests of users and economic operators under consideration of the risk and the principle of proportionality.



5.31 According to Art 13 MED if a product compromises the health and/or safety of the crew, the passengers or other persons or adversely affects the marine environment, market surveillance authorities should take all appropriate interim measures to withdraw that piece of equipment from the market or prohibit or restrict its being placed on the market or being used on board a ship.

## Norway

5.32 The Norwegian Maritime Authority state that they act in accordance with the appropriate MED article.

Are there measures other than the market survey to find out a product that is not in conformity in the market?

## Norway

5.33 The Maritime Authority has no other measures beyond the market survey to find instances of non-conformity on the market.

Can the Administration order the manufacturer to collect its product that is not in conformity ("recall system")?

## Marine Equipment Directive Overview

- 5.34 As stated above, Article 13 of the MED outlines the recall system available to member states.
- 5.35 Article 19 of Regulation (EC) no 765/2008 also allows for the recall of products not in conformity with the market.

Is there a penalty to the manufacturer to put a product that is not in conformity in the market?

Marine Equipment Directive Overview



5.36 The MED makes no reference to any penalty to the manufacturer as a result of non-conformity.

## **United Kingdom**

- 5.37 A manufacturer who fails to comply with a direction, prohibition or restriction given to him shall be guilty of an offence. The penalty for this, upon summary conviction, is a fine not exceeding the statutory maximum and on conviction on indictment by imprisonment for a term not exceeding two years or a fine, or both.
- 5.38 In any proceedings for an offence under these Regulations it shall be a defense for the person charged to prove that he took all reasonable steps to avoid the commission of the offence.
- 5.39 In any case where equipment on board a ship does not comply with the requirements of these Regulations, or the owner of a ship has not complied with a direction to replace equipment on board the ship, the ship shall be liable to be detained.

## Germany

5.40 Article 9 of Schiffsausrüstungsverordnung (Regulation on marine equipment) in conjunction with Art. 15 Seeaufgabengesetz (Federal Maritime Responsibilities Act) stipulates an administrative offense up to 50,000 euros.

## Norway

5.41 In Norway, the Maritime Authority penalizes neither the manufacturer nor Notified Body. They do comment however, that one possible penalty would be being sued by the product end user. They also comment that the Notified Body could lose its nomination to approve equipment.



# 6 RECOGNITION OF ANOTHER TYPE APPROVAL SYSTEM AND OF A PRODUCT APPROVED UNDER SUCH A SYSTEM

Does the Administration have other type approval system on marine equipment for the ships operating under its flag than the Marine Equipment Directive (MED)?

## Norway

6.1 The Norwegian Administration state that they also have type approval from classification societies or other recognized test facilities for equipment not regulated by MED.

How is the mutual recognition between US and EU and that between EFTA and EU going? What are the changes in the number of types and approvals?

6.2 No information available

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## COUNCIL DIRECTIVE 96/98/EC

# of 20 December 1996 on marine equipment (OJ L 46, 17.2.1997, p. 25)

## Amended by:

<u>B</u>

Official Journal

		No	page	date
<u>M1</u>	Commission Directive 98/85/EC of 11 November 1998	L 315	14	25.11.1998
► <u>M2</u>	Commission Directive 2001/53/EC of 10 July 2001	L 204	1	28.7.2001
► <u>M3</u>	Commission Directive 2002/75/EC of 2 September 2002	L 254	1	23.9.2002
► <u>M4</u>	Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002	L 324	53	29.11.2002
► <u>M5</u>	Commission Directive 2008/67/EC of 30 June 2008	L 171	16	1.7.2008
<u>M6</u>	Commission Directive 2009/26/EC of 6 April 2009	L 113	1	6.5.2009
<u>M7</u>	Regulation (EC) No 596/2009 of the European Parliament and of the Council of 18 June 2009	L 188	14	18.7.2009
<u>M8</u>	Commission Directive 2010/68/EU of 22 October 2010	L 305	1	20.11.2010

## Corrected by:

- ►<u>C1</u> Corrigendum, OJ L 246, 10.9.1997, p. 7 (96/98/EC)
- ►C2 Corrigendum, OJ L 241, 29.8.1998, p. 27 (96/98/EC)

#### **COUNCIL DIRECTIVE 96/98/EC**

# of 20 December 1996 on marine equipment

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 84 (2) thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

Acting in accordance with the procedure laid down in Article 189c of the Treaty (3),

- Whereas within the framework of the common transport policy further measures must be adopted to ensure safety in maritime transport;
- (2) Whereas shipping accidents are a matter of serious concern to the Community, in particular those that cause loss of human life and pollution of the Member States' seas and coastlines;
- (3) Whereas the risk of shipping accidents can be effectively reduced by means of common standards that ensure high safety levels in the performance of the equipment carried on board ships; whereas testing standards and testing methods can have great influence on the future performance of equipment;
- Whereas international conventions require flag States to ensure (4) that the equipment carried on board ships complies with certain safety requirements and to issue the relevant certificates; whereas to that end testing standards for certain types of marine equipment have been developed by the international standardization bodies and by the International Maritime Organization (IMO); whereas the national testing standards implementing the international standards leave a margin of discretion certification authorities, which themselves have different levels of qualifications and experience; whereas that leads to varying levels of safety for products which the competent national authorities have certified as complying with the relevant international safety standards and to great reluctance on the part of Member States to accept that without further verification ships flying their flags carry equipment approved by other Member States;

<sup>(1)</sup> OJ No C 218, 23. 8. 1995, p. 9.

<sup>(2)</sup> OJ No C 101, 3. 4. 1996, p. 3.

European Parliament opinion of 29 November 1995 (OJ No C 339, 18. 12. 1995, p. 21), Council common position of 18 June 1996 (OJ No C 248, 26. 8. 1996, p. 10) and European Parliament Decision of 24 October 1996 (OJ No C 347, 18. 11. 1996).

- (5) Whereas common rules must be laid down to eliminate differences in the implementation of international standards; whereas such common rules will result in the elimination of unnecessary costs and administrative procedures relating to the approval of equipment, the improvement of operating conditions and of the competitive position of Community shipping and the elimination of technical barriers to trade by means of the mark of conformity affixed to equipment;
- (6) Whereas in its resolution of 8 June 1993 on a common policy on safe seas (¹) the Council urged the Commission to submit proposals for harmonizing the implementation of IMO standards and the procedures for the approval of marine equipment;
- (7) Whereas action at Community level is the only possible way of achieving such harmonization, since Member States acting independently or through international organizations cannot establish the same level of safety performance in equipment;
- (8) Whereas a Council Directive is the appropriate legal instrument as it provides a framework for uniform and compulsory application of the international testing standards by Member States;
- (9) Whereas it is appropriate in the first place to address equipment the carriage of which on board ship and the approval of which by national administrations in accordance with safety standards laid down in international conventions or resolutions is mandatory under the main international conventions;
- (10) Whereas there are various Directives that ensure the free movement of certain products which could be used *inter alia*, as equipment on board ships but which do not concern the Member States' certification of equipment in accordance with the relevant international conventions; whereas equipment to be placed on board ships must therefore be regulated exclusively by new common rules;
- (11) Whereas new testing standards must be laid down, preferably at international level, for equipment for which such standards do not already exist or are not sufficiently detailed;
- (12) Whereas Member States should ensure that the notified bodies that assess the compliance of equipment with testing standards are independent, efficient and professionally competent to carry out their tasks;

- (13) Whereas compliance with international testing standards can best be demonstrated by means of conformity-assessment procedures such as those laid down in Council Decision 93/465/EEC of 22 July 1993 concerning the modules for the various phases of the conformity-assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonization Directives (¹);
- (14) Whereas nothing in this Directive restricts the right granted to a flag State administration by international conventions to carry out operational-performance tests on board a ship for which it has issued a safety certificate, provided such tests do not duplicate the conformity-assessment procedures;
- (15) Whereas equipment covered by this Directive should, as a general rule, bear a mark to indicate its compliance with the requirement of this Directive;
- (16) Whereas Member States may in certain cases take provisional measures to limit or prohibit the use of equipment bearing the mark of conformity;
- (17) Whereas the use of equipment not bearing the mark of conformity may be allowed in exceptional circumstances;
- (18) Whereas a simplified procedure involving a regulatory committee must be followed for the amendment of this Directive,

HAS ADOPTED THIS DIRECTIVE:

#### Article 1

The purpose of this Directive shall be to enhance safety at sea and the prevention of marine pollution through the uniform application of the relevant international instruments relating to equipment listed in Annex A to be placed on board ships for which safety certificates are issued by or on behalf of Member States pursuant to international conventions and to ensure the free movement of such equipment within the Community.

#### Article 2

For the purposes of this Directive:

(a) 'conformity-assessment procedures' shall mean the procedures set out in Article 10 and Annex B;

<sup>(1)</sup> OJ No C 220, 30. 8. 1993, p. 23.

(b) 'equipment'

shall mean items listed in Annexes A.1 and A.2 which must be placed on board a ship for use in order to comply with international instruments or are voluntarily placed on board for use, and for which the approval of the flag State administration is required according to international instruments;

#### **▼**M1

(c) 'radiocommunications equipment'

shall mean equipment required by Chapter IV of the 1974 SOLAS Convention, ►M4 in its up-to-date version ◀, and survival craft two-way VHF radiotelephone apparatus required by Regulation III/6.2.1 of the same Convention;

#### **▼**B

(d) 'international conventions'

shall mean:

- ► C2 the 1966 International Convention on Load Lines (L\overline{L}66),
- the 1972 Convention on the International Regulations for Preventing Collisions at Sea (Colreg),
- the 1973 International Convention for the Prevention of Pollution from Ships (Marpol) and
- the 1974 International Convention for the Safety of Life at Sea (Solas),

together with their Protocols and the amendments thereto  $\blacktriangleright \underline{M4}$  in their up-to-date version  $\blacktriangleleft$ ;

#### (e) 'international instruments'

shall mean the relevant international conventions, the relevant resolutions and circulars of the International Maritime Organization (IMO), and the relevant international testing standards;

(f) 'mark'

shall mean the symbol referred to in Article 11 and set out in Annex D;

(g) 'notified body'

shall mean an organization designated by the competent national administration of a Member State in accordance with Article 9;

- (h) 'placed on board'
  - shall mean installed or placed on board a ship;
- (i) 'safety certificates'

shall mean the certificates issued by or on behalf of Member States in accordance with international conventions;

(j) 'ship'

shall mean a ship falling within the scope of international conventions; warships shall not be covered;

(k) 'Community ship'

shall mean a ship for which safety certificates are issued by or on behalf of Member States under international conventions. This definition shall not include a Member State administration's issuing a certificate for a ship at the request of a third country's administration; (l) 'new ship'

shall mean a ship the keel of which is laid or which is at a similar stage of construction on or after the date of the entry into force of this Directive. For the purposes of this definition, 'a similar stage of construction' shall mean the stage at which:

(i) construction identifiable with a specific ship begins

and

- (ii) assembly of that ship has commenced, comprising at least 50 tonnes or 1 % of the estimated mass of all structural material, whichever is less;
- (m) 'existing ship' shall mean a ship which is not a new ship;
- (n) 'testing standards'

shall mean the standards set by

- the International Maritime Organization (IMO),
- the International Organization for Standardization (ISO),
- the International Electrotechnical Commission (IEC),
- the European Committee for Standardization (CEN),
- the European Committee for Electrotechnical Standardization (Cenelec)

and

- the European Telecommunication Standards Institute (ETSI)
- ▶  $\underline{\mathbf{M4}}$  in their up-to-date version  $\blacktriangleleft$ , and established in accordance with the relevant international conventions and with the relevant IMO resolutions and circulars to define testing methods and test results, but only in the form referred to in Annex A;
- (o) 'type-approval' shall mean the procedures for evaluating equipment produced in accordance with the appropriate testing standards and the issue of the appropriate certificate.

#### Article 3

- 1. This Directive shall apply to equipment for use on board:
- (a) a new Community ship whether or not the ship is situated within the Community at the time of construction;
- (b) an existing Community ship
  - where such equipment was not previously carried on board

 where equipment which was previously carried on board the ship is replaced, except where international conventions permit otherwise,

whether or not the ship is situated within the Community when the equipment is placed on board.

- 2. This Directive shall not apply to equipment which on the date of the entry into force of this Directive has already been placed on board a ship.
- 3. Notwithstanding the fact that the equipment referred to in paragraph 1 may fall within the scope of Directives other than this Directive for the purpose of free movement, and in particular Council Directives 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility (¹) and 89/686/EEC of 21 December 1989 on the approximation of the laws of the Member States relating to personal protective equipment (²), that equipment shall be subject only to this Directive, to the exclusion of all others for those purposes.

#### Article 4

Each Member State or the organizations acting on its behalf shall ensure, when issuing or renewing the relevant safety certificates, that the equipment on board Community ships for which it issues safety certificates complies with the requirements of this Directive.

#### Article 5

- 1. Equipment listed in Annex A.1 that is placed on board a Community ship on or after the date referred to in the second subparagraph of Article 20 (1) shall meet the applicable requirements of the international instruments referred to in that Annex.
- 2. The compliance of equipment with the applicable requirements of the international conventions and of the relevant resolutions and circulars of the International Maritime Organization shall be demonstrated solely in accordance with the relevant testing standards and the conformity-assessment procedures referred to in Annex A.1. For items listed in Annex A.1, where both IEC and ETSI testing standards are given, those standards shall be alternatives and a manufacturer or his authorized representative established within the Community may determine which of them is to be used.

 $<sup>(^1)</sup>$  OJ No L 139, 23. 5. 1989, p. 19. Directive as last amended by Directive 93/68/EEC (OJ No L 220, 31. 8. 1993, p. 1).

<sup>(2)</sup> OJ No L 399, 30. 12. 1989, p. 18. Directive as last amended by Directive 93/95/EEC (OJ No L 276, 9. 11. 1993, p. 11).

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

#### Article 6

- 1. No Member State shall prohibit the placing on the market or the placing on board a Community ship of equipment referred to in Annex A.1 which bears the mark or for other reasons complies with this Directive or refuse to issue or renew the safety certificates relating thereto.
- 2. A radio licence shall be issued in accordance with the international radio regulations by the competent authority before the relevant safety certificate is issued.

#### Article 7

- 1. After the date of the entry into force of this Directive, the Community shall submit a request to the IMO or to the European standardization organizations, as appropriate, for the establishment of standards, including detailed testing standards, for the equipment listed in Annex A.2.
- 2. The request referred to in paragraph 1 shall be made:
- by the Presidency of the Council and by the Commission, when it is submitted to the IMO,
- by the Commission, in accordance with Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (¹), when it is submitted to the European standardization organizations. The mandates issued by the Commission shall aim for the development of international standards through procedures for cooperation between the European bodies and their counterparts at international level.
- 3. Member States shall do their utmost to ensure that the international organizations, including the IMO, develop those standards expeditiously.
- 4. The Commission shall monitor the development of the testing standards on a regular basis.

OJ No L 109, 26. 4. 1983, p. 8. Directive as last amended by the 1994 Act of Accession.

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- 5. Should the international organisations, including the IMO, fail or refuse to adopt appropriate testing standards for a specific item of equipment within a reasonable time, standards based on the work of the European standardisation organisations may be adopted. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).
- 6. When the testing standards referred to in paragraphs 1 or 5 are adopted or enter into force, as appropriate, for a specific item of equipment, that equipment may be transferred from Annex A.2 to Annex A.1. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).

Article 5 shall apply to that equipment from the date of that transfer.;

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#### Article 8

- 1. In the case of a new ship which, irrespective of its flag, is not registered in a Member State but is to be transferred to the register of a Member State, such a ship shall, on transfer, be subject to inspection by the receiving Member State to verify that the actual condition of its equipment corresponds to its safety certificates and either complies with this Directive and bears the mark or is equivalent, to the satisfaction of that Member State's administration, to equipment type-approval in accordance with this Directive.
- 2. Unless the equipment either bears the mark or that administration considers it to be equivalent, it shall be replaced.
- 3. Equipment which is considered equivalent pursuant to this Article shall be given a certificate by the Member State which shall at all times be carried with the equipment and which gives the flag Member State's permission for the equipment to be placed on board the ship and imposes any restrictions or lays down any provisions relating to the use of the equipment.
- 4. In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

#### Article 9

1. Member States shall notify the Commission and the other Member States of the bodies which they have designated to carry out the procedures for in Article 10 together with the specific tasks which those notified bodies have been designated to carry out and the identification numbers assigned to them beforehand by the Commission. Each organization shall submit to the Member State which intends to designate it complete information concerning, and evidence of compliance with the criteria laid down in Annex C.

- 2. At least once every two years each Member State shall cause an audit of the duties its notified bodies are undertaking on its behalf to be carried out by the administration or by an impartial external organization appointed by the administration. That audit shall ensure that each notified body continues to comply with the criteria laid down in Annex C.
- 3. A Member State which has designated a body shall withdraw its designation if it finds that that body no longer complies with the criteria laid down in Annex C. It shall immediately inform the Commission and the other Member States accordingly.

#### Article 10

- 1. The conformity-assessment procedure, details of which are listed in Annex B, shall be:
- (i) EC type-examination (module B) and, before equipment is placed on the market and according to the choice made by the manufacturer or his authorized representative established within the Community from the possibilities indicated in Annex A.1, all equipment shall be subject to:
  - (a) the EC declaration of conformity to type (module C);
  - (b) the EC declaration of conformity to type (production-quality assurance) (module D);
  - (c) the EC declaration of conformity to type (product-quality assurance) (module E);
  - (d) the EC declaration of conformity to type (product verification) (module F); or
- (ii) EC full-quality assurance (module H).
- 2. The declaration of conformity to type shall be in written form and shall give the information specified in Annex B.
- 3. Where sets of equipment are produced individually or in small quantities and not in series or in mass, the conformity-assessment procedure may be the EC unit verification (module G).
- 4. The Commission shall keep an up-to-date list of approved equipment and applications withdrawn or refused and shall make it available to interested parties.

## Article 11

1. Equipment referred to in Annex A.1 which complies with the relevant international instruments and is manufactured in accordance with the conformity-assessment procedures shall have the mark affixed to it by the manufacturer or his authorized representative established within the Community.

- 2. The mark shall be followed by the identification number of the notified body which has performed the conformity-assessment procedure, if that body is involved in the production-control phase, and by the last two digits of the number of the year in which the mark is affixed. The identification number of the notified body shall be affixed under its responsibility either by the body itself or by the manufacturer or his authorized representative established within the Community.
- 3. The form of the mark to be used shall be as set out in Annex D.
- 4. The mark shall be affixed to the equipment or to its data plate so as to be visible, legible and indelible throughout the anticipated useful life of the equipment. However, where that is not possible or not warranted on account of the nature of the piece of equipment, it shall be affixed to the packaging of the product, to a label or to a leaflet.
- 5. No marks or inscriptions which are likely to mislead third parties with regard to the meaning or the graphics of the mark referred to in this Directive shall be affixed.
- 6. The mark shall be affixed at the end of the production phase.

#### Article 12

- 1. Notwithstanding Article 6, each Member State may take the measures necessary to ensure that sample checks are carried out on equipment bearing the mark which is on its market and which has not yet been placed on board, in order to ensure that it complies with this Directive. Sample checks which are not provided for in the modules for conformity assessment in Annex B shall be carried out at the expense of the Member State.
- 2. Notwithstanding Article 6, after the installation of equipment which complies with this Directive on board a Community ship, evaluation by that ship's flag State administration of that equipment shall be permitted when operational on-board performance tests are required by international instruments for safety and/or pollution-prevention purposes, provided that they do not duplicate the conformity-assessment procedures already carried out. The flag State administration may require the manufacturer of the equipment, his authorized representative established within the Community or the person responsible for marketing the equipment within the Community to provide the inspection/testing reports.

#### Article 13

1. Where a Member State ascertains by inspection or otherwise that, notwithstanding the fact that it bears the mark, a piece of equipment referred to in Annex A.1, when correctly installed, maintained and used for its intended purpose, may compromise the health and/or safety of the crew, the passengers or, where applicable, other persons, or adversely ▶ C1 affect the marine environment, it shall take all appropriate interim measures to withdraw that piece of equipment from the market ◀ or prohibit or restrict its being placed on the market or being used on board a ship for which it issues the safety certificates. The Member State shall immediately inform the other Member States and the Commission of that measure and indicate the reasons for its decision and, in particular, whether non-compliance with this Directive is due to:

- (a) failure to comply with Article 5 (1) and (2);
- (b) incorrect application of the testing standards referred to in Article 5 (1) and (2); or
- (c) shortcomings in the testing standards themselves.
- 2. The Commission shall enter into consultation with the parties concerned as soon as possible. Where, after such consultation, the Commission finds that:

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— the measures are justified, it shall immediately so inform the Member State which took the initiative and the other Member States; where the decision referred to in paragraph 1 is attributed to shortcomings in the testing standards, the Commission shall, after consulting the parties concerned, bring the matter before the Committee referred to in Article 18(1) within two months if the Member State which has taken the decision intends to maintain it, and shall initiate the regulatory procedure referred to in Article 18(2);

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- the measures are unjustified, it shall immediately so inform the Member State which took the initiative and the manufacturer or his authorized representative established within the Community.
- 3. Where a non-complying piece of equipment bears the mark, the appropriate measures shall be taken by the Member State which has authority over whomsoever affixed the mark; that Member State shall inform the Commission and the other Member States of the measures it has taken.
- 4. The Commission shall ensure that the Member States are kept informed of the progress and outcome of this procedure.

#### Article 14

1. Notwithstanding the provisions of Article 5, in exceptional circumstances of technical innovation, the flag State administration may permit equipment which does not comply with the conformity-assessment procedures to be placed on board a Community ship if it is established by trial or otherwise to the satisfaction of the flag State administration that such equipment is at least as effective as equipment which does comply with the conformity-assessment procedures.

In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

- 2. Such trial procedures shall in no way discriminate between equipment produced in the flag Member State and equipment produced in other States.
- 3. Equipment covered by this Article shall be given a certificate by the flag Member State which shall at all times be carried with the equipment and which gives the flag Member State's permission for the equipment to be placed on board the ship and imposes any restrictions or lays down any provisions relating to the use of the equipment.

4. Where a Member State allows equipment covered by this Article to be placed on board a Community ship, that Member State shall forthwith communicate the particulars thereof together with the reports of all relevant trials, assessments and conformity-assessment procedures to the Commission and the other Member States.

#### **▼**M7

5. Equipment such as is referred to in paragraph 1 shall be added to Annex A.2. That measure, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).

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6. Where a ship with equipment on board which is covered by paragraph 1 is transferred to another Member State, the receiving flag Member State may undertake the measures necessary, which may include tests and practical demonstrations, to ensure that the equipment is at least as effective as equipment which does comply with the conformity-assessment procedures.

#### Article 15

- 1. Notwithstanding Article 5, a flag State administration may permit equipment which does not comply with the conformity-assessment procedures or is not covered by Article 14 to be placed on board a Community ship for reasons of testing or evaluation, but only when the following conditions are complied with:
- (a) the equipment must be given a certificate by the flag Member State which must at all times be carried with the equipment and which gives the flag Member State permission for the equipment to be placed on board the Community ship and imposes any restrictions or lays down any provisions relating to the use of the equipment;
- (b) the permission must be limited to a short period of time;
- (c) the equipment must not be relied on in place of equipment which meets the requirements of this Directive and must not replace such equipment, which must remain on board the Community ship in working and ready for immediate use.
- 2. In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

#### Article 16

1. Where equipment needs to be replaced in a port outwith the Community and in exceptional circumstances which shall be duly justified to the flag State administration where it is not practicable in terms of reasonable time, delay and cost to place on board equipment which is EC type-approved, other equipment may be placed on board in accordance with the following procedure:

- (a) the equipment shall be accompanied by documentation issued by a recognized organization equivalent to a notified body, where an agreement has been concluded between the Community and the third country concerned on the mutual recognition of such organizations;
- (b) should it prove impossible to comply with (a), equipment accompanied by documentation issued by a Member State of the IMO which is a party to the relevant conventions, certifying compliance with the relevant IMO requirements, may be placed on board, subject to paragraphs 2 and 3.
- 2. The flag State administration shall be informed at once of the nature and characteristics of such other equipment.
- 3. The flag State administration shall, at the earliest opportunity, ensure that the equipment referred to in paragraph 1, along with its testing documentation, complies with the relevant requirements of the international instruments and of this Directive.
- 4. In the case of radiocommunications equipment, the flag State administration shall require that such equipment does not unduly affect the requirements of the radio-frequency spectrum.

## **▼**M4

#### Article 17

## **▼**M7

This Directive may be amended in order:

- (a) to apply subsequent amendments of international instruments for the purposes of this Directive;
- (b) to update Annex A, both by introducing new equipment and by transferring equipment from Annex A.2 to Annex A.1 and vice versa;
- (c) to add the possibility of using modules B + C and module H for equipment listed in Annex A.1, and by amending the columns for the conformity assessment modules;
- (d) to include other standardisation organisations in the definition of 'testing standards' in Article 2.

Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 18(3).;

## **▼**M4

The conventions and testing standards referred to in points (c), (d) and (n) of Article 2 shall be understood without prejudice to any measures taken in application of Article 5 of Regulation (EC) No 2099/2002 of the European Parliament and of the Council of 5 November 2002, establishing a Committee on Safe Seas and the Prevention of Pollution from Ships (COSS) (1).

## **▼**<u>M7</u>

#### Article 18

- 1. The Commission shall be assisted by the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS) created by Article 3 of Regulation (EC) No 2099/2002 of the European Parliament and of the Council (2).
- 2. Where reference is made to this paragraph, Articles 5 and 7 of Council Decision 1999/468/EC (3) shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at two months.

3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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#### Article 19

The Member States shall offer each other mutual assistance with a view to the effective implementation and enforcement of this Directive.

## Article 20

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive no later than 30 June 1998.

They shall apply those measures from 1 January 1999.

When Member States adopt the measures referred to in the first subparagraph, these shall contain references to this Directive or shall be accompanied by such references on their official publication. The methods of making such references shall be laid down by the Member States.

2. The Member States shall immediately communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive. The Commission shall inform the other Member States thereof.

## Article 21

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

#### Article 22

This Directive is addressed to the Member States.

<sup>(1)</sup> OJ L 324, 29.11.2002, p. 1.

<sup>(2)</sup> OJ L 324, 29.11.2002, p. 1.

<sup>(3)</sup> OJ L 184, 17.7.1999, p. 23...

#### ANNEX A

#### List of acronyms used

- A.1, Amendment 1 concerning Standard Documents other than IMO.
- A.2, Amendment 2 concerning Standard Documents other than IMO.
- AC, Amending Corrigendum concerning Standard Documents other than IMO.
- CAT, Category for radar equipment as defined in section 1.3 of IEC 62388 (2007).

Circ., Circular.

COLREG, International Regulations for Preventing Collisions at Sea.

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

EN, European Standard.

ETSI, European Telecommunication Standardisation Institute.

FSS, International Code for Fire Safety Systems.

FTP, International Code for Application of Fire Test Procedures.

HSC, High Speed Craft Code.

IBC, International Bulk Chemical Code.

ICAO, International Civil Aviation Organisation.

IEC, International Electro-technical Commission.

IMO, International Maritime Organisation.

ISO, International Standardisation Organisation.

ITU, International Telecommunication Union.

LSA, Life saving appliance.

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

MEPC, Marine Environment Protection Committee.

MSC, Maritime Safety Committee.

NO<sub>x</sub>, Nitrogen Oxides.

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

SOx, Sulphur Oxides.

Reg., Regulation.

Res., Resolution.

#### ANNEX A.1

# EQUIPMENT FOR WHICH DETAILED TESTING STANDARDS ALREADY EXIST IN INTERNATIONAL INSTRUMENTS

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

- (a) General: in addition to the testing standards specifically mentioned, a number of provisions, which must be checked during type-examination (type approval) as referred to in the modules for conformity assessment in Annex B, are to be found in the applicable requirements of the international conventions and the relevant resolutions and circulars of the IMO.
- (b) Column 1: Article 2 of Commission directive 2009/26/EC (1) may apply.
- (c) 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.
- (d) Column 5: International conventions and testing standards apply in their upto-date version. For the purpose of identifying correctly the relevant standards, test reports, certificates of conformity and declarations of conformity shall identify the specific testing standard applied and its version.
- (e) Column 5: Where two sets of identifying standards are separated by 'or', each set fulfils all the testing requirements to meet IMO Performance Standards; thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant International Instruments. Conversely, when other separators (comma) are used all the listed references apply.
- (f) Column 6: Where module H appears, module H plus design-examination certificate is to be understood.
- (g) The requirements laid down in this Annex shall be without prejudice to carriage requirements in the international conventions.

#### 1. Life-saving appliances

Notes applicable to section 1: Life saving appliances.

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

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/1.1	Lifebuoys	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F

1	2	3	4	5	6
A.1/1.2	Position-indi-	— Reg. III/4,	— Reg. III/7,	— IMO Res. MSC.81(70)	B + D
life-saving appliances:  (a) for survival craft and	cating lights for life-saving	— Reg. X/3.	— Reg. III/22,		B + E
			— Reg. III/26,		B + F
		— Reg. III/32,			
	rescue boats,		— Reg. III/34,		
	(b) for lifebuoys, (c) for life-		— IMO Res. MSC.36(63)- (1994 HSC Code) 8,		
	jackets.		— IMO Res. MSC.48(66)- (LSA Code) II, IV,		
			— IMO Res. MSC.97(73)- (2000 HSC Code) 8.		
A.1/1.3	Lifebuoys self-	— Reg. III/4,	— Reg. III/7,	— IMO Res. MSC.81(70).	B + D
	activating smoke signals	— Reg. X/3.	— Reg. III/34,		B + E
	Signais		— IMO Res. MSC.36(63)- (1994 HSC Code) 8,		B + F
			— IMO Res. MSC.48(66)- (LSA Code) I, II,		
			— IMO Res. MSC.97(73)- (2000 HSC Code) 8.		
A.1/1.4	Lifejackets	— Reg. III/4,	— Reg. III/7,	— IMO Res. MSC.81(70).	B + D
		— Reg. X/3.	— Reg. III/22,	. /	B + E
			— Reg. III/34,		B + F
			— IMO Res. MSC.36(63)- (1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)- (LSA Code) I, II,		
			— IMO Res. MSC.97(73)- (2000 HSC Code) 8,		
			— IMO MSC/Circ.922.		
A.1/1.5	Immersion suits	— Reg. III/4,	— Reg. III/7,	— IMO Res. MSC.81(70).	B + D
	and anti- exposure suits	— Reg. X/3.	— Reg. III/22,		B + E
	not classified as		— Reg. III/32,		B + F
	lifejackets:		— Reg. III/34,		
	<ul> <li>Insulated or not insulated.</li> </ul>		— IMO Res. MSC.36(63)- (1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)- (LSA Code) I, II,		
			— IMO Res. MSC.97(73)- (2000 HSC Code) 8.		
A.1/1.6	Immersion suits	— Reg. III/4,	— Reg. III/7,	— IMO Res. MSC.81(70).	B + D
, 1.0	and anti-	— Reg. 111/4, — Reg. X/3.	— Reg. III/22,	1110 1005. 11100.01(70).	B + E
	exposure suits classified as life-	Rog. A/J.	— Reg. III/32,		B + F
	jackets:		— Reg. III/34,		
	— Insulated or non-		— IMO Res. MSC.36(63)-		
	insulated.		(1994 HSC Code) 8, — IMO Res. MSC.48(66)-		
			(LSA Code) I, II,  — IMO Res. MSC.97(73)-		
			(2000 HSC Code) 8.		

1	2	3	4	5	6
A.1/1.7	Thermal protective aids	— Reg. III/4, — Reg. X/3	<ul> <li>Reg. III/22,</li> <li>Reg. III/32,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.8	Rocket parachute flares (pyro- technics)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/6,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, III,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.9	Hand flares (pyrotechnics)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, III,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.10	Buoyant smoke signals (pyro- technics)	— Reg. III/4, — Reg. X/3.	— Reg. III/34, — IMO Res. MSC.48(66)- (LSA Code) I, III.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.11	Line-throwing appliances	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/18,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VII,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.12	Inflatable liferafts	— Reg. III/4, — Reg. X/3.	Reg. III/13, Reg. III/21, Reg. III/26, Reg. III/31, Reg. III/34, IMO Res. MSC.36(63)-(1994 HSC Code) 8, IMO Res. MSC.48(66)-(LSA Code) I, IV, IMO Res. MSC.97(73)-(2000 HSC Code) 8, IMO MSC/Circ.811.	— IMO Res. MSC.81(70).	B + D B + E B + F

1	2	3	4	5	6
A.1/1.13	Rigid liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/26,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.811.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006.	B + D B + E B + F
A.1/1.14	Automatically self-righting liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC 48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.809 including Add.1,</li> <li>IMO MSC/Circ.811.</li> </ul>	— IMO Res. MSC.81(70),     — IMO MSC/Circ.809 including Add.1.	B + D B + E B + F
A.1/1.15	Canopied reversible liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.809 including Add.1,</li> <li>IMO MSC/Circ.811.</li> </ul>	IMO Res. MSC.81(70),      IMO MSC/Circ.809 including Add.1.	B + D B + E B + F
A.1/1.16	Float-free arrangements for liferafts (hydro- static release units)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/13,</li> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.811.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.17	Lifeboats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006.	B + D B + F G

1	2	3	4	5	6
A.1/1.18	Rigid rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006.	B + D B + F G
A.1/1.19	Inflated rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70), — ISO 15372 (2000).	B + D B + F G
A.1/1.20	Fast rescue boats	— Reg. III/4.	<ul> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I,V,</li> <li>IMO MSC/Circ.809 including Add.1,</li> <li>IMO MSC/Circ.1016,</li> <li>IMO MSC/Circ.1094.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006, — ISO 15372 (2000).	B + D B + F G
A.1/1.21	Launching appliances using falls (Davits)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/23,</li> <li>Reg. III/33,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.22	Float free launching appliances for survival craft	Moved to A.2/1.3			
A.1/1.23	Launching appliances for free-fall lifeboats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/16,</li> <li>Reg. III/23,</li> <li>Reg. III/33,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F G

1	2	3	4	5	6
A.1/1.24	Liferaft launching appliances (Davits)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/12,</li> <li>Reg. III/16,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.25	Fast rescue boat launching appliances (Davits)	— Reg. III/4.	<ul> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO MSC/Circ.809 including Add.1.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.26	Release mechanism for  (a) Lifeboats and rescue boats and (b) Liferafts Launched by a fall or falls	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/16,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.27	Marine evacuation systems	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/15,</li> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + F G
A.1/1.28	Means of rescue	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.810.	B + D B + F
A.1/1.29 Refer to note (b) of this Annex A.1	Embarkation ladders	— Reg. III/4, — Reg. III/11, — Reg. X/3.	<ul> <li>Reg. III/11,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.48(66)-(LSA Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>	— IMO Res. MSC.81(70), — ISO 5489 (2008).	B + D B + F

1	2	3	4	5	6
A.1/1.30	Retro-reflective materials	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. A.658(16).	B + D B + E B + F
A.1/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A.1/5.1	7 and A.1/5.18		
A.1/1.32	9 GHz SAR transponder (SART)	Moved to A.1/4.13	8		
A.1/1.33	Radar reflector for lifeboats and rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO Res. MSC.164(78).</li> </ul>	— EN ISO 8729 (1998).	B + D B + E B + F
A.1/1.34	Compass for lifeboats and rescue boats	Moved to A.1/4.2.	3		
A.1/1.35	Portable fire- extinguishing equipment for lifeboats and rescue boats	Moved to A.1/3.33	8		
A.1/1.36	Lifeboat/rescue boat propulsion engine	— Reg. III/4, — Reg. X/3.	— Reg. III/34, — IMO Res. MSC.48(66)- (LSA Code) IV, V.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.37	Rescue boat propulsion engine-outboard motor	— Reg. III/4, — Reg. X/3.	— Reg. III/34, — IMO Res. MSC.48(66)- (LSA Code) V.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.38	Searchlights for use in lifeboats and rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F

1	2	3	4	5	6
A.1/1.39	Open reversible liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, Annex 10,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, Annex 11.</li> </ul>	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code)         Annex 10,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code)         Annex 11.</li> </ul>	B + D B + F
A.1/1.40	Mechanical pilot hoist	Moved to A.1/4.4	8		
A.1/1.41	Winches for survival craft and rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/16,</li> <li>Reg. III/17,</li> <li>Reg. III/23,</li> <li>Reg. III/24,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.42	Pilot ladder	Moved to A.1/4.49	9		
A.1/1.43 New item	Rigid/inflated rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006. — ISO 15372 (2000)	B + D B + F G

#### 2. Marine pollution prevention

No	Item designation	Regulation MARPOL 73/78 where 'type approval' is required	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/2.1	Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	— Annex I, Reg. 14.	— Annex I, Reg. 14, — IMO MEPC.1/Circ.643.	— IMO Res. MEPC.107(49), — IMO MEPC.1/Circ.643.	B + D B + E B + F
A.1/2.2	Oil/water interface detectors	— Annex I, Reg. 32.	— Annex I, Reg. 32.	— IMO Res. MEPC.5(XIII).	B + D B + E B + F

1	2	3	4	5	6
A.1/2.3	Oil-content meters	— Annex I, Reg. 14.	— Annex I, Reg. 14, — IMO MEPC.1/Circ.643.	— IMO Res. MEPC.107(49), — IMO MEPC.1/Circ.643.	B + D B + E B + F
A.1/2.4	Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Deliberately left b	lank		
A.1/2.5	Oil discharge monitoring and control system for oil tankers	— Annex I, Reg. 31.	— Annex I, Reg. 31.	— IMO Res. MEPC.108(49).	B + D B + E B + F
A.1/2.6	Sewage systems	— Annex IV, Reg. 9.	— Annex IV, Reg. 9.	— IMO Res. MEPC.159(55).	B + D B + E B + F
A.1/2.7	Shipboard incinerators	— Annex VI, Reg. 16.	— Annex VI, Reg.16.	— IMO Res. MEPC.76(40).	B + D B + E B + F G
A.1/2.8  Refer to note (b) of this Annex A.1	On board NO <sub>x</sub> monitoring and recording devices	<ul> <li>— Annex VI, Reg. 13,</li> <li>— NO<sub>x</sub> Technical Code,</li> <li>— IMO Res. MEPC.177(-58).</li> </ul>	<ul> <li>— Annex VI, Reg. 13,</li> <li>— NO<sub>x</sub> Technical Code,</li> <li>— IMO Res. MEPC.177(58),</li> <li>— IMO MEPC.1/Circ.638.</li> </ul>	— IMO Res.  MEPC.103(49),  — IMO Res.  MEPC.177(58).	B + D B + E B + F G
A.1/2.9 Refer to note (b) of this Annex A.1	Other technological methods to limit SO <sub>x</sub> emissions	— Annex VI, Reg. 14.	— Annex VI, Reg. 14.	— IMO Res. MEPC.170(57)	B + D B + E B + F G

#### 3. Fire protection equipment

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/3.1	Primary decks covering	— Reg. II-2/4, — Reg. II-2/6, — Reg. X/3.	<ul> <li>Reg. II-2/4,</li> <li>Reg. II-2/6,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)-(FTP Code), Annex 1</li> <li>Part 2 and Part 6 or Annex 2,</li> <li>IMO MSC/Circ.1102,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F
A.1/3.2	Portable fire extinguishers	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 4.	<ul> <li>Reg. II-2/4,</li> <li>Reg. II-2/10,</li> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>IMO Res. A.951(23),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4,</li> <li>IMO MSC/Circ.1239,</li> <li>IMO MSC/Circ.1275.</li> </ul>	<ul> <li>EN 3-6 (1995) including A.1 (1999),</li> <li>EN 3-7 (2004) including A.1 (2007),</li> <li>EN 3-8 (2006) including AC (2007),</li> <li>EN 3-9 (2006) including AC (2007).</li> </ul>	B + D B + E B + F
A.1/3.3	Fire-fighter's outfit: protective clothing (close proximity clothing)	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)- (FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	Protective clothing for fire fighting:  — EN 469 (2005) including A1 (2006) and AC (2006)  Protective clothing for fire fighting — Reflective clothing for specialised fire-fighting:  — EN 1486 (2007).  Protective clothing for fire fighting — Protective clothing with a reflective outer surface:  — ISO 15538 (2001).	B + D B + E B + F
A.1/3.4	Fire-fighter's outfit: boots	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)- (FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>EN ISO 20344 (2004) including A1 (2007) and AC (2005),</li> <li>EN ISO 20345 (2004) including A1 (2007) and AC (2007).</li> </ul>	B + D B + E B + F
A.1/3.5	Fire-fighter's outfit: gloves	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)- (FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	— EN 659 (2003) including A1 (2008).	B + D B + E B + F

1	2	3	4	5	6
A.1/3.6	Fire-fighter's outfit: helmet	— Reg. II-2/10,	— Reg. II-2/10,	— EN 443 (2008).	B + D
		— Reg. X/3,	— IMO Res. MSC.36(63)- (1994 HSC Code) 7,		B + E
		— IMO Res. MSC.98(73)- (FSS Code) 3.	— IMO Res. MSC.97(73)- (2000 HSC Code) 7,		B + F
			— IMO Res. MSC.98(73)- (FSS Code) 3.		
1/3.7	Self-contained compressed-air-	— Reg. II-2/10,	— Reg. II-2/10,	— EN 136 (1998) including AC (2003),	B + D
	operated breathing apparatus	— Reg. X/3,	— IMO Res. MSC.36(63)- (1994 HSC Code) 7,	— EN 137 (2006).	B + E
		— IMO Res. MSC.98(73)- (FSS Code) 3.	— IMO Res. MSC.97(73)- (2000 HSC Code) 7,		B + F
	Note: For use in accidents involving dangerous goods a positive pressure type mask is required.		— IMO Res. MSC.98(73)- (FSS Code) 3.		
1/3.8	Compressed air line breathing	— Reg. X/3.	— IMO Res. MSC.36(63)- (1994 HSC Code) 7.	— EN 14593-1 (2005),	B + D
	apparatus	— IMO Res. MSC.36(63)-		— EN 14593-2 (2005) including AC (2005),	B + E
		(1994 HSC Code) 7.		— EN 14594 (2005).	B + F
		Note: This equipment is only for high speed craft built under provisions of the 1994 HSC Code.			
.1/3.9	Sprinkler systems	— Reg. II-2/7,	— Reg. II-2/7,	— IMO Res. A.800(19).	B + D
	components for accommodation spaces, service	— Reg. II-2/10,	— Reg. II-2/9,		B + E
	spaces and control stations	— Reg. X/3,	— Reg. II-2/10,		B + F
	equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited	— IMO Res. MSC.98(73)- (FSS	— IMO Res. MSC.36(63)- (1994 HSC Code) 7,		
	to nozzles and their performance).	Code) 8.	— IMO Res. MSC.44(65),		
	(Nozzles for		— IMO Res. MSC.97(73)- (2000 HSC Code) 7,		
	fixed sprinkler systems, for high speed craft (HSC) are		— IMO Res. MSC.98(73)- (FSS Code) 8.		
	included under this item)		— IMO MSC/Circ.912.		

	2	3	4	5	6
A.1/3.10	Nozzles for fixed	— Reg. II-2/10,	— Reg. II-2/10,	— IMO MSC/Circ.1165,	B + D
Refer to	pressure water spraying fire	— Reg. X/3,	— Reg. X/3,	Appendix A.	B + E
note (b) of this Annex A.1	extinguishing systems for machinery spaces and cargo pump- rooms	— IMO Res. MSC.98(73)- (FSS Code) 7.	— IMO Res. MSC.36(63)- (1994 HSC Code) 7, — IMO Res. MSC.97(73)-		B + F
			(2000 HSC Code) 7,  — IMO Res. MSC.98(73)- (FSS Code) 7.		
A.1/3.11	'A' and 'B' Class divisions fire integrity	'A' Class:  — Reg. II-2/3.2.	— Reg. II-2/9, and, 'A' Class:	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3 and Annex 2,	B + D
	(a) 'A' class divisions,	'B' Class:	— Reg. II-2/3.2.	— IMO MSC/Circ.1120.	B + F
	(b) 'B' class divisions.	— Reg. II-2/3.4.	'B' Class:  — Reg. II-2/3.4.		
A.1/3.12	Devices to	— Reg. II-2/4,	— Reg. II-2/4,	— EN 12874 (2001),	B + F
	prevent the passage of flame	— Reg. II-2/16.	— Reg. II-2/16.	— ISO 15364 (2007),	
	into the cargo tanks in tankers			— IMO MSC/Circ.677.	
A.1/3.13	Non-combustible materials	— Reg. II-2/3,	— Reg. II-2/3,	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 1,	B + D
		— Reg. X/3.	— Reg. II-2/5,	— IMO MSC/Circ.1120.	B + E
			<ul><li>Reg. II-2/9,</li><li>IMO Res. MSC.36(63)- (1994 HSC Code) 7,</li></ul>	— INO MSC/CIRC.1120.	B + F
			— IMO Res. MSC.97(73)- (2000 HSC Code) 7.		
A.1/3.14	Materials other than steel for pipes penetrating 'A' or 'B' Class division	Item included in A	A.1/3.26 and A.1/3.27		
A.1/3.15	Materials other than steel for pipes conveying oil or fuel oil  (a) pipes and fittings,  (b) valves,  (c) flexible pipe assemblies.	— Reg. II-2/4, — Reg. X/3.	<ul> <li>Reg. II-2/4,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7, 10,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7, 10,</li> <li>IMO MSC/Circ.1120.</li> </ul>	<ul> <li>IMO Res. A.753(18),</li> <li>ISO 15540 (1999) including Corrigendum 1 (1999),</li> <li>ISO 15541 (1999).</li> </ul>	B + D B + E B + F
A.1/3.16	Fire Doors	— Reg. II-2/9.	— Reg. II-2/9.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3,	B + D B + E
				— IMO MSC/Circ.1120,  — IMO MSC.1/Circ.1273.	B + F
	l .	İ	l .	I.	l .

1	2	3	4	5	6
A.1/3.17	Fire door control systems components.  Note: When the term 'system components' is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international requirements are fulfilled.	— Reg. II-2/9, — Reg. X/3.	<ul> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 4.	B + D B + E B + F
A.1/3.18	Surface materials and floor coverings with low flame-spread characteristics  (a) decorative veneers  (b) paint systems,  (c) floor coverings,  (d) pipe insulation covers,  (e) adhesives used in the construction of 'A', 'B' and 'C' class divisions,  (f) combustible ducts.	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/6, — Reg. II-2/9, — Reg. X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/5,</li> <li>Reg. II-2/6,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO MSC/Circ.1120.</li> </ul>	- IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 2 and Part 5, or Annex 2,  - IMO MSC/Circ.1120,  - ISO 1716 (2002).   Note: Where the surface material is required to have a certain maximum calorific value, this shall be measured in accordance with ISO 1716.	B + D B + E B + F
A.1/3.19	Draperies, curtains and other suspended textile materials and films	— Reg. II-2/3, — Reg. II-2/9, — Reg. X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 7,</li> <li>IMO MSC/Circ.1102,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F

1	2	3	4	5	6	
A.1/3.20	Upholstered furniture	— Reg. II-2/3,	— Reg. II-2/3,	— IMO Res. MSC.61(67)- (FTP Code) Annex 1	B + D	
		— Reg. II-2/5,	— Reg. II-2/5,	Part 8,	B + E	
		— Reg. II-2/9,	— Reg. II-2/9,	— IMO MSC/Circ.1102,	B + F	
		— Reg. X/3.	— IMO Res. MSC.36(63)- (1994 HSC Code) 7,	— IMO MSC/Circ.1120.		
			— IMO Res. MSC.97(73)- (2000 HSC Code) 7.			
			(2000 1150 0000) 7.			
A.1/3.21	Bedding	— Reg. II-2/3,	— Reg. II-2/3,	— IMO Res. MSC.61(67)-	B + D	
	components	— Reg. II-2/9,	— Reg. II-2/9,	(FTP Code) Annex 1 Part 9,	B + E	
		— Reg. X/3.	— IMO Res. MSC.36(63)- (1994 HSC Code) 7,	— IMO MSC/Circ.1102,	B + F	
			— IMO Res. MSC.97(73)-	— IMO MSC/Circ.1120.		
			(2000 HSC Code) 7.			
A.1/3.22	Fire dampers	— Reg. II-2/9.	— Reg. II-2/9.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1	B + D	
				Part 3,	B + E	
				— IMO MSC/Circ.1120.	B + F	
A.1/3.23	Non-combustible duct penetrations through 'A' class divisions	Moved to A.1/3.20	6			
A.1/3.24	Electric Cable Transits through 'A' class divisions	Moved to A.1/3.20	6			
A.1/3.25	'A' and 'D' alogg	'A' and 'B' class	— Reg. II-2/9.	— Reg. II-2/9,	— IMO Res. MSC.61(67)-	B + D
A.1/3.23	fire proof windows and	— Keg. 11-2/9.	— Keg. 11-2/9,  — IMO MSC/Circ.847,	(FTP Code) Annex 1 Part 3,	B + E	
	side scuttles		— IMO MSC/Circ.1120.	— IMO MSC/Circ.1120,	B + F	
				— IMO MSC.1/Circ.1203.		
A.1/3.26	Penetrations through 'A' class	— Reg. II-2/9.	— Reg. II-2/9, — IMO MSC.1/Circ.1276.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1	B + D	
	divisions  (a) electric cable		— IMO MSC.1/Clic.12/0.	Part 3,  — IMO MSC/Circ.1120.	B + F	
	transits,			— IMO MISC/CIIC.1120.	-	
	(b) pipe, duct, trunk, etc penetrations.					
A.1/3.27	Penetrations	— Reg. II-2/9.	— Reg. II-2/9.	— IMO Res. MSC.61(67)-	B + D	
•	through 'B' class divisions	<i>G.</i> –771		(FTP Code) Annex 1 Part 3,	B + E	
	(a) electric cable transits,			— IMO MSC/Circ.1120.	B + F	
	(b) pipe, duct, trunk, etc					
	penetrations.					

1	2	3	4	5	6
A.1/3.28	Sprinkler systems (limited to sprinkler heads).  (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	<ul><li>Reg. II-2/7,</li><li>Reg. II-2/10,</li><li>Reg. X/3.</li></ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.44(65),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 8,</li> <li>IMO MSC/Circ.912.</li> </ul>	— ISO 6182-1 (2004),  or  — EN 12259-1 (1999) including A1 (2001),  A2 (2004) and A3 (2006).	B + D B + E B + F
A.1/3.29	Fire hoses	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— EN 14540 (2004) including A.1 (2007).	B + D B + E B + F
A.1/3.30	Portable oxygen analysis and gas detection equipment	— Reg. II-2/4, — Reg. VI/3.	— Reg. II-2/4, — Reg. VI/3, — IMO Res. MSC.98(73)- (FSS Code) 15.	<ul> <li>EN 60945 (2002),</li> <li>IEC 60092-504 (2001),</li> <li>IEC 60533 (1999),</li> <li>and as applicable to:</li> <li>(a) Category 1: (safe area):</li> <li>EN 50104 (2002) including A.1 (2004) Oxygen,</li> <li>EN 60079-29-1 (2007).</li> <li>(b) Category 2: (explosive gas atmospheres):</li> <li>EN 50104 (2002) including A.1 (2004) Oxygen,</li> <li>EN 60079-29-1 (2007),</li> <li>IEC 60079-1 (2007)</li> <li>IEC 60079-1 (2007)</li> <li>IEC 60079-10 (2002),</li> <li>IEC 60079-11 (2006),</li> <li>IEC 60079-15 (2005),</li> <li>IEC 60079-26 (2006).</li> </ul>	B + D B + E B + F

1	2	3	4	5	6
A.1/3.31	Nozzles for fixed sprinkler systems, for high speed craft (HSC)	Item deleted as it	is covered by A.1/3.9 and A.1/	3.28	
A.1/3.32	Fire restricting materials (except furniture) for high speed craft	— Reg. X/3.	— IMO Res. MSC.36(63)- (1994 HSC Code) 7, — IMO Res. MSC.97(73)- (2000 HSC Code) 7.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 10.	B + D B + E B + F
A.1/3.33	Fire restricting materials for furniture for high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 10.	B + D B + E B + F
A.1/3.34	Fire resisting divisions for high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.35	Fire doors on high speed craft	— Reg. X/3.	— IMO Res. MSC.36(63)- (1994 HSC Code) 7, — IMO Res. MSC.97(73)- (2000 HSC Code) 7.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.36	Fire dampers on high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO MSC/Circ.1120.</li> </ul>	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.37	Penetrations through fire resisting divisions on high speed craft  (a) electric cable transits,  (b) pipe, duct, trunk etc penetrations.	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.38	Portable fire- extinguishing equipment for lifeboats and rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. A.951(23),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	<ul> <li>EN 3-6 (1995) including A1 (1999),</li> <li>EN 3-7 (2004) including A1 (2007),</li> <li>EN 3-8 (2006) including AC (2007).</li> </ul>	B + D B + E B + F

			I		
1	2	3	4	5	6
A.1/3.39	Nozzles for equivalent water- mist fire extin- guishing systems for machinery spaces and cargo pump rooms	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7.</li> </ul>	— IMO MSC/Circ.1165.	B + D B + E B + F
A.1/3.40	Low-location lighting systems (components only)	— Reg. II-2/13,  — IMO Res. MSC.98(73)- (FSS Code) 11.	— Reg. II-2/13, — IMO Res. MSC.98(73)- (FSS Code) 11.	— IMO Res. A.752(18), or — ISO 15370 (2001).	B + D B + E B + F
A.1/3.41	Emergency escape breathing devices (EEBD)	— Reg. II-2/13.	<ul> <li>Reg. II-2/13,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3,</li> <li>IMO MSC/Circ.849.</li> </ul>	— EN 402(2003), — EN 1146(2005), — EN 13794(2002), — ISO 23269-1 (2008).	B + D B + E B + F
A.1/3.42	Inert gas systems components	— Reg. II-2/4.	<ul> <li>Reg. II-2/4,</li> <li>IMO Res. A.567(14),</li> <li>IMO Res. MSC.98(73)-(FSS Code) 15,</li> <li>IMO MSC/Circ.353,</li> <li>IMO MSC/Circ.387,</li> <li>IMO MSC/Circ.485,</li> <li>IMO MSC/Circ.731,</li> <li>IMO MSC/Circ.1120.</li> </ul>	<ul> <li>IMO MSC/Circ.353,</li> <li>IMO MSC/Circ.387,</li> <li>IMO MSC/Circ.450 Rev.1,</li> <li>IMO MSC/Circ.485,</li> <li>IMO MSC/Circ.731.</li> </ul>	B + D B + E B + F G
A.1/3.43	Nozzles for deep fat cooking equipment fire extinguishing systems (automatic or manual type).	— Reg. II-2/1, — Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/1,</li> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— ISO 15371 (2009).	B + D B + E B + F
A.1/3.44	Fire-fighters outfit — lifeline	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)-(FTP Code) Annex 1</li> <li>Part 1,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	B + D B + E B + F
A.1/3.45	Equivalent fixed gas fire extin- guishing systems components (extinguishing medium, head valves and nozzles) for machinery spaces and cargo pump rooms	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)- (FSS Code) 5.</li> </ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 5,</li> <li>IMO MSC/Circ.848,</li> <li>IMO MSC.1/Circ.1317.</li> </ul>	— IMO MSC/Circ.848, — IMO MSC.1/Circ.1317.	B + D B + E B + F

1	2	3	4	5	6
A.1/3.46	Equivalent fixed gas fire extin- guishing systems for machinery spaces (aerosol systems)	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 5.</li> </ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 5,</li> <li>IMO MSC.1/Circ.1317.</li> </ul>	— IMO MSC.1/Circ.1270.	B + D B + E B + F
A.1/3.47	Concentrate for Fixed High Expansion Foam Fire Extinguishing Systems for Machinery Spaces and Cargo Pump Rooms.  Note: The fixed high expansion foam fire extinguishing system (including those systems which use inside air from their working spaces for their intended performance), for machinery spaces and cargo pump rooms must still be tested with the approved concentrate to the satisfaction of the Administration.	— Reg. II-2/10.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 6</li> <li>IMO MSC.1/Circ.1239.</li> </ul>	— IMO MSC/Circ.670.	B + D B + E B + F
A.1/3.48	Fixed water based local application fire fighting systems components for use in category 'A' machinery spaces (Nozzles and performance tests).	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO MSC/Circ.913, — IMO MSC.1/Circ.1276.	B + D B + E B + F

1	2	3	4	5	6
A.1/3.49  Refer to note (b) of this Annex A.1	Nozzles for fixed water-based fire-fighting systems for ro-ro spaces and special category spaces equivalent to that referred to in resolution A.123(V)	<ul> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7.</li> </ul>	<ul> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>IMO Res. A.123(V),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7.</li> </ul>	— IMO MSC.1/Circ.1272.	B + D B + E B + F
A.1/3.50	Protective clothing resistant to chemical attack	Moved to A.2/3.9			
A.1/3.51	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces	<ul> <li>Reg. II-2/7,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73) (FSS Code) 9.</li> </ul>	<ul> <li>Reg. II-2/7,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 9,</li> <li>IMO MSC.1/Circ.1242.</li> </ul>	Control and indicating equipment. Electrical installations in ships:  - EN 54-2 (1997) including AC(1999) and A1(2006).  Power supply equipment:  - EN 54-4 (1997) including AC(1999), A1(2002) and A2(2006).  Heat detectors — Point detectors:  - EN 54-5 (2000) including A1(2002).  Smoke detectors — Point detectors using scattered light, transmitted light or ionisation:  - EN 54-7 (2000) including A1(2002) and A2(2006).  Flame detectors — Point detectors:  - EN 54-7 (2000) including A1(2002) and A2(2006).  Flame detectors — Point detectors:  - EN 54-10 (2002) including A1(2005).  Manual call points:  - EN 54-11 (2001) including A1(2005).  And, as applicable, electrical and electronic installations in ships:  - IEC 60092-504 (2001),  - IEC 60533 (1999).	B + D B + E B + F

1	2	3	4	5	6
A.1/3.52	Non-portable and transportable fire extinguishers	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4.</li> </ul>	<ul> <li>Reg. II-2/4,</li> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4.</li> </ul>	— EN 1866 (2005),  — EN 1866-1 (2007),  or  — ISO 11601 (2008).	B + D B + E B + F
A.1/3.53	Alarm devices	<ul> <li>Reg. II-2/7,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 9.</li> </ul>	<ul> <li>Reg. II-2/7,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 9.</li> </ul>	Sounders  — EN 54-3 (2001) including A1(2002) and A2(2006),  — IEC 60092-504 (2001),  — IEC 60533 (1999).	B + D B + E B + F
A.1/3.54	Fixed oxygen analysis and gas detection equipment	— Reg. II-2/4, — Reg. VI/3.	— Reg. II-2/4, — Reg. VI/3, — IMO Res. MSC.98(73)- (FSS Code) 15.	<ul> <li>EN 60945 (2002),</li> <li>IEC 60092-504 (2001),</li> <li>IEC 60533 (1999),</li> <li>and as applicable to:</li> <li>(a) Category 4: (safe area)</li> <li>EN 50104 (2002) including A.1 2004 Oxygen.</li> <li>(b) Category 3: (explosive gas atmospheres)</li> <li>EN 50104 (2002) including A.1 2004 Oxygen,</li> <li>EN 50104 (2002) including A.1 2004 Oxygen,</li> <li>EN 60079-29-1 (2007).</li> </ul>	B + D B + E B + F
A.1/3.55  Refer to note (b) of this Annex A.1	Dual purpose type nozzles (spray/jet type)	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— EN 15182-1 (2007), — EN 15182-3 (2007).	B + D B + E B + F
A.1/3.56  Refer to note (b) of this Annex A.1	Fire hoses (reel type)	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>	— EN 671-1 (2001) including AC (2002).	B + D B + E B + F
A.1/3.57  Refer to note (b) of this Annex A.1	Medium Expansion Foam Fire Extin- guishing Systems components — Fixed Deck Foam for Tankers	— Reg. II-2/10.	<ul> <li>Reg. II-2/10.8.1,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 14,</li> <li>IMO MSC.1/Circ.1239,</li> <li>IMO MSC.1/Circ.1276.</li> </ul>	— IMO MSC/Circ.798.	B + D B + E B + F

1	2	3	4	5	6
A.1/3.58  Refer to note (b) of this Annex A.1	Fixed Low Expansion Foam Fire Extin- guishing Systems components for Machinery Spaces and Tanker Deck Protection.	— Reg. II-2/10.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 6, 14,</li> <li>IMO MSC.1/Circ.1239,</li> <li>IMO MSC.1/Circ.1276.</li> </ul>	— IMO MSC.1/Circ.1312.	B + D B + E B + F
A.1/3.59  Refer to note (b) of this Annex A.1	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	— IMO Res. MSC.4(48)- (IBC Code).	— IMO Res. MSC.4(48)- (IBC Code).	— IMO MSC/Circ.553, — IMO MSC.1/Circ.1312.	B + D B + E B + F
A.1/3.60  Refer to note (b) of this Annex A.1	Nozzles for fixed pressure water- spraying fire- extinguishing systems for cabin balconies	— Reg. II-2/10.	— Reg. II-2/10, — IMO Res. MSC.98(73)- (FSS Code) 7.	— IMO MSC.1/Circ.1268.	B + D B + E B + F
A.1/3.61 Refer to note (b) of this Annex A.1	Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms  Note: Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms are shall be proceeded.	— Reg. II-2/10.	— Reg. II-2/10,  — IMO Res. MSC.98(73)- (FSS Code) 6.	— IMO MSC.1/Circ.1271.	B + D B + E B + F
	rooms shall be tested with the approved concentrate to the satisfaction of the Adminis- tration				

#### 4. Navigation equipment

Notes applicable to section 4: Navigation equipment.

Column 5: Wherever reference is made to EN 61162 series or IEC 61162 series, the intended item layout shall be taken into account to determine the applicable standard of EN 61162 series or IEC 61162 series.

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.1/4.1	Magnetic compass	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.382(X),</li> <li>IMO Res. A.694(17).</li> </ul>	— ISO 1069 (1973), — ISO 25862 (2009), — EN 60945 (2002), or — ISO 1069 (1973), — ISO 25862 (2009), — IEC 60945 (2002).	B + D B + E B + F G
A.1/4.2	Transmitting heading device THD (magnetic method)	— Reg. V/18, — Reg. V/19, — Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)- (2000 HSC Code) 13.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.116(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>EN 60945 (2002),</li> <li>EN 61162 series;</li> <li>ISO 22090-2 (2004), including Corrigendum 2005,</li> <li>EN 62288 (2008), or</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 series.</li> <li>ISO 22090-2 (2004), including Corrigendum 2005,</li> <li>IEC 62288 Ed.1.0 (2008).</li> </ul>	B + D B + E B + F G
A.1/4.3	Gyro compass	— Reg. V/18.	— Reg. V/19, — IMO Res. A.424(XI), — IMO Res. A.694(17), — IMO Res. MSC.191(79).	<ul> <li>EN ISO 8728 (1998),</li> <li>EN 60945 (2002),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008),</li> <li>or</li> <li>ISO 8728 (1997),</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0 (2008).</li> </ul>	B + D B + E B + F G
A.1/4.4	Radar equipment	Moved to A.1/4.34	4, A.1/4.35 and A.1/4.36		
A.1/4.5	Automatic radar plotting aid (ARPA)	Moved to A.1/4.34	4		
A.1/4.6	Echo-sounding equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)- (2000 HSC Code) 13.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.224(VII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.74(69)</li></ul>	<ul> <li>EN ISO 9875 (2001) including ISO Technical Corrigendum 1: 2006,</li> <li>EN 60945 (2002),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008), Or</li> <li>ISO 9875 (2000) including ISO Technical Corrigendum 1: 2006,</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0 (2008).</li> </ul>	B + D B + E B + F G

1	2	3	4	5	6
A.1/4.7	Speed and distance measuring equipment (SDME)	- Reg. V/18, - Reg. X/3, - IMO Res. MSC.36(63)-(1994 HSC Code) 13, - IMO Res. MSC.97(73)-(2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. A.824(19), — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.96(72), — IMO Res. MSC.97(73)- (2000 HSC Code) 13, — IMO Res. MSC.191(79).	— EN 60945 (2002), — EN 61023 (2007), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61023 (2007), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.8	Rudder angle, rpm, pitch indicator	Moved to A.1/4.20	0, A.1/4.21 and A.1/4.22		
A.1/4.9 Refer to note (b) of this Annex A.1	Rate-of-turn indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.526(13),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 series, — ISO 20672 (2007), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 series, — ISO 20672 (2007), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.10	Direction finder	Deliberately left b	lank		
A.1/4.11	Loran-C equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.818(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61075 (1993), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61075 (1991), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.12	Chayka equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. A.818 (19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61075 (1993), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61075 (1991), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.13	Decca navigator equipment	Deliberately left b	lank	<u> </u>	

1	2	3	4	5	6
A.1/4.14	GPS equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.112(73),</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61108-1 (2003), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61108-1 (2003), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.15	GLONASS equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.113(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	— EN 60945 (2002), — EN 61108-2 (1998), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61108-2 (1998), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.16	Heading control system (HCS)	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.342(IX),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.64(67)</li> <li>Annex 3,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— ISO 11674 (2006),  — EN 60945 (2002),  — EN 61162 series,  — EN 62288 (2008),  or  — ISO 11674 (2006),  — IEC 60945 (2002),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.17	Mechanical pilot hoist	Moved to A.1/1.40	)		
A.1/4.18	9 GHz SAR transponder (SART)	<ul> <li>Reg. III/4,</li> <li>Reg. IV/14,</li> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. III/6,</li> <li>Reg. IV/7,</li> <li>IMO Res. A.530(13),</li> <li>IMO Res. A.802(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14,</li> <li>ITU-R M.628-3(11/93).</li> </ul>	— EN 60945 (2002),  — EN 61097-1 (2007),  or  — IEC 60945 (2002),  — IEC 61097-1 (2007).	B + D B + E B + F G
A.1/4.19	Radar equipment for high-speed craft	Moved to A.1/4.3	7		

1	2	3	4	5	6
A.1/4.20 Refer to note (b) of this Annex A.1	Rudder angle indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.526(13),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 series, — ISO 20673 (2007), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 series, — ISO 20673 (2007), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.21 Refer to note (b) of this Annex A.1	Propeller revolution indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 series, — ISO 22554 (2007), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 series, — ISO 22554 (2007), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.22 Refer to note (b) of this Annex A.1	Pitch indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 series, — ISO 22555 (2007), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 series, — ISO 22555 (2007), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.23	Compass for lifeboats and rescue boats	<ul> <li>Reg. III/4,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.48(66)-(LSA Code) IV, V,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 13.</li> </ul>	— ISO 25862 (2009).	B + D B + E B + F G
A.1/4.24	Automatic radar plotting aid (ARPA) for high-speed craft	Moved to A.1/4.3	7		
A.1/4.25	Automatic tracking aid (ATA)	Moved to A.1/4.3:	5		

1	2	3	4	5	6
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved to A.1/4.38	3		
A.1/4.27	Electronic plotting aid (EPA)	Moved to A.1/4.30	5		
A.1/4.28	Integrated bridge system	Moved to A.2/4.30	)		
A.1/4.29	Voyage data recorder (VDR)	<ul> <li>Reg. V/18,</li> <li>Reg. V/20,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/20,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. A.861 (20),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — IEC 61996-1 (2007-11), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 61996-1 (2007-11), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.30	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.817(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.232(82),</li> <li>IMO SN.1/Circ.266.</li> <li>[ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested].</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — EN 61174 (2008), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 61174 (2008), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.31	Gyro compass for high-speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.821(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— ISO 16328 (2001), — EN 60945 (2002), — EN 61162 Series, — EN 62288 (2008), or — ISO 16328 (2001), — IEC 60945 (2002), — IEC 61162 Series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G

1	2	3	4	5	6
A.1/4.32	Universal automatic identi- fication system equipment (AIS)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.74(69),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>ITU-R M. 1371-3(2007).</li> <li>Note: ITU-R M. 1371-3(2007) Annex 3 shall only be applicable in accordance with requirements of IMO Res. MSC.74(69).</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — EN 61993-2 (2001), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 61993-2 (2001), — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.33	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.74(69),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002),</li> <li>EN 61162 Series,</li> <li>EN 62065 (2002),</li> <li>EN 62288 (2008),</li> <li>or</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 Series,</li> <li>IEC 62065 (2002),</li> <li>IEC 62288 Ed.1.0 (2008).</li> </ul>	B + D B + E B + F G
A.1/4.34	Radar equipment CAT 1	— Reg. V/18.	<ul> <li>Reg. V/19.</li> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.823(19),</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 628-3(11/93),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	— EN 60945 (2002),  — EN 61162 Series,  — EN 62288 (2008),  — EN 62388 (2008),  or  — IEC 60945 (2002),  — IEC 61162 Series,  — IEC 62288 Ed.1.0 (2008).  — IEC 62388 Ed.1.0 (2007).	B + D B + E B + F G
A.1/4.35	Radar equipment CAT 2	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 628-3(11/93),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	— EN 60945 (2002),  — EN 61162 Series,  — EN 62288 (2008),  — EN 62388 (2008),  or  — IEC 60945 (2002),  — IEC 61162 Series,  — IEC 62288 Ed.1.0 (2008).  — IEC 62388 Ed.1.0 (2007).	B + D B + E B + F G

1	2	3	4	5	6
A.1/4.36	Radar equipment CAT 3	— Reg. V/18.	— Reg. V/19,	— EN 60945 (2002),	B + D
			— IMO Res. A.278(VIII),	— EN 61162 Series,	B + E
			— IMO Res. A.694(17),	— EN 62288 (2008),	B + F
			— IMO Res. MSC.191(79),	— EN 62388 (2008),	G
			— IMO Res. MSC.192(79),	or	
			— ITU-R M. 628-3(11/93),	— IEC 60945 (2002),	
			— ITU-R M. 1177-3(06/03).	— IEC 61162 Series,	
				— IEC 62288 Ed.1.0 (2008).	
				— IEC 62388 Ed.1.0 (2007).	
A.1/4.37	Radar equipment for high speed craft applications (CAT 1H, CAT 2H and CAT 3H)	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.820(19),</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 628-3(11/93),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — EN 62288 (2008), — EN 62388 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 62288 Ed.1.0 (2008). — IEC 62388 Ed.1.0 (2007).	B + D B + E B + F G
A.1/4.38	Radar equipment approved with a chart option, namely:  (a) CAT 1 with Chart option,  (b) CAT 2 with Chart option,  (c) CAT 1 for HSC with Chart option,  (d) CAT 2 for HSC with Chart option.	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.820(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 628-3(11/93),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — EN 62288 (2008), — EN 62388 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 62288 Ed.1.0 (2008). — IEC 62388 Ed.1.0 (2007).	B + D B + E B + F G
A.1/4.39	Radar reflector	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.164(78).</li> </ul>	— EN ISO 8729 (1998),  — EN 60945 (2002), or  — ISO 8729 (1997),  — IEC 60945 (2002).	B + D B + E B + F G

1	2	3	4	5	6
A.1/4.40	Heading control system for high speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.822(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— ISO 16329 (2003),  — EN 60945 (2002),  — EN 61162 series,  — EN 62288 (2008),  or  — ISO 16329 (2003),  — IEC 60945 (2002),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.41	Transmitting heading device THD (GNSS method)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.116(73),</li> <li>IMO Res. MSC.116(73),</li> </ul>	— ISO 22090-3 (2004),  — EN 60945 (2002),  — EN 61162 series,  — EN 62288 (2008),  or  — ISO 22090-3 (2004),  — IEC 60945 (2002),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.42	Searchlight for high speed craft	— Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)- (2000 HSC Code) 13.	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	— ISO 17884 (2004),  — EN 60945 (2002),  or  — ISO 17884 (2004),  — IEC 60945 (2002).	B + D B + E B + F G
A.1/4.43	Night vision equipment for high speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res.A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.94(72),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	— ISO 16273 (2003),  — EN 60945 (2002),  or  — ISO 16273 (2003),  — IEC 60945 (2002).	B + D B + E B + F G
A.1/4.44	Differential beacon receiver for DGPS and DGLONASS Equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.114(73).</li> </ul>	<ul> <li>EN 60945 (2002),</li> <li>IEC 61108-4 (2004),</li> <li>EN 61162 series.</li> <li>or</li> <li>IEC 60945 (2002),</li> <li>IEC 61108-4 (2004),</li> <li>IEC 61162 series.</li> </ul>	B + D B + E B + F G
A.1/4.45 Refer to note (b) of this Annex A.1	Chart facilities for shipborne radar	Item deleted, as it	is covered by A.1/4.38		

1	2	3	4	5	6
A.1/4.46	Transmitting heading device THD (Gyro- scopic method)	<ul> <li>Reg. V/18.</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.116(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>ISO 22090-1 (2002) including Corr.1 (2005),</li> <li>EN 60945 (2002),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008),</li> <li>or</li> <li>ISO 22090-1 (2002) including Corr.1 (2005),</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0 (2008).</li> </ul>	B + D B + E B + F G
A.1./4.47	Simplified voyage data recorder (S- VDR)	— Reg. V/20.	<ul> <li>Reg. V/20,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.163(78),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945(2002),</li> <li>EN 61162 series,</li> <li>EN 61996-2 (2008),</li> <li>EN 62288 (2008),</li> <li>or</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 series,</li> <li>IEC 61996-2 (2007),</li> <li>IEC 62288 Ed.1.0 (2008).</li> </ul>	B + D B + E B + F G
A.1/4.48	Mechanical pilot hoist	— Reg. V/23.	<ul><li>Reg. V/23,</li><li>IMO Res. A.889(21),</li><li>IMO MSC/Circ.773.</li></ul>	— IMO Res.A.889(21).	B + D B + E B + F
A.1/4.49	Pilot ladder	— Reg. V/23, — Reg. X/3.	— Reg. V/23  — IMO Res. A.889(21)  — IMO MSC/Circ.773.	— IMO Res. A.889(21) — ISO 799 (2004).	B + D B + E B + F G
A.1/4.50  Refer to note (b) of this Annex A.1	DGPS Equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.114(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	— EN 60945 (2002),  — EN 61108-1 (2003),  — EN 61108-4 (2004),  — EN 61162 series,  — EN 62288 (2008),  or  — IEC 60945 (2002),  — IEC 61108-1 (2003),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G

1	2	3	4	5	6
A.1/4.51 Refer to note (b) of this Annex A.1	DGLONASS Equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.114(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	— EN 60945 (2002), — EN 61108-2 (1998), — EN 61108-4 (2004), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61108-2 (1998), — IEC 61108-4 (2004), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	B + D B + E B + F G
A.1/4.52 ex. A.2/4.4	Daylight signalling lamp	<ul> <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> <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.95(72),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>	— EN 60945 (2002) — ISO 25861 (2007), or — IEC 60945 (2002), — ISO 25861 (2007).	B + D B + E B + F

#### 5. Radiocommunication equipment

Notes applicable to section 5: Radiocommunication equipment.

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

Wherever reference is made to EN 61162 series or IEC 61162 series, the intended item layout shall be taken into account to determine the applicable standard of EN 61162 series or IEC 61162 series.

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.1/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	<ul> <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> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.385(X),</li> <li>IMO Res. A.524(13),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.803(19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32,</li> <li>ITU-R M.489-2 (10/95),</li> <li>ITU-R M.493-12 (03/07),</li> <li>ITU-R M.541-9 (05/04),</li> <li>ITU-R M.689-2 (11/93).</li> </ul>	— ETSI EN 300162-1 V1.4.1 (2006-05),  — ETSI EN 300338 V1.2.1 (1999-04),  — ETSI EN 300828 V1.1.1 (1998-03),  — ETSI EN 301925 V1.2.1 (2006-12),  — EN 60945 (2002),  — IEC 61097-3 (1994),  — IEC 61097-7 (1996),  — EN 61162 series,  — IMO MSC/Circ.862.	B + D B + E B + F

	1	i			
1	2	3	4	5	6
A.1/5.2	VHF DSC watch-keeping receiver	<ul> <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> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.803(19),</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 COMSAR Circ.32,</li> <li>ITU-R M.489-2 (10/95),</li> <li>ITU-R M.493-12 (03/07),</li> <li>ITU-R M.541-9 (05/04).</li> </ul>	— ETSI EN 300338 V1.2.1 (1999-04), — ETSI EN 300828 V1.1.1 (1998-03), — ETSI EN 301033 V1.2.1 (2005-05), — EN 60945 (2002), — IEC 61097-3 (1994), — IEC 61097-8 (1998).	B + D B + E B + F
A.1/5.3	NAVTEX receiver	<ul> <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> <li>Reg. IV/7,</li> <li>Reg. X/3,</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.148(77),</li> <li>IMO COMSAR Circ.32,</li> <li>ITU-R M.540-2 (06/90),</li> <li>ITU-R M.625-3 (10/95).</li> </ul>	— ETSI EN 300065-1 V1.2.1 (2009-01), — ETSI EN 301011 V1.1.1 (1998-09), — EN 60945 (2002), — IEC 61097-6 (2005-12).	B + D B + E B + F
A.1/5.4	EGC receiver	<ul> <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> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.570(14),</li> <li>IMO Res. A.664(16),</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 COMSAR Circ.32.</li> </ul>	— ETSI ETS 300460 Ed.1 (1996-05),  — ETSI ETS 300460/A1 (1997-11),  — ETSI EN 300829 V1.1.1 (1998-03),  — EN 60945 (2002),  — IEC 61097-4 (1994).	B + D B + E B + F
A.1/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	<ul> <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> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.699(17),</li> <li>IMO Res. A.700(17),</li> <li>IMO Res. A.806(19),</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 COMSAR Circ.32,</li> <li>ITU-R M.491-1 (07/86),</li> <li>ITU-R M.492-6 (10/95),</li> <li>ITU-R M.540-2 (06/90),</li> <li>ITU-R M.625-3 (10/95),</li> <li>ITU-R M.688 (06/90).</li> </ul>	— ETSI ETS 300067 Ed.1 (1990-11),  — ETSI ETS 300067/A1 Ed.1 (1993-10),  — EN 60945 (2002),  — EN 61162 Series.	B + D B + E B + F

1	2	3	4	5	6
A.1/5.6	406 MHz EPIRB (COSPAS-	— Reg. IV/14,	— Reg. IV/7,	— ETSI EN 300066 V 1.3.1 (2001-01),	B + D
	SARSAT)	— Reg. X/3,	— Reg. X/3,	— EN 60945 (2002),	B + E
		— IMO Res. MSC.36(63)-	— IMO Res. A.662(16),	— IEC 61097-2 (2008),  — IMO MSC/Circ.862.	B + F
		(1994 HSC Code) 14,	— IMO Res. A.694(17),		
		— IMO Res. MSC.97(73)-	— IMO Res. A.696(17),		
		(2000 HSC Code) 14.	— IMO Res. A.810(19),	Note: IMO MSC/Circ.862 is	
			— IMO Res. MSC.36(63)- (1994 HSC Code) 14,	applicable only to the optional remote activation device, not to the EPIRB itself.	
			— IMO Res. MSC.97(73)- (2000 HSC Code) 14,	itself.	
			— IMO MSC/Circ.862,		
			— IMO COMSAR Circ.32,		
			— ITU-R M.633-3 (05/04),		
			— ITU-R M.690-1 (10/95).		
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left b	lank		
A.1/5.8	2182 kHz watch receiver	Deliberately left b	lank		
A.1/5.9	Two-tone alarm generator	Deliberately left b	lank		
A.1/5.10	MF radio capable of trans-	— Reg. IV/14,	— Reg. IV/9,	— ETSI EN 300338 V1.2.1 (1999-04),	B + D
	mitting and receiving DSC and radio-	— Reg. X/3,	— Reg. IV/10,	— ETSI ETS 300373-1	B + E
	telephony	— IMO Res. MSC.36(63)-	— Reg. X/3,	V1.2.1 (2002-10),	B + F
		(1994 HSC Code) 14,	— IMO Res. A.694(17),	— EN 60945 (2002),	
	Note: In line with IMO and	— IMO Res. MSC.97(73)-	— IMO Res. A.804(19),	— IEC 61097-3 (1994),	
	ITU decisions, the requirements for Two Tone Alarm generator	(2000 HSC Code) 14.	(2000 HSC — IMO Res. MSC.36(63)- Code) 14. (1994 HSC Code) 14,	— IEC 61097-9 (1997),  — EN 61162 series,	
	and transmission on H3E are no longer applicable in the testing standards		— IMO Res. MSC.97(73)- (2000 HSC Code) 14,	— IMO MSC/Circ.862.	
			— IMO COMSAR Circ.32,		
			— ITU-R M.493-12 (03/07),		
			— ITU-R M.541-9 (05/04).		

1	2	3	4	5	6
A.1/5.11	MF DSC watch-keeping receiver	<ul> <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> <li>Reg. IV/9,</li> <li>Reg. IV/10,</li> <li>Reg. X/3,</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 COMSAR Circ.32,</li> <li>ITU-R M.493-12 (03/07),</li> <li>ITU-R M.541-9 (05/04),</li> <li>ITU-R M.1173 (10/95).</li> </ul>	— ETSI EN 300338 V1.2.1 (1999-04),  — ETSI EN 301033 V1.2.1 (2005-05),  — EN 60945 (2002),  — IEC 61097-3 (1994),  — IEC 61097-8 (1998).	B + D B + E B + F
A.1/5.12	Inmarsat-B SES	<ul> <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> <li>Reg. IV/10,</li> <li>Reg. X/3,</li> <li>IMO Res. A.570(14),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.808(19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32.</li> </ul>	— EN 60945 (2002),  — IEC 61097-10 (1999),  — IMO MSC/Circ 862.	B + D B + E B + F
A.1/5.13	Inmarsat-C SES	<ul> <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> <li>Reg. IV/10,</li> <li>Reg. X/3,</li> <li>IMO Res. A.570(14),</li> <li>IMO Res. A.664 (16), (applicable only if the Inmarsat C SES comprises EGC functions),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.807(19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32.</li> </ul>	— ETSI ETS 300460 Ed.1 (1996-05),  — ETSI ETS 300460/A1 (1997-11),  — ETSI EN 300829 V1.1.1 (1998-03),  — EN 60945 (2002),  — IEC 61097-4 (2007),  — EN 61162 series,  — IMO MSC/Circ.862.	B + D B + E B + F

-					I
1	2	3	4	5	6
A.1/5.14  A.1/5.15	MF/HF DSC watch keeping receiver	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 14, — IMO Res. MSC.97(73)- (2000 HSC Code) 14.  — Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 14, — IMO Res. MSC.97(73)- (2000 HSC Code) 14,	— Reg. IV/10, — Reg. X/3, — IMO Res. A.694(17), — IMO Res. A.806(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO MSC/Circ.862, — IMO COMSAR Circ.32, — ITU-R M.476-5 (10/95), — ITU-R M.491-1 (07/86), — ITU-R M.493-12 (03/07), — ITU-R M.541-9 (05/04), — ITU-R M.625-3 (10/95), — ITU-R M.1173 (10/95). — Reg. IV/10, — Reg. X/3, — IMO Res. A.694(17), — IMO Res. A.806(19), — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14, — IMO COMSAR Circ.32,	— ETSI EN 300067 Ed.1 (1990-11), — ETSI ETS 300067/A1 Ed.1 (1993-10), — ETSI EN 300338 V1.2.1 (1999-04), — ETSI EN 300373-1 V1.2.1 (2002-10), — EN 60945 (2002), — IEC 61097-9 (1997), — EN 61162 series, — IMO MSC/Circ.862.  — ETSI EN 300338 V1.2.1 (1999-04), — ETSI EN 301033 V1.2.1 (2005-05), — EN 60945 (2002), — IEC 61097-3 (1994), — IEC 61097-3 (1994), — IEC 61097-8 (1998).	B + D B + E B + F  B + F  B + F
A.1/5.16	Aeronautical two way VHF radio telephone	Moved to A.2/5.8	— ITU-R M.493-12 (03/07), — ITU-R M. 541-9 (05/04).		
A.1/5.17	apparatus  Portable survival craft two-way VHF radio-telephone apparatus	<ul> <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> <li>Reg. III/6,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.809(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14,</li> <li>IMO Res. MSC.149(77),</li> <li>ITU-R M.489-2 (10/95).</li> </ul>	— ETSI EN 300225 V1.4.1 (2004-12), — EN 300828 V1.1.1 (1998-03), — EN 60945 (2002), — IEC 61097-12 (1996).	B + D B + E B + F

1	2	3	4	5	6
A.1/5.18	Fixed survival craft two-way VHF radio- telephone apparatus	<ul> <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> <li>Reg. III/6,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.809(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14,</li> <li>ITU-R M.489-2 (10/95).</li> </ul>	— ETSI EN 301466 V1.2.1 (2001-01), — EN 60945 (2002), — IEC 61097-12 (1996).	B + D B + E B + F
A1/5.19	Inmarsat-F SES	<ul> <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> <li>Reg. IV/10,</li> <li>IMO Res. A.570 (14),</li> <li>IMO Res. A.808 (19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32.</li> </ul>	— EN 60945 (2002),  — IEC 61097-13 (2003),  — IMO MSC/Circ.862.	B + D B + E B + F

#### 6. Equipment required under COLREG 72

No	Item designation	Regulation COLREG 72 where 'type approval' is required	relevant resolutions and circulars	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/6.1	Navigation lights	— COLREG Annex I/14.	<ul><li>COLREG Annex I/14,</li><li>IMO Res. A.694(17),</li><li>IMO Res. MSC.253(83).</li></ul>	<ul> <li>EN 14744 (2005) including AC (2006),</li> <li>EN 60945 (2002), or</li> <li>EN 14744 (2005) including AC (2006),</li> <li>IEC 60945 (2002).</li> </ul>	B + D B + E B + F G

#### 7. Bulk carrier safety equipment

No items in Annex A.1.

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

No	Item designation	Regulation SOLAS 74 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.1/8.1 (new item)	Water level detectors	— IMO Res.     MSC.188(79- ),  — IMO MSC.1/     Circ.1291.	<ul> <li>Reg. II-1/22-1,</li> <li>Reg. II-1/23-3,</li> <li>Reg. XII/12</li> <li>IMO Res. MSC.188(79),</li> <li>IMO MSC.1/Circ.1291.</li> </ul>	<ul> <li>IEC 60092-0504 (2001),</li> <li>IEC 60529 (2001),</li> <li>IMO Res. MSC.188(79),</li> <li>IMO MSC.1/Circ.1291.</li> </ul>	B + D B + E B + F

#### ANNEX A.2

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

#### 1. Life-saving appliances

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

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/1.1	Radar reflector for liferafts	— Reg. III/4, — Reg. III/34, — Reg. X/3.	— IMO Res. MSC.48(66)- (LSA Code).		
A.2/1.2	Immersion suit materials	Deliberately left b	lank		
A.2/1.3	Float-free launching appliances for survival craft	— Reg. III/4, — Reg. III/34.	<ul> <li>Reg. III/13,</li> <li>Reg. III/16,</li> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>		
A.2/1.4	Embarkation ladders	Moved to A.1/1.29	9		
A.2/1.5	Public address and general emergency alarm system  (when used as fire alarm device item A.1/3.53 shall apply)	— Reg. III/6.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.48(66)-(LSA Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>IMO MSC/Circ.808.</li> </ul>		
2. Marine	pollution prevention	n	— INIO MISC/CITC.808.		
No	Item designation	Regulation MARPOL 73/78 where 'type	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO amplicable	Testing standards	Modules for conformity

No	Item designation	Regulation MARPOL 73/78 where 'type approval' is required	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO, applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/2.1	On board NO <sub>x</sub> monitoring and recording devices	Moved to A.1/2.8			

1	2	3	4	5	6
A.2/2.2	On board exhaust gas cleaning systems	— Annex VI, Reg. 13,  — Annex VI, Reg. 14.	— Annex VI Reg. 13,  — Annex VI Reg. 14.	— IMO Res. MEPC.170 (57).	
A.2/2.3	Other equivalent methods to reduce on board NO <sub>x</sub> emissions	— Annex VI, Reg. 13.	— Annex VI, Reg. 13.		
A.2/2.4	Other technological methods to limit SO <sub>x</sub> emissions	Moved to A.1/2.9			

#### 3. Fire protection equipment

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment			
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.1/3.4	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.1/3.5.	5					

<u> </u>	T	T		1	<u> </u>	
1	2	3	4	5	6	
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.1/3.5	1			
A.2/3.6	Smoke detectors	Moved to A.1/3.5	1			
A.2/3.7	Heat detectors	Moved to A.1/3.5	1			
A.2/3.8	Electric safety lamp	— Reg. II-2/10,	— Reg. II-2/10,	— IEC Publication 79.		
		— Reg. X/3,	— IMO Res. MSC.36(63)- (1994 HSC Code),			
		— IMO Res. MSC.98(73)- (FSS Code).	— IMO Res. MSC.97(73)- (2000 HSC Code),			
			— IMO Res. MSC.98(73)- (FSS Code), 3.			
A.2/3.9	Protective clothing resistant to chemical attack	— Reg. II-2/19.	— Reg. II-2/19,  — IMO Res. MSC.36(63)- (1994 HSC Code) 7,	— EN 943-1 (2002),  — EN 943-1 (2002) including AC (2005),		
			— IMO Res. MSC.97(73)- (2000 HSC Code) 7.	— EN 943-2 (2002),		
				— EN ISO 6529 (2001),		
				— EN ISO 6530 (2005),		
				— EN 14605 (2005),		
				— IMO MSC/Circ.1120.		
A.2/3.10	Low-location lighting systems	Moved to A.1/3.40				
A.2/3.11	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces	Moved to A.1/3.10	0			

1	2	3	4	5	6			
A.2/3.12	Equivalent fixed gas fire extin- guishing systems for machinery spaces and cargo pump rooms	Moved to A.1/3.43	5					
A.2/3.13	Compressed airline breathing apparatus	Item deleted						
	(High Speed Craft)							
A.2/3.14	Fire hoses (reel type)	Moved to A.1/3.50	Moved to A.1/3.56					
A.2/3.15	Sample extraction smoke detection systems components	— Reg. II-2/7, — Reg. II-2/19,	— Reg. II-2/7,  — Reg. II-2/19,	— IMO Res. MSC.98(73)- (FSS Code) 10.				
		— Reg. II-2/20,	— Reg. II-2/20,					
		— IMO Res. MSC.98(73)- (FSS Code) 10.	— IMO Res. MSC.98(73)- (FSS Code) 10.					
A.2/3.16	Flame detectors	Moved to A.1/3.5	1					
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	0					

	1	ı	T .	Г	
1	2	3	4	5	6
A.2/3.21	Paint lockers and flammable liquid lockers fire extinguishing systems components	— Reg. II-2/10.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.98(73)-(FSS Code),</li> <li>IMO MSC.1/Circ.1239.</li> </ul>		
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 Extin- guishing Systems components	— Reg. II-2/18.	— Reg. II-2/18,  — IMO MSC.1/Circ.1239.	— EN 13565-1 (2003) including A1 (2007).	
A.2/3.24	Portable Foam Applicator Units	— Reg. II-2/10,  — Reg. II-2/20,  — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>Reg. II-2/20,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4,</li> <li>IMO MSC.1/Circ.1239.</li> </ul>		
A.2/3.25	C class Divisions	— Reg. II-2/3.	— Reg. II-2/3.	<ul> <li>IMO Res. A.653(16),</li> <li>IMO Res. A.799(19),</li> <li>IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 1 and Part 5 or Annex 2,</li> <li>ISO 1716 (2002).</li> </ul>	
A.2/3.26	Gaseous Fuel Systems Used for Domestic Purposes (components)	— Reg. II-2/4.	— Reg. II-2/4,  — IMO MSC.1/Circ.1276.		

1	2	3	4	5	6	
A.2/3.27	Fixed Gas Fire Extinguishing Systems (CO <sub>2</sub> ) components.	— Reg. II-2/5, — Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/5,</li> <li>Reg. II-2/10,</li> <li>Reg. II-2/20,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7.</li> </ul>	<ul> <li>EN 12094-1 (2003),</li> <li>EN 12094-2 (2003),</li> <li>EN 12094-3 (2003),</li> <li>EN 12094-4 (2004),</li> <li>EN 12094-5 (2006),</li> <li>EN 12094-6 (2006),</li> <li>EN 12094-7 (2000) including A1 (2005),</li> <li>EN 12094-8 (2006),</li> <li>EN 12094-10 (2003),</li> <li>EN 12094-11 (2003),</li> <li>EN 12094-13 (2001) including AC (2002),</li> <li>EN 12094-16 (2003).</li> </ul>		
A.2/3.28	Medium Expansion Foam Fire Extin- guishing Systems components — Fixed Deck Foam for Tankers	Moved to A.1/3.5	7			
A.2/3.29	Fixed Low Expansion Foam Fire Extin- guishing Systems components for Machinery Spaces and Tanker Deck Protection.	Moved to A.1/3.58				
A.2/3.30	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	Moved to A.1/3.59				
A.2/3.31	Water Spraying Hand Operated System	— Reg. II-2/10.	— Reg. II-2/10, — IMO Res. A.800 (19).			
A.2/3.32 (new item)	Dry chemical powder extinguishing systems	— Reg. II-2/1.	Reg. II-2/1,      International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk: Chapter 11.			

## 4. Navigation equipment

Notes applicable to section 4: Navigation equipment

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

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/4.1	Gyro compass for high speed craft	Moved to A.1/4.3	1		
A.2/4.2	Heading control system for high speed craft (formerly auto- pilot)	Moved to A.1/4.4	0		
A.2/4.3	Transmitting heading device THD (GNSS method)	Moved to A.1/4.4	1		
A.2/4.4	Daylight signalling lamp	Moved to A.1/4.5	2		
A.2/4.5	Searchlight for high speed craft	Moved to A.1/4.4.	2		
A.2/4.6	Night vision equipment for high speed craft	Moved to A.1/4.4	3		
A.2/4.7	Track control system	Moved to A.1/4.3.	3		
A.2/4.8	Electronic Chart Display and Information System (ECDIS).	Moved to A.1/4.30	0		
A.2/4.9	Electronic Chart Display and Information System (ECDIS) backup	Moved to A.1/4.3	0		
A.2/4.10	Raster Chart Display System (RCDS)	Moved to A.1/4.30	0		

1	2	3	4	5	6
A.2/4.11	Combined GPS/ GLONASS equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code), — IMO Res. MSC.97(73)- (2000 HSC Code).	<ul> <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.74(69),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61108-1 (2003), — EN 61108-2 (1998), — EN 61162 series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61108-1 (2003), — IEC 61108-2 (1998), — IEC 61162 series, — IEC 62288 Ed.1.0 (2008).	
A.2/4.12	DGPS, DGLONASS equipment	Moved to A.1/4.4	4, A.1/4.50 and A.1/4.51		
A.2/4.13	Gyro compass for high speed craft	Moved to A.1/4.3	1		
A.2/4.14	Voyage data recorder (VDR)	Moved to A.1/4.2	9		
A.2/4.15	Integrated navigation system	— Reg. V/18, — Reg. X/3, — IMO Res.     MSC.36(63)-     (1994 HSC Code) 13, — IMO Res.     MSC.97(73)-     (2000 HSC Code) 13.	— Reg. V/19, — IMO Res. A.694(17), — IMO Res. MSC.86(70), — IMO Res. MSC.191(79).	— EN 60945 (2002), — EN 61162 series, — EN 61924 (2006), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 series, — IEC 61924 (2006), — IEC 62288 Ed.1.0 (2008).	
A.2/4.16	Integrated bridge system	Deliberately left b	lank		
A.2/4.17	Radar target enhancer	<ul> <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>	— IMO Res. A.694(17),  — IMO Res. MSC.164(78),  — ITU-R M 1176 (10/95).	— EN 60945 (2002), or — IEC 60945 (2002).	
A.2/4.18	Sound reception system	<ul> <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> <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> </ul>	— EN 60945 (2002), — EN 61162 series. or — IEC 60945 (2002), — IEC 61162 series.	

1	2	3	4	5	6
A.2/4.19	Magnetic compass for high speed craft	— Reg. X/3,  — IMO Res. MSC.36(63)- (1994 HSC Code),  — IMO Res. MSC.97(73)- (2000 HSC Code).	<ul> <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>	— ISO 1069 (1973),  — ISO 25862(2009),  — EN 60945 (2002),  or  — ISO 1069 (1973),  — ISO 25862(2009),  — IEC 60945 (2002).	
A.2/4.20	Track control system for  — high-speed craft	<ul> <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> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002),  — EN 61162 series,  — EN 62288 (2008),  or  — IEC 60945 (2002),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	
A.2/4.21	Chart facilities for shipborne radar	Moved to A.1/4.4:	5		
A.2/4.22	Transmitting heading device THD (Gyro- scopic method)	Moved to A.1/4.40	6		
A.2/4.23	Transmitting heading device THD (Magnetic method)	Moved to A.1/4.2			
x.2/4.24	Thrust indicator	— Reg. V/18,  — Reg. X/3,  — IMO Res. MSC.36(63)- (1994 HSC Code),  — IMO Res. MSC.97(73)- (2000 HSC Code).	<ul> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002),  — EN 61162 series,  — EN 62288 (2008),  or  — IEC 60945 (2002),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	
x.2/4.25	Lateral thrust, pitch and mode indicators	<ul> <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</li> </ul>	<ul> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002),  — EN 61162 series,  — EN 62288 (2008),  or  — IEC 60945 (2002),  — IEC 61162 series,  — IEC 62288 Ed.1.0 (2008).	
		Code).			

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1	2	3	4	5	6			
A.2/4.27	Rudder angle indicator	Moved to A.1/4.20	)					
A.2/4.28	Propeller revolution indicator	Moved to A.1/4.2	Moved to A.1/4.21					
A.2/4.29	Pitch indicator	Moved to A.1/4.22	2					
A.2/4.30	Integrated bridge system	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 15,</li> <li>IMO Res. MSC.64(67),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 15,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — EN 61209 (1999), — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 61209 (1999), — IEC 62288 Ed.1.0 (2008).				
A.2/4.31	Bearing Device	— Reg. V/18.	— Reg. V/19.	— EN 60945 (2002), or — IEC 60945 (2002).				
A.2/4.32	Bridge Navi- gational Watch Alarm System (BNWAS)		<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.128(75),</li> <li>IMO MSC/Circ.982,</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002),  — EN 61162 Series,  — EN 62288 (2008),  or  — IEC 60945 (2002),  — IEC 61162 Series,  — IEC 62288 Ed.1.0 (2008).				
A.2/4.33	Track control system (working at ship's speed from 30 knots and above)	— Reg. V/18.	— Reg. V/19, — IMO Res. A.694 (17).	— EN 60945 (2002),  — EN 61162 Series.  or  — IEC 60945 (2002),  — IEC 61162 Series.				
A.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	— Reg. V/19	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.813(19),</li> <li>IMO Res. MSC.202(81),</li> <li>IMO Res. MSC.211(81),</li> <li>IMO Res. MSC.263(84),</li> <li>IMO MSC.1/Circ 1307.</li> </ul>	— EN 60945 (2002),  — EN 61162 Series.  or  — IEC 60945 (2002),  — IEC 61162 Series.				
A.2/4.35	Galileo Receiver	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.813(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.233(82),</li> <li>IMO Res. MSC.191(79).</li> </ul>	— EN 60945 (2002), — EN 61162 Series, — EN 62288 (2008), or — IEC 60945 (2002), — IEC 61162 Series, — IEC 62288 Ed.1.0 (2008).				

1	2	3	4	5	6
A.2/4.36	AIS SART equipment	— Reg. III/4, — Reg. IV/14.	<ul> <li>Reg. III/6,</li> <li>Reg. IV/7,</li> <li>IMO Res. MSC.246(83),</li> <li>IMO Res. MSC.247(83),</li> <li>IMO Res. MSC.256(84).</li> </ul>	<ul> <li>EN 60945 (2002),</li> <li>EN 61162 Series,</li> <li>or</li> <li>IEC 60945 (2002),</li> <li>IEC 61162 Series.</li> </ul>	

#### 5. Radiocommunication equipment

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/5.1	VHF EPIRB	<ul> <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> <li>Reg.IV/8,</li> <li>IMO Res. A.662(16),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.805(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>ITU-R M.489-2 (10/95),</li> <li>ITU-R M.693 (06/90).</li> </ul>	— EN 60945 (2002), or — IEC 60945 (2002).	
A.2/5.2	Radio reserve source of energy	<ul> <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> <li>Reg. IV/13,</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 COMSAR Circ.16,</li> <li>IMO COMSAR Circ.32.</li> </ul>	— EN 60945 (2002), or — IEC 60945 (2002).	
A.2/5.3	Inmarsat-F SES	Moved to A.1/5.19	9.		
A.2/5.4	Distress panel	<ul> <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> <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>	— EN 60945 (2002), or — IEC 60945 (2002).	

1	2	3	4	5	6
A.2/5.5	Distress alarm or alert panel	<ul> <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> <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>	— EN 60945 (2002), or — IEC 60945 (2002).	
A.2/5.6	L- band EPIRB (INMARSAT)	Deliberately left b	lank		
A.2/5.7	Ship security alert system		<ul> <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>	— EN 60945 (2002),  — EN 61162 Series.  or  — IEC 60945 (2002),  — IEC 61162 Series.	
A.2/5.8 Ex A.1/5.16	Aeronautical two way VHF radio telephone apparatus	<ul> <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> <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>	— ETSI EN 301688 V1.1.1 (2000-07), — EN 60945 (2002).	

## 6. Equipment required under COLREG 72

No	Item designation	Regulation COLREG 72 where 'type approval' is required	relevant resolutions and circulars	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/6.1	Navigation lights	Moved to A.1/6.1.			
A.2/6.2	Sound signal appliances	— COLREG 72 Annex III/3.	— COLREG 72 Annex III/3, — IMO Res. A.694(17).	<ul> <li>EN 60945 (2002),</li> <li>Whistles — COLREG 72 Annex III/1 (Performance),</li> <li>Bells or Gongs — COLREG 72 Annex III/2 (Performance),</li> <li>or</li> <li>IEC 60945 (2002),</li> <li>Whistles — COLREG 72 Annex III/1 (Performance),</li> <li>Bells or Gongs - COLREG 72 Annex III/1 (Performance),</li> </ul>	

## 7. Bulk carrier safety equipment

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/7.1	Loading instrument	<ul><li>Reg. XII/11,</li><li>1997 SOLAS Conference Res. 5.</li></ul>	— Reg. XII/11, — 1997 SOLAS Conference Res. 5.	— IMO MSC.1/Circ 1229.	
A.2/7.2	Water level detectors on bulk carriers	Item deleted			

## 8. SOLAS Chapter II-1 equipment

No	Item designation	Regulation SOLAS 74 where 'type approval' is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/8.1 ex. A.2/3.3	Cold-weather starting of generator sets (starting devices)	— Reg. II-1/44, — Reg. X/3.	<ul> <li>Reg. II-1/44,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>		

#### ANNEX B

#### Modules for conformity assessment

#### EC TYPE-EXAMINATION (MODULE B)

- A notified body must ascertain and attest that a specimen, representative
  of the production envisaged, complies with the provisions of the international instruments that apply to it.
- The application for the EC type-examination must be lodged by the manufacturer or his authorized representative established within the Community with a notified body of his choice.

The application must include:

- the name and address of the manufacturer and, if the application is lodged by the authorized representative, his name and address as well,
- a written declaration that the same application has not been lodged simultaneously with any other notified body,
- the technical documentation as described in point 3.

The applicant must place at the disposal of the notified body a specimen, representative of the production envisaged and hereinafter called 'type' (1). The notified body may request further specimens if needed for the test programme.

- 3. The technical documentation must make it possible to assess the product's compliance with the requirements of the relevant international instruments. It must, as far as is relevant for such assessment, cover the design, the building standard, manufacture, installation and functioning of the product in accordance with the description of technical documentation set down in the Appendix to this Annex.
- 4. The notified body must:
- 4.1. examine the technical documentation and verify that the type has been manufactured in accordance with the technical documentation;
- 4.2. perform the appropriate examinations and necessary tests or have them performed to check whether the requirements of the relevant international instruments have actually been met;
- 4.3. agree with the applicant the location where the examinations and necessary tests will be carried out.
- 5. Where the type meets the provisions of the relevant international instruments, the notified body must issue an EC type-examination certificate to the applicant. The certificate must give the name and address of the manufacturer, details of the equipment, the conclusions of the examination, the conditions of its validity and the necessary data for identification of the approved type.

A list of the relevant parts of the technical documentation must be annexed to the certificate and a copy kept by the notified body.

If a manufacturer is refused a type-certification, the notified body must give detailed reasons for that refusal.

Where a manufacturer reapplies for type-approval for equipment for which a type-certificate has been refused, his submission to the notified body must include all relevant documentation, including the original test reports, the detailed reasons for the previous refusal and details of all modifications made to the equipment.

<sup>(</sup>¹) A type may cover several versions of the product provided that the differences between the versions do not affect the level of safety or the other requirements concerning the performance of the product.

- 6. The applicant must inform the notified body that holds the technical documentation concerning the EC type-examination certificate of all modifications to the approved product, which must receive additional approval where such changes may affect compliance with the requirements or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EC type-examination certificate.
- Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the EC type-examination certificates and additions issued and withdrawn.
- The other notified bodies may receive copies of the EC type-examination certificates and/or their additions. The Annexes to the certificates must be kept at the disposal of the other notified bodies.
- The manufacturer or his authorized representative established within the Community must keep with the technical documentation copies of EC type-examination certificates and their additions for at least 10 years after the last product has been manufactured.

#### CONFORMITY TO TYPE (MODULE C)

- A manufacturer or his authorized representative established within the Community must ensure and declare that the products concerned conform to type as described in the EC type-examination certificate and satisfy the requirements of the international instruments that apply to them. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity.
- The manufacturer must take all measures necessary to ensure that the manufacturing process ensures that the manufactured products conform to type as described in the EC type-examination certificate and comply with the requirements of the international instruments that apply to them.
- 3. The manufacturer or his authorized representative established within the Community must keep a copy of the declaration of conformity for at least 10 years after the last product has been manufactured.

#### PRODUCTION-QUALITY ASSURANCE (MODULE D)

- 1. A manufacturer who satisfies the obligations of point 2 must ensure and declare that the products concerned conform to type as described in the EC type-examination certificate. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.
- The manufacturer must operate an approved quality system for production, final-product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

#### 3. Quality system

3.1. The manufacturer must lodge an application for assessment of his quality system with a notified body of his choice for the products concerned.

The application must include:

— all relevant information for the product category envisaged,

- the documentation concerning the quality system,
- the technical documentation of the approved type and a copy of the EC type-examination certificate.
- 3.2. The quality system must ensure that the products conform to type as described in the EC type-examination certificate.

All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality-system documentation must permit a consistent interpretation of the quality programmes, plan, manuals and records.

It must, in particular, include an adequate description of:

- the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,
- the manufacturing, quality-control and quality-assurance techniques, processes and systematic actions that will be used,
- the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.,
- the means of monitoring the achievement of the required product quality and the effective operation of the quality system.
- 3.3. The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with those requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience of assessment in the product technology concerned. The assessment procedure must include a visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising out of the quality system as approved and to uphold it so that it remains adequate and efficient

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must assess the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

#### 4. Surveillance under the responsibility of the notified body

4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.

- 4.2. The manufacturer must allow the notified body access for inspection purposes to the locations of manufacture, inspection and testing and storage and must provide it with all necessary information, in particular:
  - the quality-system documentation,
  - the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.
- 4.3. The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.4. In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has taken place, with a test report.
- 5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:
  - the documentation referred to in the second indent of the second paragraph of point 3.1,
  - the updating referred to in the second paragraph of point 3.4,
  - the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.
- Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

### PRODUCT-QUALITY ASSURANCE (MODULE E)

- A manufacturer who satisfies the obligations of point 2 ensures and declares that the products concerned conform to type as described in the EC type-examination certificate. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.
- The manufacturer must operate an approved quality system for final inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

#### 3. Quality system

3.1. The manufacturer must lodge an application for assessment of his quality system for the products concerned with a notified body of his choice.

The application must include:

- all relevant information for the product category envisaged,
- documentation concerning the quality system,
- the technical documentation of the approved type and a copy of the EC type-examination certificate.

3.2. Under the quality system, each product must be examined and appropriate tests must be carried out in order to ensure its compliance with the relevant requirements of the international instruments. All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. That quality-system documentation must ensure common understanding of the quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

- the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,
- the examinations and tests that will be carried out after manufacture,
- the means of monitoring the effective operation of the quality system,
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.
- 3.3 The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with the requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising out of the quality system as approved and to maintain it in an appropriate and efficient manner.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decisions. The notification must include the conclusions of the examination and the reasoned assessment decision.

#### 4. Surveillance under the responsibility of the notified body

- 4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.
- 4.2. The manufacturer must allow the notified body access for inspection purposes to the locations of inspection, testing and storage and must provide it with all necessary information, in particular:
  - the quality-system documentation,
  - the technical documentation,
  - the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

- 4.3. The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.4. In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.
- 5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:
  - the documentation referred to in the third indent of the second paragraph of point 3.1,
  - the updating referred to in the second paragraph of point 3.4,
  - the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.
- Each notified body must on request provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

#### PRODUCT VERIFICATION (MODULE F)

- A manufacturer or his authorized representative established within the Community must check and attest that the products subject to point 3 conform to the type as described in the EC type-examination certificate.
- The manufacturer must take all measures necessary to ensure that the manufacturing process ensures that the products conform to type as described in the EC type-examination certificate. He must affix the mark to each product and must draw up a declaration of conformity.
- 3. The notified body must carry out the appropriate examinations and tests in order to check that the product complies with the requirements of the international instruments either by examination and testing of every product as specified in point 4 or by examination and testing of products on a statistical basis, as specified in point 5, at the choice of the manufacturer.
  - 3a. The manufacturer or his authorized representative established within the Community must keep a copy of the declaration of conformity for at least 10 years after the last product has been manufactured.

#### 4. Verification by examination and testing of every product

- 4.1. All products must be individually examined and appropriate tests must be carried out in order to verify their conformity to type as described in the EC type-examination certificate.
- 4.2. The notified body must affix its identification symbol or cause it to be affixed to each approved product and draw up a written certificate of conformity relating to the tests carried out.
- 4.3. The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificate of conformity on request to the flag Member State administration.

#### 5. Statistical verification

5.1. The manufacturer must present his products in the form of homogeneous lots and must take all measures necessary to ensure that the manufacturing process ensures the homogeneity of each lot produced.

- 5.2. All products must be available for verification in the form of homogeneous lots. A random sample must be drawn from each lot. Products in a sample must be individually examined and appropriate tests must be carried out to ensure that they comply with the requirements of the international instruments which apply to them and to determine whether the lot is to be accepted or rejected.
- 5.3. In the case of accepted lots, the notified body must affix its identification symbol or cause it to be affixed to each product and must draw up a written certificate of conformity relating to the tests carried out. All products in the lot may be put on the market except those products from the sample which are found not to comply.

If a lot is rejected, the notified body or the competent authority must take appropriate measures to prevent that lot's being put on the market. In the event of frequent rejection of lots the notified body may suspend statistical verification.

The manufacturer may, under the responsibility of the notified body, affix the latter's identification symbol during the manufacturing process.

5.4. The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificates of conformity on request to the flag Member State administration.

#### UNIT VERIFICATION (MODULE G)

- The manufacturer must ensure and declare that the product concerned, which has been issued with the certificate referred to in point 2, complies with the requirements of the international instruments that apply to it. The manufacturer or his authorized representative established within the Community must affix the mark to the product and draw up a declaration of conformity.
- The notified body must examine the individual product and carry out appropriate tests to ensure that it complies with the relevant requirements of the international instruments.

The notified body must affix its identification number or cause it to be affixed to the approved product and must draw up a certificate of conformity concerning the tests carried out.

 The aim of the technical documentation is to enable compliance with the requirements of the international instruments to be assessed and the design, manufacture and operation of the product to be understood.

## FULL-QUALITY ASSURANCE (MODULE H)

- 1. A manufacturer who satisfies the obligations of paragraph 2 must ensure and declare that the products concerned comply with the requirements of the international instruments that apply to them. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.
- The manufacturer must operate an approved quality system for design, manufacture, final-product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

#### 3. Quality system

3.1. The manufacturer must lodge an application for assessment of his quality system with a notified body.

The application must include:

- all relevant information for the product category envisaged and

- documentation concerning the quality system.
- 3.2. The quality system must ensure that the products comply with the requirements of the international instruments that apply to them.

All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality-system documentation must ensure common understanding of the quality policies and procedures such as quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

- the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,
- the technical design specifications, including standards, that will be applied and the assurance that the essential requirements of the international instruments that apply to the products will be met,
- the design-control and design-verification techniques, processes and systematic actions that will be used in the design of the products pertaining to the product category covered,
- the corresponding manufacturing, quality-control and quality-assurance techniques, processes and systematic actions that will be used,
- the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.,
- the means of monitoring the achievement of the required design and product quality and the effective operation of the quality system.
- 3.3. The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with the requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising from the quality system as approved and to uphold it so that it remains adequate and efficient.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decisions. The notification must include the conclusions of the examination and the reasoned assessment decision.

- 4. EC surveillance under the responsibility of the notified body
- 4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.
- 4.2. The manufacturer must allow the notified body access for inspection purposes to the locations of design, manufacture, inspection and testing and storage and must provide it with all necessary information, in particular:
  - the quality-system documentation,
  - the quality records as provided for in the design part of the quality system, such as the results of analyses, calculations, tests, etc.,
  - the quality records as provided for in the manufacturing part of the quality system, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.
- 4.3. The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.4. In addition the notified body may pay unannounced visits to the manufacturer. During such visits, the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.
- 5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:
  - the documentation referred to in the second indent of the second paragraph of point 3.1,
  - the updating referred to in the second paragraph of point 3.4,
  - the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.
- Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

#### 7. **Design examination**

- 7.1. The manufacturer must lodge an application for examination of the design with a single notified body.
- 7.2 The application must make it possible to understand the design, manufacture and operation of the product and to assess compliance with the requirements of international instruments.

It must include:

- the technical design specifications, including standards, that have been applied and
- the necessary supporting evidence for their adequacy, in particular where the standards specified in Article 5 have not been applied in full. Such supporting evidence must include the results of tests carried out by an appropriate laboratory of the manufacturer's or on his behalf.
- 7.3. The notified body must examine the application and where the design complies with those provisions of the international instruments that apply it must issue an EC design-examination certificate to the applicant. The certificate must include the conclusions of the examination, the conditions of its validity, the data necessary for identification of the approved design and, if relevant, a description of the product's functioning.

- 7.4. The applicant must keep the notified body that has issued the EC design-examination certificate informed of any modification to the approved design. Modifications to the approved design must receive additional approval from the notified body that issued the EC design-examination certificate where such changes may affect compliance with the relevant requirements of the international instruments or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EC design-examination certificate.
- 7.5. The notified bodies must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning:
  - the EC design-examination certificates and additions issued and
  - the EC design-approvals and additional approvals withdrawn.

#### Appendix to Annex B

# Technical documentation to be supplied by the manufacturer to the notified body

The provisions set down in this Appendix apply to all modules of Annex B.

The technical documentation referred to in Annex B must comprise all relevant data and means used by the manufacturer to ensure that equipment complies with the essential requirements relating to it.

The technical documentation must make it possible to understand the design, manufacture and operation of the product, and must make it possible to assess compliance with the requirements of the relevant international instruments.

The documentation must, so far as they are relevant to assessment, include:

- a general description of the type,
- conceptual-design, build standard and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.,
- descriptions and explanations necessary for the understanding of those drawings and schemes, including the operation of the product,
- the results of design calculations made, impartial examinations carried out, etc.,
- impartial test reports,
- manuals for installation, use and maintenance.

Where appropriate, the design documentation must contain the following:

- attestations relating to the equipment incorporated in the appliance,
- attestations and certificates relating to the methods of manufacture and/or inspection and/or monitoring of the appliance,
- any other document that makes it possible for the notified body to improve its assessment.

#### ANNEX C

# Minimum criteria to be taken into account by Member States for the designation of bodies

- 1. Notified bodies must fulfil the requirements of the relevant EN 45000 series.
- A notified body must be independent and must not be controlled by manufacturers or by suppliers.
- 3. A notified body must be established within the territory of the Community.
- 4. Where type-approvals are issued by a notified body on behalf of a Member State, the Member State must ensure that the qualifications, technical experience and staffing of the notified body are such as will enable it to issue type-approvals which comply with the requirements of this Directive and to guarantee a high level of safety.
- 5. A notified body must be in a position to provide maritime expertise.

A notified body is entitled to perform conformity-assessment procedures for any economic operator established within or outwith the Community.

A notified body may perform conformity-assessment procedures in any Member State or State outwith the Community using either its home-based means or the personnel of its branch office abroad.

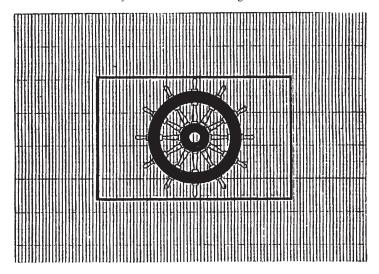
If a subsidiary of a notified body performs conformity-assessment procedures, all documents relating to the conformity-assessment procedures must be issued by and in the name of the notified body and not in the name of the subsidiary.

A subsidiary of a notified body which is established in another Member State may, however, issue documents relating to conformity-assessment procedures if it is notified by that Member State.

#### $\mathit{ANNEX}\ D$

### Mark of conformity

The mark of conformity must take the following form:



If the mark is reduced or enlarged the proportions given in the above graduated drawing must be respected.

The various components of the mark must have substantially the same vertical dimension, which may not be less than  $5\ \mathrm{mm}$ .

That minimum dimension may be waived for small devices.

L 239/1

II

(Non-legislative acts)

## **DIRECTIVES**

#### **COMMISSION DIRECTIVE 2011/75/EU**

#### of 2 September 2011

### amending Council Directive 96/98/EC on marine equipment

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

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

#### Whereas:

- (1) For the purposes of Directive 96/98/EC, the international conventions and testing standards should apply in their up-to-date versions.
- (2) A number of amendments to the international conventions and applicable testing standards have entered into force since the adoption of the last amending act to Directive 96/98/EC. Those amendments should be incorporated into Directive 96/98/EC.
- (3) In the same period the International Maritime Organisation and the European standardisation organisations have also adopted standards, including detailed testing standards, for a number of items of equipment which are listed in Annex A.2 to Directive 96/98/EC or which, albeit not listed, are considered relevant for the purpose of that Directive. Therefore such items of equipment should be included in Annex A.1 or transferred from Annex A.2 to Annex A.1, as appropriate.
- (4) Directive 96/98/EC should therefore be amended accordingly.
- (5) The measures provided for in this Directive are in accordance with the opinion of the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS),

HAS ADOPTED THIS DIRECTIVE:

#### Article 1

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

#### Article 2

Equipment listed in Annex A.1 as having been transferred from Annex A.2 which was manufactured before 5 October 2012 in conformity with procedures for type-approval already in force before that date within the territory of a Member State may continue to be placed on the market and on board a Community ship until 5 October 2014.

#### Article 3

1. Member States shall adopt and publish, by 5 October 2012 at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions. They shall apply those provisions from 5 October 2012.

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

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

#### Article 4

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

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

Article 5

This Directive is addressed to the Member States.

Done at Brussels, 2 September 2011.

For the Commission The President José Manuel BARROSO

#### ANNEX

#### 'ANNEX A

General note for Annex A: SOLAS Regulations refer to SOLAS consolidated version 2009.

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

List of acronyms used:

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

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

AC: Amending Corrigendum concerning Standard Documents other than IMO.

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

Circ.: Circular.

COLREG: International Regulations for Preventing Collisions at Sea.

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

EN: European Standard.

ETSI: European Telecommunication Standardisation Institute.

FSS: International Code for Fire Safety Systems.

FTP: International Code for Application of Fire Test Procedures.

HSC: High Speed Craft Code.

IBC: International Bulk Chemical Code.

ICAO: International Civil Aviation Organization.

IEC: International Electro-technical Commission.

IMO: International Maritime Organization.

ISO: International Standardisation Organisation.

ITU: International Telecommunication Union.

LSA: Life saving appliance.

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

MEPC: Marine Environment Protection Committee.

MSC: Maritime Safety Committee.

NO<sub>x</sub>: Nitrogen Oxides.

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

SO<sub>x</sub>: Sulphur Oxides.

Reg.: Regulation.

Res.: Resolution.

#### ANNEX A.1

# EQUIPMENT FOR WHICH DETAILED TESTING STANDARDS ALREADY EXIST IN INTERNATIONAL INSTRUMENTS

Notes applicable to the whole of Annex A.1:

- (a) General: in addition to the testing standards specifically mentioned, a number of provisions, which must be checked during type-examination (type approval) as referred to in the modules for conformity assessment in Annex B, are to be found in the applicable requirements of the international conventions and the relevant resolutions and circulars of the IMO.
- (b) Column 1: Article 2 of Commission Directive 2009/26/EC (1) may apply.
- (c) Column 1: Article 2 of Commission Directive 2010/68/EU (2) may apply.
- (d) Column 5: Where IMO Resolutions are cited, only the testing standards contained in relevant parts of the Annexes to the Resolutions are applicable and exclude the provisions of the Resolutions themselves.
- (e) Column 5: International conventions and testing standards apply in their up-to-date version. For the purpose of identifying correctly the relevant standards, test reports, certificates of conformity and declarations of conformity shall identify the specific testing standard applied and its version.
- (f) Column 5: Where two sets of identifying standards are separated by "or", each set fulfils all the testing requirements to meet IMO Performance Standards; thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant International Instruments. Conversely, when other separators (comma) are used all the listed references apply.
- (g) Column 6: Where module H appears, module H plus design-examination certificate is to be understood.
- (h) The requirements laid down in this Annex shall be without prejudice to carriage requirements in the international conventions.

#### 1. Life-saving appliances

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

No	Item designation	Regulation SOLAS 74 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.1/1.1	Lifebuoys	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.2	Position-indicating lights for life-saving appliances:  (a) for survival craft and rescue boats,  (b) for lifebuoys,  (c) for lifejackets.	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/22,</li> <li>Reg. III/26,</li> <li>Reg. III/32,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) II, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F

<sup>(1)</sup> OJ L 113, 6.5.2009, p. 1.

<sup>(2)</sup> OJ L 305, 20.11.2010, p. 1.



1	2	3	4	5	6
A.1/1.3	Lifebuoys self-activating smoke signals	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.4	Lifejackets	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/22,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.922,</li> <li>IMO MSC.1/Circ.1304.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.5	Immersion suits and anti-exposure suits not classified as lifejackets:  — Insulated or not insulated.	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/22,</li> <li>Reg. III/32,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.1046.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.6	Immersion suits and anti-exposure suits classified as lifejackets:  — Insulated or noninsulated.	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/7,</li> <li>Reg. III/22,</li> <li>Reg. III/32,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, II,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.1046.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.7	Thermal protective aids	— Reg. III/4, — Reg. X/3	— Reg. III/22, — Reg. III/32, — Reg. III/34, — IMO Res. MSC.36(63)-(1994 HSC Code) 8, — IMO Res. MSC.48(66)-(LSA Code) I, II, — IMO Res. MSC.97(73)-(2000 HSC Code) 8, — IMO MSC/Circ.1046.	— IMO Res. MSC.81(70).	B + D B + E B + F



1	2	3	4	5	6
A.1/1.8	Rocket parachute flares (pyrotechnics)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/6,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, III,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.9	Hand flares (pyrotechnics)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, III,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.10	Buoyant smoke signals (pyrotechnics)	— Reg. III/4, — Reg. X/3.	— Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) I, III.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.11	Line-throwing appliances	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/18,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VII,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.12	Inflatable liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/13,</li> <li>Reg. III/21,</li> <li>Reg. III/26,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.811.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.13	Rigid liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/26,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO MSC/Circ.811.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.1006.	B + D B + E B + F



1	2	3	4	5	6
A.1/1.14	Automatically self- righting liferafts	— Reg. III/4,	— Reg. III/26,	— IMO Res. MSC.81(70).	B + D
	righting ineraits	— Reg. X/3.	— Reg. III/34,		B + E
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		B + F
			— IMO Res. MSC 48(66)-(LSA Code) I, IV,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8,		
			— IMO MSC/Circ.809,		
			— IMO MSC/Circ.811.		
A.1/1.15	Canopied reversible	— Reg. III/4,	— Reg. III/26,	— IMO Res. MSC.81(70).	B + D
	liferafts	— Reg. X/3.	— Reg. III/34,		B + E
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		B + F
			— IMO Res. MSC.48(66)-(LSA Code) I, IV,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8,		
			— IMO MSC/Circ.809,		
			— IMO MSC/Circ.811.		
A.1/1.16	Float-free arrangements for liferafts (hydrostatic release units)	— Reg. III/4,	— Reg. III/13,	— IMO Res. MSC.81(70).	B + D
		— Reg. X/3.	— Reg. III/26,		B + E
			— Reg. III/34,		B + F
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)-(LSA Code) I, IV,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8,		
			— IMO MSC/Circ.811.		
A.1/1.17	Lifeboats	— Reg. III/4,	— Reg. III/21,	— IMO Res. MSC.81(70),	B + D
		— Reg. X/3.	— Reg. III/31,	— IMO MSC/Circ.1006.	B + F
			— Reg. III/34,		G
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)-(LSA Code) I, IV,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8.		
A.1/1.18	Rigid rescue boats	— Reg. III/4,	— Reg. III/21,	— IMO Res. MSC.81(70),	B + D
		— Reg. X/3.	— Reg. III/31,	— IMO MSC/Circ.1006.	B + F
			— Reg. III/34,		G
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)-(LSA Code) I, V,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8.		



1	2	3	4	5	6
A.1/1.19	Inflated rescue boats	— Reg. III/4, — Reg. X/3.	— Reg. III/21, — Reg. III/31,	— IMO Res. MSC.81(70), — ISO 15372 (2000).	B + D B + F
		— keg. A/3.	— Reg. III/34,	— ISO 13372 (2000).	G
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)-(LSA Code) I, V,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8.		
A.1/1.20	Fast rescue boats	— Reg. III/4.	— Reg. III/26,	— IMO Res. MSC.81(70),	B + D
			— Reg. III/34,	— IMO MSC/Circ.1006,	B + F
			— IMO Res. MSC.48(66)-(LSA Code) I,V,	— ISO 15372 (2000).	G
			— IMO MSC/Circ.1016,		
			— IMO MSC/Circ.1094.		
A.1/1.21	Launching appliances	— Reg. III/4,	— Reg. III/23,	— IMO Res. MSC.81(70).	B + D
	using falls (Davits)	— Reg. X/3.	— Reg. III/33,		B + E
			— Reg. III/34,		B + F
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		G
			— IMO Res. MSC.48(66)-(LSA Code) I, VI,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8.		
A.1/1.22	Float free launching appliances for survival craft	Moved to A.2/1.3			
A.1/1.23	Launching appliances	— Reg. III/4,	— Reg. III/16,	— IMO Res. MSC.81(70).	B + D
	for free-fall lifeboats	— Reg. X/3.	— Reg. III/23,		B + E
			— Reg. III/33,		B + F
			— Reg. III/34,		G
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		
			— IMO Res. MSC.48(66)-(LSA Code) I, VI,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8.		
A.1/1.24	Liferaft launching	— Reg. III/4,	— Reg. III/12,	— IMO Res. MSC.81(70).	B + D
	appliances	— Reg. X/3.	— Reg. III/16,		B + E
	(Davits)		— Reg. III/34,		B + F
			— IMO Res. MSC.36(63)-(1994 HSC Code) 8,		G
			— IMO Res. MSC.48(66)-(LSA Code) I, VI,		
			— IMO Res. MSC.97(73)-(2000 HSC Code) 8.		



1	2	3	4	5	6
A.1/1.25	Fast rescue boat launching appliances (Davits)	— Reg. III/4.	— Reg. III/26, — Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) I, VI.	— IMO Res. MSC.81(70).	B + D B + E B + F G
A.1/1.26	Release mechanism for  (a) Lifeboats and rescue boats  (b) Liferafts  Launched by a fall or falls	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/16,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.27	Marine evacuation systems	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/15,</li> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + F G
A.1/1.28	Means of rescue	— Reg. III/4.	<ul> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI.</li> </ul>	— IMO Res. MSC.81(70), — IMO MSC/Circ.810.	B + D B + F
A.1/1.29 Refer to note (b) of this Annex A.1	Embarkation ladders	— Reg. III/4, — Reg. III/11, — Reg. X/3.	<ul> <li>Reg. III/11,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.48(66)-(LSA Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>IMO MSC.1/Circ.1285.</li> </ul>	— IMO Res. MSC.81(70), — ISO 5489 (2008).	B + D B + F
A.1/1.30	Retro-reflective materials	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. A.658(16).	B + D B + E B + F
A.1/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A.1/5.17	and A.1/5.18		1



1	2	3	4	5	6
A.1/1.32	9 GHz SAR transponder (SART)	Moved to A.1/4.18			
A.1/1.33	Radar reflector for lifeboats and rescue boats (passive)	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8,</li> <li>IMO Res. MSC.164(78).</li> </ul>	<ul> <li>— ISO 8729-1 (2010),</li> <li>— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>— Or,</li> <li>— ISO 8729-1 (2010),</li> <li>— IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>	B + D B + E B + F
A.1/1.34	Compass for lifeboats and rescue boats	Moved to A.1/4.23			
A.1/1.35	Portable fire- extinguishing equipment for lifeboats and rescue boats	Moved to A.1/3.38			
A.1/1.36	Lifeboat / rescue boat propulsion engine	— Reg. III/4, — Reg. X/3.	— Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) IV, V.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.37	Rescue boat propulsion engine-outboard motor	— Reg. III/4, — Reg. X/3.	— Reg. III/34, — IMO Res. MSC.48(66)-(LSA Code) V.	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.38	Searchlights for use in lifeboats and rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.39	Open reversible liferafts	— Reg. III/4, — Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, Annex 10,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, Annex 11.</li> </ul>	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code)         Annex 10,     </li> <li>IMO Res. MSC.97(73)-(2000 HSC Code)         Annex 11.     </li> </ul>	B + D B + F
A.1/1.40	Mechanical pilot hoist	Moved to A.1/4.48			
A.1/1.41	Winches for survival craft and rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/16,</li> <li>Reg. III/17,</li> <li>Reg. III/23,</li> <li>Reg. III/24,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70).	B + D B + E B + F G

1	2	3	4	5	6
A.1/1.42	Pilot ladder	Moved to A.1/4.49			
A.1/1.43 Refer to note (c) of this Annex A.1	Rigid/inflated rescue boats	— Reg. III/4, — Reg. X/3.	<ul> <li>Reg. III/21,</li> <li>Reg. III/31,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>	— IMO Res. MSC.81(70),  — IMO MSC/Circ.1006.  — ISO 15372 (2000)	B + D B + F G

## 2. Marine pollution prevention

No	Item designation	Regulation MARPOL 73/78 where "type approval" is required	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.1/2.1	Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	— Annex I, Reg. 14.	— Annex I, Reg. 14, — IMO MEPC.1/Circ.643.	— IMO Res. MEPC.107(49),  — IMO MEPC.1/Circ.643.	B + D B + E B + F
A.1/2.2	Oil/water interface detectors	— Annex I, Reg. 32.	— Annex I, Reg. 32.	— IMO Res. MEPC.5(XIII).	B + D B + E B + F
A.1/2.3	Oil-content meters	— Annex I, Reg. 14.	— Annex I, Reg. 14, — IMO MEPC.1/Circ.643.	— IMO Res. MEPC.107(49), — IMO MEPC.1/Circ.643.	B + D B + E B + F
A.1/2.4	Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Deliberately left blank			
A.1/2.5	Oil discharge monitoring and control system for oil tankers	— Annex I, Reg. 31.	— Annex I, Reg. 31.	— IMO Res. MEPC.108(49).	B + D B + E B + F
A.1/2.6	Sewage systems	— Annex IV, Reg. 9.	— Annex IV, Reg. 9.	— IMO Res. MEPC.159(55).	B + D B + E B + F
A.1/2.7	Shipboard incinerators	— Annex VI, Reg. 16.	— Annex VI, Reg.16.	— IMO Res. MEPC.76(40).	B + D B + E B + F G



1	2	3	4	5	6
A.1/2.8 Refer to note (b) of this Annex A.1	On board NO <sub>x</sub> monitoring and recording devices	<ul> <li>— Annex VI, Reg. 13,</li> <li>— NO<sub>x</sub> Technical Code 2008,</li> <li>— IMO Res. MEPC.177(58).</li> </ul>	<ul> <li>— Annex VI, Reg. 13,</li> <li>— NO<sub>x</sub> Technical Code 2008,</li> <li>— IMO Res. MEPC.177(58),</li> <li>— IMO MEPC.1/Circ.638.</li> </ul>	<ul> <li>NO<sub>x</sub> Technical Code 2008,</li> <li>IMO Res. MEPC.177(58).</li> </ul>	B + D B + E B + F G
A.1/2.9 Refer to note (b) of this Annex A.1	Other technological methods to limit SO <sub>x</sub> emissions	— Annex VI, Reg. 4.	— Annex VI, Reg. 4.	— IMO Res. MEPC.184(59).	B + D B + E B + F
A.1/2.10 ex A.2/2.2	On board exhaust gas cleaning systems	— Annex VI, Reg. 4.	— Annex VI Reg. 4.	— IMO Res. MEPC.184(59).	B + D B + E B + F G

## 3. Fire protection equipment

No	Item designation	Regulation SOLAS 74 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.1/3.1	Primary decks covering	— Reg. II-2/4, — Reg. II-2/6, — Reg. X/3.	<ul> <li>Reg. II-2/4,</li> <li>Reg. II-2/6,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)-(FTP Code), Annex 1 Part 2 and Part 6 or Annex 2,</li> <li>IMO MSC/Circ.1102,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F
A.1/3.2	Portable fire extinguishers	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 4.	<ul> <li>Reg. II-2/4,</li> <li>Reg. II-2/10,</li> <li>Reg. II-2/18,</li> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>IMO Res. A.951(23),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4,</li> <li>IMO MSC/Circ.1239,</li> <li>IMO MSC/Circ.1275.</li> </ul>	<ul> <li>EN 3-7 (2004) including A.1 (2007),</li> <li>EN 3-8 (2006) including AC (2007),</li> <li>EN 3-9 (2006) including AC (2007),</li> <li>EN 3-10 (2009).</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/3.3	Fire-fighter's outfit: protective clothing (close proximity clothing)	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	Protective clothing for fire fighting:  — EN 469 (2005) including A1 (2006) and AC (2006)  Protective clothing for fire fighting – Reflective clothing for specialised fire-fighting:  — EN 1486 (2007).  Protective clothing for fire fighting – Protective clothing with a reflective outer surface:  — ISO 15538 (2001).	B + D B + E B + F
A.1/3.4	Fire-fighter's outfit: boots	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	— EN 15090 (2006),	B + D B + E B + F
A.1/3.5	Fire-fighter's outfit: gloves	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	— EN 659 (2003) including A1 (2008) and AC (2009).	B + D B + E B + F
A.1/3.6	Fire-fighter's outfit: helmet	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	— EN 443 (2008).	B + D B + E B + F
A.1/3.7	Self-contained compressed-air-operated breathing apparatus  Note: For use in accidents involving dangerous goods a positive pressure type mask is required.	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res.</li> <li>MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>EN 136 (1998) including AC (2003),</li> <li>EN 137 (2006).</li> </ul>	B + D B + E B + F
A.1/3.8	Compressed air line breathing apparatus	<ul> <li>Reg. X/3.</li> <li>IMO Res.         MSC.36(63)-(1994         HSC Code) 7.</li> <li>Note: This equipment         is only for high-speed         craft built under         provisions of the         1994 HSC Code.</li> </ul>	— IMO Res. MSC.36(63)-(1994 HSC Code) 7.	<ul> <li>EN 14593-1 (2005),</li> <li>EN 14593-2 (2005) including AC (2005),</li> <li>EN 14594 (2005).</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/3.9	Sprinkler systems components for accommodation spaces, service spaces and control stations equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited to nozzles and their performance). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	— Reg. II-2/7, — Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 8.	<ul> <li>Reg. II-2/7,</li> <li>Reg. II-2/9,</li> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.44(65),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 8.</li> <li>IMO MSC/Circ.912.</li> </ul>	— IMO Res. A.800(19).	B + D B + E B + F
A.1/3.10 Refer to note (b) of this Annex A.1	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces and cargo pump-rooms	— Reg. II-2/10, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 7.	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	— IMO MSC/Circ.1165, Appendix A.	B + D B + E B + F
A.1/3.11	"A" & "B" Class divisions fire integrity (a) "A" class divisions, (b) "B" class divisions.	"A" Class:  — Reg. II-2/3.2.  "B" Class:  — Reg. II-2/3.4.	— Reg.II-2/9, and, "A" Class: — Reg. II-2/3.2. "B" Class: — Reg. II-2/3.4.	<ul> <li>IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3 and Annex 2,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F
A.1/3.12	Devices to prevent the passage of flame into the cargo tanks in tankers	— Reg. II-2/4, — Reg. II-2/16.	— Reg. II-2/4, — Reg. II-2/16.	— EN 12874 (2001), — ISO 15364 (2007), — IMO MSC/Circ.677.	For equipment other than valves:  B + D B + E B + F For valves: B + F
A.1/3.13	Non-combustible materials	— Reg. II-2/3, — Reg. X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/5,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>— IMO Res. MSC.61(67)- (FTP Code) Annex 1</li> <li>Part 1,</li> <li>— IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/3.14	Materials other than steel for pipes penetrating "A" or "B" Class division	Item included in A.1/3.	.26 and A.1/3.27		
A.1/3.15	Materials other than steel for pipes conveying oil or fuel oil (a) pipes and fittings, (b) valves, (c) flexible pipe assemblies.	— Reg. II-2/4, — Reg. X/3.	<ul> <li>Reg. II-2/4,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7, 10,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7, 10,</li> <li>IMO MSC/Circ.1120.</li> </ul>	— IMO Res. A.753(18), — ISO 15540 (2001) — ISO 15541 (2001).	B + D B + E B + F
A.1/3.16	Fire Doors	— Reg. II-2/9.	— Reg. II-2/9.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3, — IMO MSC/Circ.1120, — IMO MSC.1/Circ.1273, — IMO MSC.1/Circ.1319.	B + D B + E B + F
A.1/3.17	Fire door control systems components.  Note: When the term "system components" is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international requirements are fulfilled.	— Reg. II-2/9, — Reg. X/3.	— Reg. II-2/9, — IMO Res. MSC.97(73)-(2000 HSC Code) 7.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 4.	B + D B + E B + F
A.1/3.18	Surface materials and floor coverings with low flame-spread characteristics  (a) decorative veneers (b) paint systems, (c) floor coverings, (d) pipe insulation covers, (e) adhesives used in the construction of "A", "B" & "C" class divisions, (f) combustible ducts.	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/6, — Reg. II-2/9, — Reg. X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/5,</li> <li>Reg. II-2/6,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO MSC/Circ.1120.</li> </ul>	- IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 2 and Part 5, or Annex 2,  - IMO MSC/Circ.1120,  - ISO 1716 (2002).  Note: Where the surface material is required to have a certain maximum calorific value, this shall be measured in accordance with ISO 1716.	B + D B + E B + F
A.1/3.19	Draperies, curtains and other suspended textile materials and films	— Reg. II-2/3, — Reg. II-2/9, — Reg. X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 7,</li> <li>IMO MSC/Circ.1102,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/3.20	Upholstered furniture	— Reg. II-2/3, — Reg. II-2/5, — Reg. II-2/9, — Reg.X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/5,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 8,</li> <li>IMO MSC/Circ.1102,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F
A.1/3.21	Bedding components	— Reg. II-2/3, — Reg. II-2/9, — Reg. X/3.	<ul> <li>Reg. II-2/3,</li> <li>Reg. II-2/9,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 9,</li> <li>IMO MSC/Circ.1102,</li> <li>IMO MSC/Circ.1120.</li> </ul>	B + D B + E B + F
A.1/3.22	Fire dampers	— Reg. II-2/9.	— Reg. II-2/9.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3, — IMO MSC/Circ.1120.	B + D B + E B + F
A.1/3.23	Non-combustible duct penetrations through "A" class divisions	Moved to A.1/3.26			
A.1/3.24	Electric Cable Transits through "A" class divisions	Moved to A.1/3.26			
A.1/3.25	"A" and "B" class fire proof windows and side scuttles	— Reg. II-2/9.	— Reg. II-2/9, — IMO MSC/Circ.1120.	<ul> <li>IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3,</li> <li>IMO MSC/Circ.1120,</li> <li>IMO MSC.1/Circ.1203.</li> </ul>	B + D B + E B + F
A.1/3.26	Penetrations through "A" class divisions  (a) electric cable transits,  (b) pipe, duct, trunk, etc penetrations.	— Reg. II-2/9.	— Reg. II-2/9, — IMO MSC.1/Circ.1276.	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3, — IMO MSC/Circ.1120.	B + D B + E B + F
A.1/3.27	Penetrations through "B" class divisions  (a) electric cable transits,  (b) pipe, duct, trunk, etc penetrations.	— Reg. II-2/9.	— Reg. II-2/9.	- IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 3,  - IMO MSC/Circ.1120.	B + D B + E B + F
A.1/3.28	Sprinkler systems (limited to sprinkler heads). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	— Reg. II-2/7, — Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/7,</li> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.44(65),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 8,</li> <li>IMO MSC/Circ.912.</li> </ul>	— ISO 6182-1 (2004).  Or,  — EN 12259-1 (1999) including A1 (2001), A2 (2004) and A3 (2006).	B + D B + E B + F



1	2	3	4	5	6
A.1/3.29	Fire hoses	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— EN 14540 (2004) including A.1 (2007).	B + D B + E B + F
\(\lambda.1/3.30\)	Portable oxygen analysis and gas detection equipment	— Reg. II-2/4, — Reg. VI/3.	— Reg. II-2/4, — Reg. VI/3, — IMO Res. MSC.98(73)-(FSS Code) 15.	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 60092-504 (2001),</li> <li>IEC 60533 (1999),</li> <li>and as applicable to: <ul> <li>a) Category 1: (safe area):</li> <li>EN 50104 (2002) including A.1 (2004) Oxygen,</li> <li>EN 60079-29-1 (2007).</li> </ul> </li> <li>b) Category 2: (explosive gas atmospheres): <ul> <li>EN 50104 (2002) including A.1 (2004) Oxygen,</li> <li>EN 60079-29-1 (2007),</li> <li>EN 60079-29-1 (2007),</li> <li>IEC 60079-0 (2007),</li> <li>IEC 60079-1 (2007) including IEC 60079-1 Corrigendum 1 (2008)</li> <li>IEC 60079-10-1 (2006),</li> <li>IEC 60079-15 (2010),</li> <li>IEC 60079-26 (2006).</li> </ul> </li> </ul>	B + D B + E B + F
A.1/3.31	Nozzles for fixed sprinkler systems, for high speed craft (HSC)	Item deleted as it is co	vered by A.1/3.9 and A.1/3.28		
A.1/3.32	Fire restricting materials (except furniture) for high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 10.	B + D B + E B + F
A.1/3.33	Fire restricting materials for furniture for high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO MSC/Circ.1102.</li> </ul>	— IMO Res. MSC.61(67)-(FTP Code) Annex 1: Part 1, Part 8 and Part 10.	B + D B + E B + F
A.1/3.34	Fire resisting divisions for high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.	B + D B + E B + F



1	2	3	4	5	6
A.1/3.35	Fire doors on high speed craft	— Reg. X/3.	<ul> <li>— IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.36	Fire dampers on high speed craft	— Reg. X/3.	<ul> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO MSC/Circ.1102.</li> </ul>	— IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.37	Penetrations through fire resisting divisions on high speed craft  (a) electric cable transits,  (b) pipe, duct, trunk etc penetrations.	— Reg. X/3.	<ul> <li>— IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO Res. MSC.61(67)- (FTP Code) Annex 1 Part 11.	B + D B + E B + F
A.1/3.38	Portable fire- extinguishing equipment for lifeboats and rescue boats	— Reg. III/4, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 4.	<ul> <li>Reg. III/34,</li> <li>IMO Res. A.951(23),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, V,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	<ul> <li>EN 3-7 (2004) including A1 (2007),</li> <li>EN 3-8 (2006) including AC (2007),</li> <li>EN 3-9 (2006) including AC (2007),</li> <li>EN 3-10 (2009).</li> </ul>	B + D B + E B + F
A.1/3.39	Nozzles for equivalent water-mist fire extinguishing systems for machinery spaces and cargo pump rooms	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	— IMO MSC/Circ.1165.	B + D B + E B + F
A.1/3.40	Low-location lighting systems (components only)	— Reg. II-2/13, — IMO Res. MSC.98(73)-(FSS Code) 11.	<ul><li>— Reg. II-2/13,</li><li>— IMO Res. MSC.98(73)-(FSS Code) 11.</li></ul>	<ul><li>— IMO Res. A.752(18).</li><li>Or,</li><li>— ISO 15370 (2010).</li></ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/3.41	Emergency escape breathing devices (EEBD)	— Reg. II-2/13.	<ul> <li>Reg. II-2/13,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3,</li> <li>IMO MSC/Circ.849.</li> </ul>	<ul> <li>ISO 23269-1 (2008), and alternatively:</li> <li>For self-contained opencircuit compressed air breathing apparatus with full mask or mouthed piece assembly for escape:</li> <li>EN 402(2003).</li> <li>For self-contained opencircuit compressed air breathing apparatus with a hood for escape:</li> <li>EN 1146(2005).</li> <li>For self-contained closedcircuit compressed air breathing apparatus:</li> <li>EN 13794(2002).</li> </ul>	B + D B + E B + F
A.1/3.42	Inert gas systems components	— Reg. II-2/4.	<ul> <li>Reg. II-2/4,</li> <li>IMO Res. A.567(14),</li> <li>IMO Res. MSC.98(73)-(FSS Code) 15,</li> <li>IMO MSC/Circ.353,</li> <li>IMO MSC/Circ.387,</li> <li>IMO MSC/Circ.485,</li> <li>IMO MSC/Circ.450 Rev.1,</li> <li>IMO MSC/Circ.731,</li> <li>IMO MSC/Circ.1120.</li> </ul>	— IMO MSC/Circ.353.	B + D B + E B + F G
A.1/3.43	Nozzles for deep fat cooking equipment fire extinguishing systems (automatic or manual type).	— Reg. II-2/1, — Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/1,</li> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— ISO 15371 (2009).	B + D B + E B + F
A.1/3.44	Fire-fighters outfit - lifeline	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	<ul> <li>IMO Res. MSC.61(67)- (FTP Code) Annex 1</li> <li>Part 1,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 3.</li> </ul>	B + D B + E B + F
A.1/3.45	Equivalent fixed gas fire extinguishing systems components (extinguishing medium, head valves and nozzles) for machinery spaces and cargo pump rooms	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 5,</li> <li>IMO MSC/Circ.848,</li> <li>IMO MSC.1/Circ.1313,</li> <li>IMO MSC.1/Circ.1316,</li> <li>IMO MSC.1/Circ.1317.</li> </ul>	— IMO MSC/Circ.848, — IMO MSC.1/Circ.1317.	B + D B + E B + F



1	2	3	4	5	6
A.1/3.46	Equivalent fixed gas fire extinguishing systems for machinery spaces (aerosol systems)	<ul> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 5.</li> </ul>	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 5,</li> <li>IMO MSC.1/Circ.1270,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	— IMO MSC.1/Circ.1270.	B + D B + E B + F
A.1/3.47	Concentrate for fixed high expansion foam fire extinguishing systems for machinery spaces and cargo pump rooms.  Note: The fixed high expansion foam fire extinguishing system (including those systems which use inside air from their working spaces for their intended performance), for machinery spaces and cargo pump rooms must still be tested with the approved concentrate to the satisfaction of the Administration.	— Reg. II-2/10.	— Reg. II-2/10, — IMO Res. MSC.98(73)-(FSS Code) 6.	— IMO MSC/Circ.670.	B + D B + E B + F
A.1/3.48	Fixed water based local application fire fighting systems components for use in category "A" machinery spaces (Nozzles and performance tests).	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— IMO MSC/Circ.913, — IMO MSC.1/Circ.1276.	B + D B + E B + F
A.1/3.49 Refer to note b) of this Annex A.1	Nozzles for fixed water- based fire-fighting systems for ro-ro spaces and special category spaces equivalent to that referred to in resolution A.123(V)	<ul> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7.</li> </ul>	<ul> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>IMO Res. A.123(V),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7.</li> </ul>	— IMO MSC.1/Circ.1272.	B + D B + E B + F
A.1/3.50	Protective clothing resistant to chemical attack	Moved to A.2/3.9		•	•



1	2	3	4	5	6
A.1/3.51	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces	— Reg. II-2/7, — Reg. X/3, — IMO Res. MSC.98(73)-(FSS Code) 9.	<ul> <li>Reg. II-2/7,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 9,</li> <li>IMO MSC.1/Circ.1242,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	Control and indicating equipment. Electrical installations in ships:  — EN 54-2 (1997) including AC(1999) and A1(2006).  Power supply equipment:  — EN 54-4 (1997) including AC(1999), A1(2002) and A2(2006).  Heat detectors - Point detectors:  — EN 54-5 (2000) including A1(2002).  Smoke detectors - Point detectors using scattered light, transmitted light or ionisation:  — EN 54-7 (2000) including A1(2002) and A2(2006).  Flame detectors - Point detectors:  — EN 54-10 (2002) including A1(2005).  Manual call points:  — EN 54-11 (2001) including A1(2005).  And, as applicable, electrical and electronic installations in ships:  — IEC 60092-504 (2001),  — IEC 60533 (1999).	B + D B + E B + F
A.1/3.52	Non-portable and transportable fire extinguishers	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/4,</li> <li>Reg. II-2/10,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— EN 1866-1 (2007). Or, — ISO 11601 (2008).	B + D B + E B + F
A.1/3.53	Fire alarm devices - Sounders	<ul> <li>Reg. II-2/7,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 9.</li> </ul>	<ul> <li>Reg. II-2/7,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 9,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	Sounders  — EN 54-3 (2001) including A1(2002) and A2(2006),  — IEC 60092-504 (2001),  — IEC 60533 (1999).	B + D B + E B + F



1	2	3	4	5	6
A.1/3.54	Fixed oxygen analysis and gas detection equipment	— Reg. II-2/4, — Reg. VI/3.	<ul> <li>Reg. II-2/4,</li> <li>Reg. VI/3,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 15.</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008) or IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 60945 (2001),</li> <li>IEC 60092-504 (2001),</li> <li>IEC 60533 (1999),</li> <li>and as applicable to:</li> <li>a) Category 4: (safe area)</li> <li>EN 50104 (2002) including A.1 2004 Oxygen.</li> <li>b) Category 3: (explosive gas atmospheres)</li> <li>EN 50104 (2002) including A.1 2004 Oxygen,</li> <li>EN 50104 (2002)</li> <li>EN 50104 (2002)</li> <li>EN 50104 (2002)</li> <li>EN 50104 (2002)</li> <li>EN 60079-29-1 (2007).</li> </ul>	B + D B + E B + F
A.1/3.55 Refer to note (b) of this Annex A.1	Dual purpose type nozzles (spray/jet type)	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	Hand-held branchpipes for fire service use – Combination branchpipes PN 16:  — EN 15182-1 (2007) including A1(2009),  — EN 15182-2 (2007) including A1(2009).  Hand-held branchpipes for fire service use – Smooth bore jet and/or one fixed spray jet angle branchpipes PN 16:  — EN 15182-1 (2007) including A1(2009),  — EN 15182-3 (2007) including A1(2009).	B + D B + E B + F
A.1/3.56 Refer to note (b) of this Annex A.1	Fire hoses (reel type)	— Reg. II-2/10, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	— EN 671-1 (2001) including AC (2002).	B + D B + E B + F
A.1/3.57 Refer to note (b) of this Annex A.1	Medium expansion foam fire extinguishing systems components - Fixed deck foam for tankers	— Reg. II-2/10.	<ul> <li>Reg. II-2/10.8.1,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 14,</li> <li>IMO MSC.1/Circ.1239,</li> <li>IMO MSC.1/Circ.1276.</li> </ul>	— IMO MSC/Circ.798.	B + D B + E B + F
A.1/3.58 Refer to note (b) of this Annex A.1	Fixed low expansion foam fire extinguishing systems components for machinery spaces and tanker deck protection.	— Reg. II-2/10.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 6, 14,</li> <li>IMO MSC.1/Circ.1239,</li> <li>IMO MSC.1/Circ.1276,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	— IMO MSC.1/Circ.1312.	B + D B + E B + F

1	2	3	4	5	6
A.1/3.59 Refer to note (b) of this Annex A.1	Expansion foam for fixed fire extinguishing systems for chemical tankers	— Reg. II-2/1, — IMO Res. MSC.4(48)-(IBC Code).	— IMO Res. MSC.4(48)-(IBC Code), — IMO MSC/Circ.553.	— IMO MSC.1/Circ.1312.	B + D B + E B + F
A.1/3.60 Refer to note (b) of this Annex A.1	Nozzles for fixed pressure water-spraying fire-extinguishing systems for cabin balconies	— Reg. II-2/10.	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 7,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>	— IMO MSC.1/Circ.1268.	B + D B + E B + F
A.1/3.61 Refer to note (b) of this Annex A.1	Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms	— Reg. II-2/10.	— Reg. II-2/10.	— IMO MSC.1/Circ.1271.	B + D B + E B + F
expa syste prote mack carge shall appre to th	Note: Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms shall be tested with the approved concentrate to the satisfaction of the Administration				
A.1/3.62 ex A.2/3.32	Dry chemical powder extinguishing systems	— Reg. II-2/1.	Reg. II-2/1,      International Code for the     Construction and Equipment of     Ships Carrying Liquefied Gases in     Bulk: Chapter 11.	— IMO MSC.1/Circ.1315.	B + D B + E B + F

## 4. Navigation equipment

Notes applicable to section 4: Navigation equipment.

Column 5: Wherever reference is made to EN 61162 series or IEC 61162 series, the intended item layout shall be taken into account to determine the applicable standard of EN 61162 series or IEC 61162 series.

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.1/4.1	Magnetic compass	— Reg. V/18.	— Reg. V/19, — IMO Res. A.382(X), — IMO Res. A.694(17).	<ul> <li>— ISO 1069 (1973),</li> <li>— ISO 25862 (2009),</li> <li>— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>— Or,</li> <li>— ISO 1069 (1973),</li> <li>— ISO 25862 (2009),</li> <li>— IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.2	Transmitting heading device THD (magnetic method)	— Reg. V/18, — Reg. V/19, — Reg. X/3, — IMO Res. MSC.36(63)- (1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.116(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series;</li> <li>ISO 22090-2 (2004), including Corrigendum 2005,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series.</li> <li>ISO 22090-2 (2004), including Corrigendum 2005,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.3	Gyro compass	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.424(XI),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN ISO 8728 (1998),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>ISO 8728 (1997),</li> <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>	B + D B + E B + F G
A.1/4.4	Radar equipment	Moved to A.1/4.34, A.	1/4.35 and A.1/4.36		
A.1/4.5	Automatic radar plotting aid (ARPA)	Moved to A.1/4.34			
A.1/4.6	Echo-sounding equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.224(VII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.74(69) Annex 4,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN ISO 9875 (2001) including ISO Technical Corrigendum 1: 2006,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).         <ul> <li>Or,</li> <li>ISO 9875 (2000) including ISO Technical Corrigendum 1: 2006,</li> <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> </li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.7	Speed and distance measuring equipment (SDME)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.         MSC.36(63)-(1994         HSC Code) 13,</li> <li>IMO Res.         MSC.97(73)-(2000         HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.824(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.96(72),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61023 (2007),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61023 (2007),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.8	Rudder angle, rpm, pitch indicator	Moved to A.1/4.20, A.	1/4.21 and A.1/4.22		•
A.1/4.9 Refer to note (b) of this Annex A.1	Rate-of-turn indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.526(13),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ISO 20672 (2007),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series,</li> <li>ISO 20672 (2007),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.10	Direction finder	Deliberately left blank			
A.1/4.11	Loran-C equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.         MSC.36(63)-(1994         HSC Code) 13,</li> <li>IMO Res.         MSC.97(73)-(2000         HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.818(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61075 (1993),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61075 (1991),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.12	Chayka equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. A.818 (19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61075 (1993),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61075 (1991),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.13	Decca navigator equipment	Deliberately left blank			
A.1/4.14	GPS equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	<ul> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.112(73),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61108-1 (2003),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-1 (2003),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.15	GLONASS equipment	— Reg. V/18, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 13, — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.113(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61108-2 (1998),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-2 (1998),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.16	Heading control system (HCS)	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.342(IX),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.64(67) Annex 3,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>— ISO 11674 (2006),</li> <li>— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>— EN 61162 series,</li> <li>— EN 62288 (2008).</li> <li>Or,</li> <li>— ISO 11674 (2006),</li> <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>	B + D B + E B + F G
A.1/4.17	Mechanical pilot hoist	Moved to A.1/1.40			•
A.1/4.18	9 GHz SAR transponder (SART)	<ul> <li>Reg. III/4,</li> <li>Reg. IV/14,</li> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. III/6,</li> <li>Reg. IV/7,</li> <li>IMO Res. A.530(13),</li> <li>IMO Res. A.802(19),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14,</li> <li>ITU-R M.628-3(11/93).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61097-1 (2007).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-1 (2007).</li> </ul>	B + D B + E B + F G
A.1/4.19	Radar equipment for high-speed craft	Moved to A.1/4.37			•
A.1/4.20 Refer to note (b) of this Annex A.1	Rudder angle indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.         MSC.36(63)-(1994         HSC Code) 13,</li> <li>IMO Res.         MSC.97(73)-(2000         HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ISO 20673 (2007),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series,</li> <li>ISO 20673 (2007),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.21 Refer to note (b) of this Annex A.1	Propeller revolution indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ISO 22554 (2007),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series,</li> <li>ISO 22554 (2007),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.22 Refer to note (b) of this Annex A.1	Pitch indicator	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ISO 22555 (2007),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series,</li> <li>ISO 22555 (2007),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.23	Compass for lifeboats and rescue boats	<ul> <li>Reg. III/4,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. III/34,</li> <li>IMO Res. MSC.48(66)-(LSA Code) IV, V,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 13.</li> </ul>	— ISO 25862 (2009).	B + D B + E B + F
A.1/4.24	Automatic radar plotting aid (ARPA) for high-speed craft	Moved to A.1/4.37			
A.1/4.25	Automatic tracking aid (ATA)	Moved to A.1/4.35			
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved to A.1/4.38			
A.1/4.27	Electronic plotting aid (EPA)	Moved to A.1/4.36			
A.1/4.28	Integrated bridge system	Moved to A.2/4.30			
A.1/4.29	Voyage data recorder (VDR)	<ul> <li>Reg. V/18,</li> <li>Reg. V/20,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/20,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. A.861 (20),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 61996-1 (2008),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 61996-1 (2007-11),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
1/4.30	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.232(82),</li> <li>IMO SN.1/Circ.266.</li> <li>[ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested].</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 61174 (2008),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 61174 (2008),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.31	Gyro compass for high-speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res.</li> <li>MSC.36(63)-(1994)</li> <li>HSC Code) 13,</li> <li>IMO Res.</li> <li>MSC.97(73)-(2000)</li> <li>HSC Code) 13.</li> </ul>	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.821(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>— ISO 16328 (2001),</li> <li>— EN 60945 (2002)</li> <li>including IEC 60945</li> <li>Corrigendum 1 (2008),</li> <li>— EN 61162 Series,</li> <li>— EN 62288 (2008).</li> <li>Or,</li> <li>— ISO 16328 (2001),</li> <li>— IEC 60945 (2002)</li> <li>including IEC 60945</li> <li>Corrigendum 1 (2008),</li> <li>— IEC 61162 Series,</li> <li>— IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.32	Universal automatic identification system equipment (AIS)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.74(69),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>ITU-R M. 1371-4(2010).</li> <li>Note: ITU-R M. 1371-4(2010) shall only be applicable in accordance with requirements of IMO Res.MSC.74(69).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 61993-2 (2001),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 61993-2 (2001),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.33	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.74(69),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62065 (2002),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62065 (2002),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.34	Radar equipment CAT 1	— Reg. V/18.	<ul> <li>Reg. V/19.</li> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.823(19),</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008),</li> <li>EN 62388 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2008).</li> <li>IEC 62388 Ed.1.0(2007).</li> </ul>	B + D B + E B + F G
A.1/4.35	Radar equipment CAT 2	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008),</li> <li>EN 62388 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2008).</li> <li>IEC 62388 Ed.1.0(2007).</li> </ul>	B + D B + E B + F G
A.1/4.36	Radar equipment CAT 3	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008),</li> <li>EN 62388 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2007).</li> </ul>	B + D B + E B + F G
A.1/4.37	Radar equipment for high speed craft applications (CAT 1H, CAT 2H and CAT 3H)	<ul> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008),</li> <li>EN 62388 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2008).</li> <li>IEC 62388 Ed.1.0(2007).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.38	Radar equipment approved with a chart option, namely:  (a) CAT 1 with Chart option,  (b) CAT 2 with Chart option,  (c) CAT 1 for HSC with Chart option,  (d) CAT 2 for HSC with Chart option.	<ul> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>IMO Res. A.278(VIII),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.192(79),</li> <li>ITU-R M. 1177-3(06/03).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008),</li> <li>EN 62388 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2008).</li> <li>IEC 62388 Ed.1.0(2007).</li> </ul>	B + D B + E B + F G
A.1/4.39	Radar reflector – passive type	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.164(78).</li> </ul>	<ul> <li>ISO 8729-1 (2010),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>Or,</li> <li>ISO 8729-1 (2010),</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>	B + D B + E B + F G
A.1/4.40	Heading control system for high speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.822(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>ISO 16329 (2003),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>ISO 16329 (2003),</li> <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>	B + D B + E B + F G
A.1/4.41	Transmitting heading device THD (GNSS method)	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.116(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>ISO 22090-3 (2004) including ISO Corrigendum 1 (2005),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>ISO 22090-3 (2004) including ISO Corrigendum 1 (2005),</li> <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>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.42	Searchlight for high speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>ISO 17884 (2004),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>Or,</li> <li>ISO 17884 (2004),</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>	B + D B + E B + F G
A.1/4.43	Night vision equipment for high speed craft	<ul> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>IMO Res.A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.94(72),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13.</li> </ul>	<ul> <li>— ISO 16273 (2003),</li> <li>— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>Or,</li> <li>— ISO 16273 (2003),</li> <li>— IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>	B + D B + E B + F G
A.1/ 4.44	Differential beacon receiver for DGPS and DGLONASS Equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.114(73).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-4 (2004),</li> <li>EN 61162 series.</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-4 (2004),</li> <li>IEC 61162 series.</li> </ul>	B + D B + E B + F G
A.1/ 4.45 Refer to note (b) of this Annex A.1	Chart facilities for shipborne radar	Item deleted, as it is co	Nevered by A.1/4.38		
A.1/4.46	Transmitting heading device THD (Gyroscopic method)	<ul> <li>Reg. V/18.</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.116(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>ISO 22090-1 (2002) including Corr.1 (2005),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>ISO 22090-1 (2002) including Corr.1 (2005),</li> <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>	B + D B + E B + F G



1	2	3	4	5	6
A.1./4.47	Simplified voyage data recorder (S-VDR)	— Reg. V/20.	<ul> <li>Reg. V/20,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.163(78),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 61996-2 (2008),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series,</li> <li>IEC 61996-2 (2007),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/4.48	Mechanical pilot hoist	— Reg. V/23.	<ul><li>Reg. V/23,</li><li>IMO Res. A.889(21),</li><li>IMO MSC/Circ.773.</li></ul>	— IMO Res.A.889(21).	B + D B + E B + F
A.1/4.49	Pilot ladder	— Reg. V/23, — Reg. X/3.	— Reg. V/23 — IMO Res. A.889(21) — IMO MSC/Circ.773.	— IMO Res. A.889(21), — ISO 799 (2004).	B + D B + E B + F G
A.1/ 4.50 Refer to note (b) of his Annex A.1	DGPS Equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.112(73),</li> <li>IMO Res. MSC.114(73),</li> <li>IMO Res. MSC.1191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61108-1 (2003),</li> <li>EN 61108-4 (2004),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-1 (2003),</li> <li>IEC 61108-4 (2004),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G
A.1/ 4.51 Refer to note (b) of his Annex A.1	DGLONASS Equipment	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.113(73),</li> <li>IMO Res. MSC.114(73),</li> <li>IMO Res. MSC.114(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61108-2 (1998),</li> <li>EN 61108-4 (2004),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-2 (1998),</li> <li>IEC 61108-4 (2004),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G



1	2	3	4	5	6
A.1/4.52 Refer to note (c) of this Annex A.1	Daylight signalling lamp	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <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.95(72),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ISO 25861 (2007).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ISO 25861 (2007).</li> </ul>	B + D B + E B + F
A.1/4.53 ex A.2/4.17	Radar target enhancer	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.164(78).</li> </ul>	<ul> <li>ISO 8729-2 (2009),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>Or,</li> <li>ISO 8729-2 (2009),</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> </ul>	B + D B + E B + F G
A.1/4.54 ex A.2/4.31	Bearing Device	— Reg. V/18.	— Reg. V/19.	<ul> <li>— ISO 25862 (2009),</li> <li>— EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>Or,</li> <li>— ISO 25862 (2009),</li> <li>— IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> </ul>	B + D B + E B + F G
A.1/4.55 ex A.2/4.36	AIS SART equipment	— Reg. III/4, — Reg. IV/14.	<ul> <li>Reg. III/6,</li> <li>Reg. IV/7,</li> <li>IMO Res. MSC.246(83),</li> <li>IMO Res. MSC.247(83),</li> <li>IMO Res. MSC.256(84),</li> <li>ITU-R M. 1371-4(2010).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61097-14 (2010),</li> <li>EN 61162 Series, Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-14 (2010),</li> <li>IEC 61162 Series.</li> </ul>	B + D B + E B + F G
A.1/4.56 ex A.2/4.35	Galileo Receiver	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.813(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO Res. MSC.233(82).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61108-3 (2010),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-3 (2010),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	B + D B + E B + F G

1	2	3	4	5	6
A.1/4.57 ex A.2/4.32	Bridge Navigational Watch Alarm System (BNWAS)	— Reg. V/18.	— IMO Res. A.694(17),  — IMO Res. MSC.128(75),  — IMO Res. MSC.191(79).	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008),</li> <li>IEC 62616(2010).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 62288 Ed.1.0(2008),</li> <li>IEC 62616(2010).</li> </ul>	B + D B + E B + F G

#### 5. Radiocommunication equipment

Notes applicable to section 5: Radiocommunication equipment.

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

Wherever reference is made to EN 61162 series or IEC 61162 series, the intended item layout shall be taken into account to determine the applicable standard of EN 61162 series or IEC 61162 series.

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.1/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	— Reg. IV/14,  — Reg. X/3,  — IMO Res. MSC.36(63)-(1994 HSC Code) 14,  — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	<ul> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.385(X),</li> <li>IMO Res. A.524(13),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32,</li> <li>ITU-R M.489-2 (10/95),</li> <li>ITU-R M.493-13 (10/09),</li> <li>ITU-R M.541-9 (05/04),</li> <li>ITU-R M.689-2 (09/94).</li> </ul>	<ul> <li>IMO MSC/Circ.862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>ETSI EN 301 843-2 V1.2.1 (2004-06),</li> <li>ETSI EN 301 925 V1.2.1 (2006-12).</li> <li>Or,</li> <li>IMO MSC/Circ.862,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-3 (1994),</li> <li>IEC 61097-7 (1996),</li> <li>IEC 61162 series.</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/5.2	VHF DSC watch-keeping receiver	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/7,</li> <li>Reg. X/3,</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 COMSAR Circ.32,</li> <li>ITU-R M.489-2 (10/95),</li> <li>ITU-R M.493-13 (10/09),</li> <li>ITU-R M.541-9 (05/04).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>ETSI EN 301 033 V1.2.1 (2005-12),</li> <li>ETSI EN 301 843-2 V1.2.1 (2004-06),</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-3 (1994),</li> <li>IEC 61097-8 (1998).</li> </ul>	B + D B + E B + F
A.1/5.3	NAVTEX receiver	— Reg. IV/14, — Reg. X/3, — IMO Res. MSC.36(63)-(1994 HSC Code) 14, — IMO Res. MSC.97(73)-(2000 HSC Code) 14.	<ul> <li>Reg. IV/7,</li> <li>Reg. X/3,</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.148(77),</li> <li>IMO COMSAR Circ.32,</li> <li>ITU-R M.540-2 (06/90),</li> <li>ITU-R M.625-3 (10/95).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 300 065-1 V1.2.1 (2009-01),</li> <li>ETSI EN 301 843-4 V1.2.1 (2004-06),</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-6 (2005-12).</li> </ul>	B + D B + E B + F
A.1/5.4	EGC receiver	— Reg. IV/14, — Reg. X/3, — IMO Res.     MSC.36(63)-(1994     HSC Code) 14, — IMO Res.     MSC.97(73)-(2000     HSC Code) 14.	<ul> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.570(14),</li> <li>IMO Res. A.664(16),</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 COMSAR Circ.32.</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI ETS 300 460 Ed.1 (1996-05),</li> <li>ETSI ETS 300 460/ A1 (1997-11),</li> <li>ETSI EN 300 829 V1.1.1 (1998-03),</li> <li>ETSI EN 301 843-1 V1.2.1 (2004-06),</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-4 (2007).</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.699(17),</li> <li>IMO Res. A.700(17),</li> <li>IMO Res. A.806(19),</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 COMSAR Circ.32,</li> <li>ITU-R M.491-1 (07/86),</li> <li>ITU-R M.492-6 (10/95),</li> <li>ITU-R M.540-2 (06/90),</li> <li>ITU-R M.625-3 (10/95),</li> <li>ITU-R M.688 (06/90).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>ETSI ETS 300 067 Ed.1 (1990-11),</li> <li>ETSI ETS 300 067/ A1 Ed.1 (1993-10).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>ETSI ETS 300 067 Ed.1 (1990-11),</li> <li>ETSI ETS 300 067/ A1 Ed.1 (1993-10).</li> </ul>	B + D B + E B + F
A.1/5.6	406 MHz EPIRB (COSPAS-SARSAT)	— Reg. IV/14, — Reg. X/3, — IMO Res.     MSC.36(63)-(1994     HSC Code) 14, — IMO Res.     MSC.97(73)-(2000     HSC Code) 14.	<ul> <li>Reg. IV/7,</li> <li>Reg. X/3,</li> <li>IMO Res. A.662(16),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.696(17),</li> <li>IMO Res. A.810(19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32,</li> <li>ITU-R M.633-3 (05/04),</li> <li>ITU-R M.690-1 (10/95).</li> </ul>	<ul> <li>IMO MSC/Circ.862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 300 066 V 1.3.1 (2001-01).</li> <li>Or,</li> <li>IMO MSC/Circ.862,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-2 (2008),</li> <li>Note: IMO MSC/ Circ. 862 is applicable only to the optional remote activation device, not to the EPIRB itself.</li> </ul>	B + D B + E B + F
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left blank			<u> </u>
A.1/5.8	2 182 kHz watch receiver	Deliberately left blank			
A.1/5.9	Two-tone alarm generator	Deliberately left blank			



1	2	3	4	5	6
A.1/5.10	MF radio capable of transmitting and receiving DSC and radiotelephony  Note: In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/9,</li> <li>Reg. IV/10,</li> <li>Reg. X/3,</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 COMSAR Circ.32,</li> <li>ITU-R M.493-13 (10/09),</li> <li>ITU-R M.541-9 (05/04).</li> </ul>	<ul> <li>IMO MSC/Circ.862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>ETSI ETS 300 373-1 V1.2.1 (2002-10),</li> <li>ETSI EN 301 843-5 V1.1.1 (2004-06),</li> <li>Or,</li> <li>IMO MSC/Circ.862,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-3 (1994),</li> <li>IEC 61097-9 (1997),</li> <li>IEC 61162 series.</li> </ul>	B + D B + E B + F
A.1/5.11	MF DSC watch-keeping receiver	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/9,</li> <li>Reg. IV/10,</li> <li>Reg. X/3,</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 COMSAR Circ.32,</li> <li>ITU-R M.493-13 (10/09),</li> <li>ITU-R M.541-9 (05/04),</li> <li>ITU-R M.1173 (10/95).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>ETSI EN 301 033 V1.2.1 (2005-12),</li> <li>ETSI EN 301 033 V1.2.1 (2005-12),</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-3 (1994),</li> <li>IEC 61097-8 (1998).</li> </ul>	B + D B + E B + F
A.1/5.12	Inmarsat-B SES	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/10,</li> <li>Reg. X/3,</li> <li>IMO Res. A.570(14),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.808(19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32.</li> </ul>	<ul> <li>IMO MSC/Circ 862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-10 (1999).</li> <li>Or,</li> <li>IMO MSC/Circ 862,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-10 (1999).</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/5.13 Inm	narsat-C SES	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/10,</li> <li>Reg. X/3,</li> <li>IMO Res. A.570(14),</li> <li>IMO Res. A.664 (16), (applicable only if the Inmarsat C SES comprises EGC functions),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32.</li> </ul>	<ul> <li>IMO MSC/Circ.862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ETSI ETS 300 460 Ed.1 (1996-05),</li> <li>ETSI ETS 300 460/ A1 (1997-11),</li> <li>ETSI EN 300 829 V1.1.1 (1998-03),</li> <li>ETSI EN 301 843-1 V1.2.1 (2004-06),</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-4 (2007),</li> <li>IEC 61162 series.</li> </ul>	B + D B + E B + F
Note and requestion and A31 app	/HF radio capable of ismitting and eiving DSC, NBDP radiotelephony  e: In line with IMO ITU decisions, the uirements for Two ne Alarm generator transmission on H are no longer olicable in testing ndards.	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/10,</li> <li>Reg. X/3,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.806(19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32,</li> <li>ITU-R M.476-5 (10/95),</li> <li>ITU-R M.491-1 (07/86),</li> <li>ITU-R M.492-6 (10/95),</li> <li>ITU-R M.493-13 (10/09),</li> <li>ITU-R M.541-9 (05/04),</li> <li>ITU-R M.625-3 (10/95),</li> <li>ITU-R M.1173 (10/95).</li> </ul>	<ul> <li>IMO MSC/Circ.862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>ETSI ETS 300 067 Ed.1 (1990-11),</li> <li>ETSI ETS 300 067/ A1 Ed.1 (1993-10),</li> <li>ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>ETSI ETS 300 373-1 V1.2.1 (2002-10),</li> <li>ETSI EN 301 843-5 V1.1.1 (2004-06),</li> <li>Or,</li> <li>IMO MSC/Circ.862,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-3 (1994),</li> <li>IEC 61097-9 (1997),</li> <li>IEC 61162 series.</li> </ul>	B + D B + E B + F



1	2	3	4	5	6
A.1/5.15	MF/HF DSC watch keeping receiver	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/10,</li> <li>Reg. X/3,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.806(19),</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 COMSAR Circ.32,</li> <li>ITU-R M.493-13 (10/09),</li> <li>ITU-R M. 541-9 (05/04).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>ETSI EN 301 033 V1.2.1 (2005-12).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-3 (1994),</li> <li>IEC 61097-8 (1998).</li> </ul>	B + D B + E B + F
A.1/5.16	Aeronautical two way VHF radio telephone apparatus	Moved to A.2/5.8			
A.1/5.17	Portable survival craft two-way VHF radiotelephone apparatus	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. III/6,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.809(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14,</li> <li>IMO Res. MSC.149(77),</li> <li>ITU-R M.489-2 (10/95).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 300 225 V1.4.1 (2004-12),</li> <li>ETSI EN 301 843-2 V1.2.1 (2004-06).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-12 (1996).</li> </ul>	B + D B + E B + F
A.1/5.18	Fixed survival craft two- way VHF radiotelephone apparatus	<ul> <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> <li>Reg. III/6,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.809(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14,</li> <li>ITU-R M.489-2 (10/95).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>ETSI EN 301 466 V1.1.1 (2000-10),</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-12 (1996).</li> </ul>	B + D B + E B + F
A1/ 5.19	Inmarsat-F77	<ul> <li>Reg. IV/14,</li> <li>Reg. X/3,</li> <li>IMO Res.</li></ul>	<ul> <li>Reg. IV/10,</li> <li>IMO Res. A.570 (14),</li> <li>IMO Res. A.808 (19),</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 MSC/Circ.862,</li> <li>IMO COMSAR Circ.32.</li> </ul>	<ul> <li>IMO MSC/Circ.862,</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-13 (2003).</li> <li>Or,</li> <li>IMO MSC/Circ.862,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61097-13 (2003).</li> </ul>	B + D B + E B + F

# 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
A.1/6.1	Navigation lights	— COLREG Annex I/14.	<ul><li>— COLREG Annex I/14,</li><li>— IMO Res. A.694(17),</li><li>— IMO Res. MSC.253(83).</li></ul>	<ul> <li>EN 14744 (2005) including AC (2006),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>Or,</li> <li>EN 14744 (2005) including AC (2006),</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> </ul>	B + D B + E B + F G

#### 7. Bulk carrier safety equipment

No items in Annex A.1.

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

No	Item designation	Regulation SOLAS 74 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
A.1/8.1 Refer to note (c) of this Annex A.1	Water level detectors	— IMO Res. MSC.188(79), — IMO MSC.1/Circ. 1291.	<ul> <li>Reg. II-1/22-1,</li> <li>Reg. II-1/23-3,</li> <li>Reg. XII/12</li> <li>IMO Res. MSC.188(79),</li> <li>IMO MSC.1/Circ. 1291.</li> </ul>	— IEC 60092-504 (2001), — IEC 60529 (2001), — IMO Res. MSC.188(79), — IMO MSC.1/Circ. 1291.	B + D B + E B + F

#### ANNEX A.2

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

## 1. Life-saving appliances

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

No	Item designation	Regulation SOLAS 74 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
A.2/1.1	Radar reflector for liferafts	— Reg. III/4, — Reg. III/34, — Reg. X/3.	— IMO Res. MSC.48(66)-(LSA Code).		
A.2/1.2	Immersion suit materials	Deliberately left blar	nk		•
A.2/1.3	Float-free launching appliances for survival craft	— Reg. III/4, — Reg. III/34.	<ul> <li>Reg. III/13,</li> <li>Reg. III/16,</li> <li>Reg. III/26,</li> <li>Reg. III/34,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</li> <li>IMO Res. MSC.48(66)-(LSA Code) I, IV, VI,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</li> </ul>		
A.2/1.4	Embarkation ladders	Moved to A.1/1.29			•
A.2/1.5	Public address & general emergency alarm system (when used as fire alarm device item A.1/3.53 shall apply)	— Reg. III/6.	<ul> <li>IMO Res. A.1021(26),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.48(66)-(LSA Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>IMO MSC/Circ.808.</li> </ul>	— ISO 27991 (2008)	

## 2. Marine pollution prevention

No	Item designation	Regulation MARPOL 73/78 where "type approval" is required	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO, applicable	Testing standards	Modules for conformity assessment
A.2/2.1	On board NO <sub>x</sub> 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	Other equivalent methods to reduce on board NO <sub>x</sub> emissions	— Annex VI, Reg. 4.	— Annex VI, Reg. 4.		
A.2/2.4	Other technological methods to limit SO <sub>x</sub> emissions	Moved to A.1/2.9			

# 3. Fire protection equipment

No	Item designation	Regulation SOLAS 74 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
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, — Reg. X/3, — IMO Res. MSC.98(73)- (FSS Code).	<ul> <li>Reg. II-2/10,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code), 3.</li> </ul>	— IEC 60079 series.	
A.2/3.9	Protective clothing resistant to chemical attack	— Reg. II-2/19.	<ul> <li>Reg. II-2/19,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7.</li> </ul>	<ul> <li>EN 943-1 (2002) including AC (2005),</li> <li>EN 943-2 (2002),</li> <li>EN ISO 6529 (2001),</li> <li>EN ISO 6530 (2005),</li> <li>EN 14605 (2005) including A1(2009),</li> <li>IMO MSC/Circ.1120.</li> </ul>	
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			



1	2	3	4	5	6
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	<ul> <li>Reg. II-2/7,</li> <li>Reg. II-2/19,</li> <li>Reg. II-2/20,</li> <li>IMO Res. MSC.98(73)- (FSS Code) 10.</li> </ul>	— Reg. II-2/7, — Reg. II-2/19, — Reg. II-2/20, — IMO Res. MSC.98(73)-(FSS Code) 10.	— IMO Res. MSC.98(73)- (FSS Code) 10.	
A.2/3.16	Flame detectors	Moved to A.1/3.51			
A.2/3.17	Manual call points	Moved to A.1/3.51			
A.2/3.18	Alarm devices	Moved to A.1/3.53			
A.2/3.19	Fixed water based local application fire fighting systems components for use in category "A" machinery spaces.	Moved to A.1/3.48			
A.2/3.20	Upholstered furniture	Moved to A.1/3.20			
A.2/3.21	Paint lockers and flammable liquid lockers fire extinguishing systems components	— Reg. II-2/10.	— Reg. II-2/10, — IMO MSC.1/Circ.1239.		
A.2/3.22	Galley exhaust Duct fixed fire extinguishing systems components	— 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, — Reg. II-2/20, — Reg. X/3.	<ul> <li>Reg. II-2/10,</li> <li>Reg. II-2/20,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 7,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 7,</li> <li>IMO Res. MSC.98(73)-(FSS Code) 4,</li> <li>IMO MSC.1/Circ.1239,</li> <li>IMO MSC.1/Circ.1313.</li> </ul>		
A.2/3.25	C class Divisions	— Reg. II-2/3.	— Reg. II-2/3.	<ul> <li>IMO Res. MSC.61(67)- (FTP Code) Annex 1</li> <li>Part 1 and Part 5 or Annex 2,</li> <li>ISO 1716 (2002).</li> </ul>	
A.2/3.26	Gaseous fuel systems used for domestic purposes (components)	— Reg. II-2/4.	— Reg. II-2/4, — IMO MSC.1/Circ.1276.		



1	2	3	4	5	6
2 3.27	Fixed gas fire extinguishing systems (CO <sub>2</sub> ) components.	— Reg. II-2/5, — Reg. II-2/10, — Reg. X/3.	— Reg. II-2/5, — Reg. II-2/10, — Reg. II-2/20, — IMO Res. MSC.36(63)-(1994 HSC Code) 7, — IMO Res. MSC.97(73)-(2000 HSC Code) 7, — IMO Res. MSC.98(73)-(FSS Code) 7, — IMO MSC.1/Circ.1313, — IMO MSC.1/Circ.1318.	Electrical automatic control and delay devices:  — EN 12094-1 (2003).  Non-electrical automatic control and delay devices:  — EN 12094-2 (2003).  Manual triggering and stop devices:  — EN 12094-3 (2003).  Container valve assemblies and their actuators:  — EN 12094-4 (2004).  High and low pressure selector valves and their actuators:  — EN 12094-5 (2006).  Non-electrical disable devices:  — EN 12094-6 (2006).  Nozzles for CO <sub>2</sub> systems:  — EN 12094-7 (2000) including A1 (2005).  Connectors:  — EN 12094-8 (2006).  Pressure gauges and pressure switches:  — EN 12094-10 (2003).  Mechanical weighing devices:  — EN 12094-11 (2003).  Check valves and non-return valves:  — EN 12094-13 (2001) including AC (2002).  Odorising devices for CO <sub>2</sub> low pressure systems:  — EN 12094-16 (2003).	
A.2/3.28	Medium expansion foam fire extinguishing systems components - Fixed deck foam for tankers	Moved to A.1/3.57			
A.2/3.29	Fixed low expansion foam Fire extinguishing systems components for machinery spaces and tanker deck protection.	Moved to A.1/3.58			
A.2/3.30	Expansion foam for fixed fire extinguishing systems for chemical tankers	Moved to A.1/3.59			
A.2/3.31	Water spraying hand operated system	— Reg. II-2/10.	— Reg. II-2/10.		
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.

No	Item designation	Regulation SOLAS 74 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/4.1	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.2	Heading control system for high speed craft (formerly auto-pilot)	Moved to A.1/4.40			
A.2/4.3	Transmitting heading device THD (GNSS method)	Moved to A.1/4.41			
A.2/4.4	Daylight signalling lamp	Moved to A.1/4.52			
A.2/4.5	Searchlight for high speed craft	Moved to A.1/4.42			
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	<ul> <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> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.115(73),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61108-1 (2003),</li> <li>EN 61108-2 (1998),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61108-1 (2003),</li> <li>IEC 61108-2 (1998),</li> <li>IEC 61162 series,</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	
A.2/4.12	DGPS, DGLONASS equipment	Moved to A.1/4.44,	A.1/4.50 and A.1/4.51		<u> </u>
A.2/4.13	Gyro compass for high speed craft	Moved to A.1/4.31			
A.2/4.14	Voyage data recorder (VDR)	Moved to A.1/4.29			



1	2	3	4	5	6
A.2/4.15	Integrated navigation system	<ul> <li>Reg. V/18,</li> <li>Reg. X/3,</li> <li>IMO Res. MSC.36(63)- (1994 HSC Code) 13,</li> <li>IMO Res. MSC.97(73)- (2000 HSC Code) 13.</li> </ul>	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 13,</li> <li>IMO Res. MSC.86(70),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 13,</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 61924 (2006),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 series,</li> <li>IEC 61924 (2006),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	
A.2/4.16	Bridge equipment system	Deliberately left blar	ık		
A.2/4.17	Radar target enhancer	Moved to A.1/4.53			
A.2/4.18	Sound reception system	<ul> <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> <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> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <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> <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> <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> <li>ISO 1069 (1973),</li> <li>ISO 25862(2009),</li> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>Or,</li> <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  — high-speed craft	<ul> <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> <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 Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <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>	



1	2	3	4	5	6
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	<ul> <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> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <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.2/4.25	Lateral thrust, pitch and mode indicators	<ul> <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> <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.97(73)-(2000 HSC Code),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <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.2/4.26	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,  — Reg. X/3,  — IMO Res. MSC.36(63)-(1994 HSC Code) 13,  — IMO Res. MSC.97(73)-(2000 HSC Code) 13.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 15,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 15,</li> <li>IMO Res. MSC.191(79),</li> <li>IMO SN.1/Circ.288.</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 61209 (1999),</li> <li>EN 62288 (2008).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series,</li> <li>IEC 61209 (1999),</li> <li>IEC 62288 Ed.1.0(2008).</li> </ul>	

1	2	3	4	5	6		
A.2/4.31	Bearing Device	Moved to A.1/4.54					
A.2/4.32	Bridge Navigational Watch Alarm System (BNWAS)	Moved to A.1/4.57					
A.2/4.33	Track control system  (working at ship's speed from 30 knots and above)	— Reg. V/18.	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694 (17),</li> <li>IMO Res. MSC.191(79).</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series,</li> <li>EN 62288 (2008).</li> <li>Or,</li> <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.2/4.34	Equipment with Long Range Identification and Tracking (LRIT) capability	— Reg. V/19	<ul> <li>Reg. V/19,</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.813(19),</li> <li>IMO Res. MSC.202(81),</li> <li>IMO Res. MSC.211(81),</li> <li>IMO Res. MSC.263(84),</li> <li>IMO MSC.1/Circ 1307.</li> </ul>	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series.</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series.</li> </ul>			
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					

## $5. \ \textbf{Radiocommunication equipment}$

No	Item designation	Regulation SOLAS 74 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
1	2	3	4	5	6
A.2/5.1	VHF EPIRB	<ul> <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> <li>Reg.IV/8,</li> <li>IMO Res. A.662(16),</li> <li>IMO Res. A.694(17),</li> <li>IMO Res. A.805(19),</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code),</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code),</li> <li>ITU-R M.489-2 (10/95),</li> <li>ITU-R M.693 (06/90).</li> </ul>	<ul> <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>	



1	2	3	4	5	6
A.2/5.2	Radio reserve source of energy	<ul> <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> <li>Reg. IV/13,</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 COMSAR Circ.16,</li> <li>IMO COMSAR Circ.32.</li> </ul>	<ul> <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.2/5.3	Inmarsat-F SES	Moved to A.1/5.19.			
A.2/5.4	Distress panel	<ul> <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> <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> <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> <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> <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> <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 blan	k		
A.2/5.7	Ship security alert system		<ul> <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> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>EN 61162 Series.</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>IEC 61162 Series.</li> </ul>	
A.2/5.8 ex A.1/5.16	Aeronautical two way VHF radio telephone apparatus	<ul> <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> <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> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008).</li> <li>ETSI EN 301 688 V1.1.1 (2000-07).</li> <li>Or,</li> <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
A.2/6.1	Navigation lights	Moved to A.1/6.1.			
A.2/6.2	Sound signal appliances	— COLREG 72 Annex III/3.	— COLREG 72 Annex III/3, — IMO Res. A.694(17).	<ul> <li>EN 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>Whistles - COLREG 72 Annex III/1 (Performance),</li> <li>Bells or Gongs - COLREG 72 Annex III/2 (Performance).</li> <li>Or,</li> <li>IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008),</li> <li>Whistles - COLREG 72 Annex III/1 (Performance),</li> <li>Bells or Gongs - COLREG 72 Annex III/1 (Performance),</li> <li>Bells or Gongs - COLREG 72 Annex III/2 (Performance).</li> </ul>	

## 7. Bulk carrier safety equipment

No	Item designation	Regulation SOLAS 74 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
A.2/7.1	Loading instrument	<ul><li>Reg. XII/11,</li><li>1997 SOLAS Conference Res. 5.</li></ul>	— Reg. XII/11, — 1997 SOLAS Conference Res. 5.	— IMO MSC.1/Circ 1229.	
A.2/7.2	Water level detectors on bulk carriers	Item deleted			

# 8. SOLAS Chapter II-1 equipment

No	Item designation	Regulation SOLAS 74 where "type approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
A.2/8.1	generator sets (starting devices) — Reg. X/3.		<ul> <li>Reg. II-1/44,</li> <li>IMO Res. MSC.36(63)-(1994 HSC Code) 12,</li> <li>IMO Res. MSC.97(73)-(2000 HSC Code) 12.'</li> </ul>		



# Rules for the Certification of Marine Equipment in accordance with European Directive 96/98/EC and Subsequent Amendments

Effective from 1 January 2009

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### GENERAL CONDITIONS

### **Definitions:**

"Rules" in these General Conditions means the documents below issued by the Society:

Rules for the Classification of Ships or other special units;

- Complementary Rules containing the requirements for product, plant, system and other certification or containing the requirements for the assignment of additional class notations;

Rules for the application of statutory rules, containing the rules to perform the duties delegated by Administrations;
Guides to carry out particular activities connected with Services;
Any other technical document, as for example rule variations or interpretations.

"Services" means the activities described in Article 1 below, rendered by the Society upon request made by or on behalf of the

Interested Party.
"Society" or "RINA" means RINA S.p.A. and/or a all the companies in the RINA Group which provide the Services.

"Surveyor" means technical staff acting on behalf of the Society in

"Surveyor" means technical staff acting on behalf of the Society in performing the Services.

"Interested Party" means the party, other than the Society, having an interest in or responsibility for the Ship, product, plant or system subject to classification or certification (such as the owner of the Ship and his representatives, the ship builder, the engine builder or the supplier of parts to be tested) who requests the Services or on whose behalf the Services are requested.

"Owner" means the registered Owner, the ship Owner, the manager or any other party with the responsibility, legally or contractually, to keep the ship seaworthy or in service, having particular regard to the provisions relating to the maintenance of class laid down in Part A, Chapter 2 of the Rules for the Classification of Chica crie the converge of the Rules for the Classification of the converge of the Rules for the Classification of the converge of the Rules for the Classification of the converge of the Rules for the Classification of the converge of the Rules for the Classification of the Classification Ships or in the corresponding rules indicated in the specific Rules. "Administration" means the Government of the State whose flag the Ship is entitled to fly or under whose authority the Ship is authorised to operate in the specific case.

"Ship" means ships, boats, craft and other special units, as for example offshore structures, floating units and underwater craft.

**1.1.** - The purpose of the Society is, among others, the classification and certification of ships and the certification of their parts and components.

The Society:

- sets forth and develops Rules;

- publishes the Register of Ships;

- issues certificates, statements and reports based on its survey
- **1.2**. The Society also takes part in the implementation of national and international rules and standards as delegated by various Governments
- **1.3.** The Society carries out technical assistance activities on request and provides special services outside the scope of classification, which are regulated by these general conditions, unless expressly excluded in the particular contract.

2.1. - The Rules developed by the Society reflect the level of its technical knowledge at the time they are published. Therefore, the Society, though committed, also through its research and development services, to continuous updating, does not guarantee they meet state-of-the-art science and technology at the time of publication or that they meet the Society's or others' subsequent technical developments.

2.2. - The Interested Party is required to know the Rules on the basis of which the Service's are provided. With particular reference to Classification Services, special attention is to be given to the Rules concerning class suspension, withdrawal and reinstatement. In case of doubt or inaccuracy, the Interested Party is to promptly

contact the Society for clarification.

The Rules for Classification of Ships are published on the Society's website: www.rina.org.

2.3. - The Society exercises due care and skill:
- in the selection of its Surveyors

- in the performance of its Services, taking into account the level of its technical knowledge at the time the Services are performed.

2.4. - Surveys conducted by the Society include, but are not limited to, visual inspection and non-destructive testing. Unless otherwise required, surveys are conducted through sampling techniques and do not consist of comprehensive verification or monitoring of the Ship or of the items subject to certification. The surveys and checks made by the Society on board ship do not necessarily require the constant and continuous presence of the Surveyor. The Society may also commission laboratory testing, underwater inspection and other checks carried out by and under the responsibility of qualified service suppliers. Survey practices and procedures are selected by the Society based on its experience and knowledge and according to generally accepted technical standards in the sector.

### Article 3

3.1. - The class assigned to a Ship, like the reports, statements, certificates or any other document or information issued by the Society, reflects the opinion of the Society concerning compliance, at the time the Service is provided, of the Ship or product subject to certification, with the applicable Rules (given the intended use and within the relevant time frame).

The Society is under no obligation to make statements or provide information about elements or facts which are not part of the specific scope of the Service requested by the Interested Party or on its

behalf.

3.2. - No report, statement, notation on a plan, review, Certificate of Classification, document or information issued or given as part of the Services provided by the Society shall have any legal effect or implication other than a representation that, on the basis of the checks made by the Society, the Ship, structure, materials, equipment, machinery or any other item covered by such document or information meet the Rules. Any such document is issued solely for the use of the Society, its committees and clients or other duly authorised bodies and for no other purpose. Therefore, the Society cannot be held liable for any act made or document issued by other parties on the basis of the statements or information given by the Society. The validity, application, meaning and interpretation of a Certificate of Classification, or any other document or information issued by the Society in connection with its Services, is governed by the Rules of the Society, which is the sole subject entitled to make such interpretation. Any disagreement on technical matters between the Interested Party and the Surveyor in the carrying out of his functions shall be raised in writing as soon as possible with the Society, which will settle any divergence of opinion or dispute.

**3.3.** - The classification of a Ship, or the issuance of a certificate or other document connected with classification or certification and other document connected with classification or certification and in general with the performance of Services by the Society shall have the validity conferred upon it by the Rules of the Society at the time of the assignment of class or issuance of the certificate; in no case shall it amount to a statement or warranty of seaworthiness, structural integrity, quality or fitness for a particular purpose or service of any Ship, structure, material, equipment or machinery inspected or tested by the Society.

3.4. - Any document issued by the Society in relation to its activities reflects the condition of the Ship or the subject of certification.

ties reflects the condition of the Ship or the subject of certification

or other activity at the time of the check. 3.5. - The Rules, surveys and activities performed by the Society, reports, certificates and other documents issued by the Society are in no way intended to replace the duties and responsibilities of other parties such as Governments, designers, ship builders, manufacturers, repairers, suppliers, contractors or sub-contractors, Owners, operators, charterers, underwriters, sellers or intended buyers of a Ship or other product or system surveyed. These documents and activities do not relieve such parties from any fulfilment, warranty, responsibility, duty or obligation (also of a

contractual nature) expressed or implied or in any case incumbent on them, nor do they confer on such parties any right, claim or cause of action against the Society. With particular regard to the duties of the ship Owner, the Services undertaken by the Society do not relieve the Owner of his duty to ensure proper maintenance of the Ship and ensure seaworthiness at all times. Likewise, the Rules, surveys performed, reports, certificates and other documents issued by the Society are intended neither to guarantee the buyers of the Ship, its components or any other surveyed or certified item, nor to relieve the seller of the duties arising out of the law or the contract, regarding the quality, commercial value or characteristics of the item which is the subject of transaction. In no case, therefore, shall the Society assume the obligations incumbent upon the above-mentioned parties, even when it is

consulted in connection with matters not covered by its Rules or other documents.

In consideration of the above, the Interested Party undertakes to relieve and hold harmless the Society from any third party claim, as well as from any liability in relation to the latter concerning the Services rendered.

Insofar as they are not expressly provided for in these General Conditions, the duties and responsibilities of the Owner and Interested Parties with respect to the services rendered by the Society are described in the Rules applicable to the specific Service rendered.

### Article 4

**4.1.** – Any request for the Society's Services shall be submitted in writing and signed by or on behalf of the Interested Party. Such a request will be considered irrevocable as soon as received by the Society and shall entail acceptance by the applicant of all relevant requirements of the Rules, including these General Conditions. Upon acceptance of the written request by the Society, a contract between the Society and the Interested Party is entered into, which

**4.2.** – In consideration of the Services rendered by the Society, the Interested Party and the present General Conditions. **4.2.** – In consideration of the Services rendered by the Society, the Interested Party and the person requesting the service shall be jointly liable for the payment of the relevant fees, even if the service is not concluded for any cause not pertaining to the Society. In the latter case, the Society shall not be held liable for non-fulfilment or partial fulfilment of the Services requested. In the event of late payment, interest at the legal current rate increased by 2%

may be demanded.

4.3. - The contract for the classification of a Ship or for other Services may be terminated and any certificates revoked at the request of one of the parties, subject to at least 30 days' notice to be given in writing. Failure to pay, even in part, the fees due for Services carried out by the Society will entitle the Society to immediately terminate the contract and suspend the Services. For every termination of the contract, the fees for the activities per-

formed until the time of the termination shall be owed to the Society as well as the expenses incurred in view of activities already programmed; this is without prejudice to the right to compensation due to the Society as a consequence of the termination.

With particular reference to Ship classification and certification, unless decided otherwise by the Society, termination of the contract implies that the assignment of class to a Ship is withheld or, if already assigned, that it is suspended or withdrawn; any statutory certificates issued by the Society will be withdrawn in those cases where provided for by agreements between the Society and the flag State.

### Article 5

5.1. - In providing the Services, as well as other correlated information or advice, the Society, its Surveyors, servants or agents operate with due diligence for the proper execution of the activity. However, considering the nature of the activities performed (see art. 2.4), it is not possible to guarantee absolute accuracy, correctness and completeness of any information or advice supplied. Express and implied warranties are specifically disclaimed.

Therefore, except as provided for in paragraph 5.2 below, and also in the case of activities carried out by delegation of Governments, neither the Society nor any of its Surveyors will be liable for any loss, damage or expense of whatever nature sustained by any person, in tort or in contract, derived from carrying out the Services.

**5.2.** – Notwithstanding the provisions in paragraph 5.1 above, should any user of the Society's Services prove that he has suffered a loss or damage due to any negligent act or omission of the Society's Services prove that he has suffered a loss or damage due to any negligent act or omission of the Society services are sufficiently sufficie ety, its Surveyors, servants or agents, then the Society will pay compensation to such person for his proved loss, up to, but not exceeding, five times the amount of the fees charged for the specific services, information or opinions from which the loss or damage derives or, if no fee has been charged, a maximum of one hundred thousand Euro. Where the fees charged are related to a number of Services, the amount of the fees will be apportioned for the purpose of the calculation of the maximum compensation, by reference to the estimated time involved in the performance of the Service from which the damage or loss derives. Any liability for indirect or consequential loss, damage or expense is specifically excluded. In any case, irrespective of the amount of the fees charged, the maximum damages payable by the Society will not be more than 1 million Euro. Payment of compensation under this paragraph will not entail any admission of responsibility and/or liability by the Society and will be made without prejudice to the

disclaimer clause contained in paragraph 5.1 above. **5.3.** - Any claim for loss or damage of whatever nature by virtue of the provisions set forth herein shall be made to the Society in writing, within the shorter of the following periods: THREE MONTHS from the date on which the Services were performed or THREE MONTHS from the date on which the damage was discovered. Failure to comply with the above deadline will constitute an absolute bar to the pursuit of such a claim against the Society.

### Article 6

**6.1.** - Any dispute arising from or in connection with the Rules or with the Services of the Society, including any issues concerning responsibility, liability or limitations of liability of the Society, will be determined in accordance with Italian Law and settled through arbitration assigned to a board of three arbitrators who will proceed in compliance with the Rules of the Chamber of National

and International Arbitration of Milan. Arbitration will take place in Genoa, Italy.

**6.2.** - However, for disputes concerning non-payment of the fees and/or expenses due to the Society for services, the Society shall have the right to submit any claim to the jurisdiction of the Courts of the place where the registered or operating office of the Interested Party or of the applicant who requested the Service is located.

In the case of actions taken against the Society by a third party before a public Court, the Society shall also have the right to summon the Interested Party or the subject who requested the Service before that Court, in order to be relieved and held harmless according to art. 3.5 above.

### Article 7

7.1. - All plans, specifications, documents and information provided by, issued by, or made known to the Society, in connection with the performance of its Services, will be treated as confidential and will not be made available to any other party other than the Owner without authorisation of the Interested Party, except as provided for or required by any applicable international, European or domestic legislation, Charter or other IACS resolutions, or order from a competent authority. Information about the status and validity of class and statutory certificates, including transfers, changes, suspensions, withdrawals of class, recommendations/ conditions of class, operating conditions or restrictions issued against classed ships and other related information, as may be required, may be published on the website or released by other

means, without the prior consent of the Interested Party. Information about the status and validity of other certificates and statements may also be published on the website or released by other means, without the prior consent of the Interested Party.

7.2. - Notwithstanding the general duty of confidentiality owed by the Society to its clients in clause 7.1 above, the Society's clients hereby accept that the Society will participate in the IACS Early Warning System which requires Classification Society to provide other involved Classification Societies with relevant technical information on serious hull structural and engineering systems failures, as defined in the IACS Early Warning System (but not including any drawings relating to the ship which may be the specific property of another party), to enable such useful information to be shared and used to facilitate the proper working of the IACS Early Warning System. The Society will provide its clients with written details of such information sent to the involved Classification

7.3. - In the event of transfer of class, addition of a second class or withdrawal from a double/dual class, the Interested Party undertakes to provide or to permit the Society to provide the other Classification Society with all building plans and drawings, certificates, documents and information relevant to the classed unit, including its history file, as the other Classification Society may require for the purpose of classification in compliance with the applicable legislation and relative IACS Procedure. It is the Owner's duty to ensure that, whenever required, the consent of the builder is obtained with regard to the provision of plans and drawings to the new Society, either by way of appropriate stipulation in the building contract or by other agreement.

In the event that the ownership of the ship, product or system subject to certification is transferred to a new subject, the latter shall have the right to access all pertinent drawings, specifications, documents or information issued by the Society or which has come to the knowledge of the Society while carrying out its Services, even

if related to a period prior to transfer of ownership. Pursuant and owing to Italian legislative decree 196/2003, the Interested Party declares that it has read the information sheet concerning the processing of personal data published on the society's website and gives its consent to such processing, also for commercial information purposes.

### Article 8

8.1. - Should any part of these General Conditions be declared invalid, this will not affect the validity of the remaining provisions.

8.2. - In the event of doubts concerning the interpretation of these General Conditions, the Italian text will prevail.

9.1. – When the Society provides its Services to a consumer - i.e. a natural person who does not act within the scope of his business or professional activity - the following provisions do not apply: art. 3.2. (as far as the Society is solely entitled to the interpretation of the Rules); art. 4.2., (as far as the payment of the fees is also due for services not concluded due to causes not attributable to the Interested Party); art. 5.1. (as far as the exclusion of liability is concerned); art. 5.2.; art. 5.3.; and art. 6.1. (as far as the jurisdiction of a Board of Arbitrators based in Genoa is concerned).

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### Chapter 1 - General

### 1 GENERAL

These requirements illustrate the general criteria and the procedures adopted by RINA for the EC certification of marine equipment in accordance with European Directive 96/98/EC and subsequent amendments.

### 2 FIELD OF APPLICATION

These requirements apply to equipment fitted on new Community ships, as defined in [3.7], and to new equipment fitted on existing Community ships, as defined in [3.8], subject to the departures foreseen in the MED Directive.

### 3 DEFINITIONS AND ABBREVIATIONS

### 3.1 MED Directive

European Directive 96/98/EC and the following amendments which are in force at the time it is applied.

### 3.2 MED Equipment

Items of equipment listed in Annexes A.1 and A.2 to the European Directive in force amending Directive 96/98/EC, which must be placed on board a ship for use in order to comply with international instruments or are voluntarily placed on board for use, and for which the approval of the flag State administration is required according to international instruments.

### 3.3 International conventions

The MED Directive refers to the following International conventions:

- the 1966 International Convention on Load Lines (LL66).
- the 1972 Convention on the International Regulations for Preventing Collisions at Sea (COLREG),
- the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL).
- the 1974 International Convention for the Safety of Life at Sea (SOLAS),

together with their Protocols and subsequent amendments in force at the dates of entry into force of the MED Directive.

### 3.4 International standards

For the scope of the MED Directive the International Maritime Organization (IMO) resolutions and circulars as well as the relevant international testing standards are defined as international standards.

### 3.5 Testing standards

The MED Directive refers to the testing standards set up by the following Organisations:

- International Maritime Organisation (IMO),
- International Organization for Standardisation (ISO),
- International Electrotechnical Commission (IEC),
- European Committee for Standardisation (CEN),
- European Committee for Electrotechnical Standardisation (Cenelec),
- European Telecommunication Standards Institute (ETSI),

which are in force at the date of entry into force of the MED Directive and are established in conformity to International

Conventions and to the IMO resolutions and circulars for the definition of the testing methods and acceptability criteria.

### 3.6 Notified Body

A Notified Body is an organisation designated by the competent national administration of a Member State of the European Community to carry out the activities of certification of marine equipment in accordance with the provisions of the MED Directive.

### 3.7 New ship

For the purpose of the MED Directive a new ship is a ship the keel of which was laid or which was at a similar stage of construction after 16<sup>th</sup> February 1997. For the purposes of this definition, "a similar stage of construction" means the stage at which:

- construction identifiable with a specific ship begins, and
- assembly of that ship has commenced, comprising at least 50 tonnes or 1% of the estimated mass of all structural material,

whichever is the lesser.

### 3.8 Existing ship

For the purpose of the MED Directive an existing ship is a ship which is not a "new ship".

### 3.9 Community ship

A Community ship is a ship for which safety certificates are issued by or on behalf of Member States under international conventions. This definition does not include a Member State administration's issuing a certificate for a ship at the request of an administration of a third country that is not a Member State.

### 4 TYPES OF MARINE EQUIPMENT

At present the MED Directive considers 7 categories of marine equipment as follows:

- 1) LIFE SAVING APPLIANCES
- 2) EQUIPMENT FOR MARINE POLLUTION PREVENTION
- 3) EQUIPMENT FOR FIRE PROTECTION
- 4) NAVIGATION EQUIPMENT
- 5) RADIO-COMMUNICATION EQUIPMENT
- 6) EQUIPMENT REQUIRED UNDER COLREG 72
- 7) BULK CARRIER SAFETY EQUIPMENT

RINA is a "Notified Body" of the European Community, having been notified by the Italian administration and can issue EC certificates for the following types of marine equipment:

- LIFE SAVING APPLIANCES
- EQUIPMENT FOR MARINE POLLUTION PREVENTION
- EQUIPMENT FOR FIRE PROTECTION
- NAVIGATION EQUIPMENT

At present there are no requirements in the MED Directive on the equipment belonging to the sixth and the seventh categories listed above.

# 5 MARINE EQUIPMENT AND APPLICABLE STANDARDS

Annexes A.1 and A.2 to the MED Directive indicate the reference parts of the applicable international instruments, the testing standards and the procedures for the evaluation of conformity for each item of equipment to be EC certified. The equipment listed in Annex A.2 to the MED Directive is not subject to these Rules but is indicated for reference only.

The MED Directory is mandatory for all equipment listed in Annex A.1 to the MED Directive intended for Community ships. Certification in accordance with the MED Directive requirements of marine equipment that is not listed in Annex A.1 is not allowed.

### 6 DUTIES OF INTERESTED PARTIES

Interested parties (Manufacturers, testing laboratories, etc.) involved in the certification in accordance with these Rules are take the necessary measures so that RINA Surveyors can carry out surveys and tests in complete safety. In this regard it assumes with respect to Surveyors all the responsibility of employers for their workforce such as to meet the provisions of applicable legislation.

As a rule, when in attendance the RINA Surveyor is to be accompanied by personnel representing the interested party and is to have free access to all areas where it is necessary to carry out inspections required to verify compliance with the Rules.

Free access is also to be given to auditors and/or inspectors from authorities or external bodies within the scope of vertical audits of RINA's own performance.

### Chapter 2 - Certification procedures

### 1 GENERAL

The MED Directive envisages a certification process consisting of the following two steps:

- type approval,
- production control.

Both steps are to be completed before the equipment is put on the market.

In particular cases relative to individual products, for which individual certification is requested, the two steps are combined (see [2.2.7]).

### 2 CERTIFICATION SCHEMES

### 2.1 Modules

The MED Directive contemplates one certification scheme for type approval, several certification schemes for production certification and one scheme for the individual approval of the products. These schemes are briefly indicated by the word "Modules". There are currently seven modules indicated with the letters from B to H.

Fig. 1 shows a diagram of the Module structure used for evaluating conformity as laid down by the MED Directive.

### 2.2 Meaning of the production modules

### 2.2.1 General

The production modules indicated in the MED Directive and shown in Fig. 1 have the meanings described from [2.2.2] to [2.2.8].

### 2.2.2 Module B

**Module B (EC Type Examination)** includes all the procedures relative to the type approval. This module is always required and is to be considered preliminary to the Production Certification Module, notwithstanding the provisions in [2.2.7] and [2.2.8] for Modules G and H.

### 2.2.3 Module C

**Module C (Conformity to Type)** is a Manufacturer's declaration that the products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards.

At present the MED Directive does not allow certification with Module C of any of the equipment listed in Annex A.1 to the Directive. Therefore, this Module is to be treated as a possible certification scheme for new products that might be considered in future editions of the MED Directive.

### 2.2.4 Module D

**Module D (Production Quality Assurance)** consists of the verification by the Notified Body (RINA) of the quality assurance system applied by the Manufacturer for production, inspection and testing during fabrication and on the finished product in order to obtain the reasonable presumption that the marketed products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards.

### 2.2.5 Module E

Module E (Product Quality Assurance) consists of the verification by the Notified Body (RINA) of the quality control system applied by the Manufacturer for the testing

of the finished product in order to obtain the reasonable presumption that the marketed products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards.

### 2.2.6 Module F

**Module F (Product Verification)** consists of the examination and testing by the Notified Body (RINA) of each single product or of products sampled on a statistical basis for each homogeneous production in order to ascertain that the products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standards

### 2.2.7 Module G

**Module G (Verification of Single Product)** consists of a complete examination by the Notified Body (RINA) of a product which, due to its complexity or peculiarity, is produced in a single unit. This type of product does not require an applicable EC Type Examination Certificate (Module B).

### 2.2.8 Module H

Module H (Total Quality Assurance) consists of the verification by the Notified Body (RINA) of the quality assurance system applied by the Manufacturer for the design, manufacturing, production, inspection and testing during fabrication and on the finished product in order to obtain the reasonable presumption that the marketed products conform to the type described in the applicable EC Type Examination Certificate (Module B) and satisfy the requirements of the applicable international standard. Module H differs from Module D in that it includes design activities and therefore the verification required for the issue of Module B is not necessary.

At present the MED Directive does not allow certification with Module H of any of the equipment listed in Annex A.1 to the Directive. Therefore, this Module is to be treated as a possible certification scheme for new products that might be considered in future editions of the MED Directive.

### 2.3 Selection of the certification scheme

For each product, the possible procedures for conformity assessment and for the consequent issuing of certificates by RINA are given in the tables of Annex A.1 of the applicable MED Directive. Where the tables of Annex A.1 to the applicable Directive indicate alternative certification paths among those indicated in Fig. 1, the Manufacturer may choose the one most suitable among those allowed. In any event, once a scheme has been selected, all the equipment produced and certified is considered equivalent irrespective of the Modules used.

### 2.4 Uniqueness of the certification

Certification according to the MED Directive of the same product by more than one Notified Body is not permitted. Therefore, the Manufacturer is to declare that the same application for certification has not been lodged simultaneously with any other Notified Body.

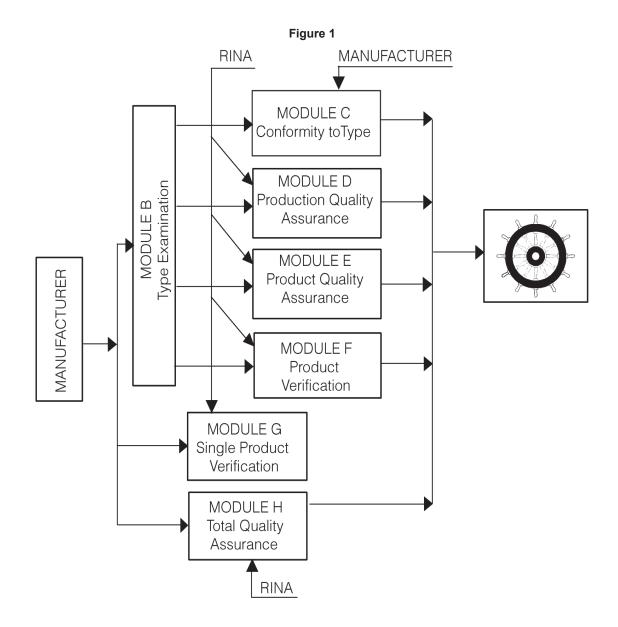
However, a Manufacturer may apply for production certification to a Notified Body other than the one that issued the applicable EC Type Examination Certificate (Module B).

### Chapter 2 - Certification procedures

Therefore, it is possible that a Manufacturer requests from RINA only the issue of the EC Type Examination Certificate (Module B); in such case it must be clear that the issue of this certificate by RINA does not authorise the Manufacturer to market the product.

It is also possible that a Manufacturer requests RINA to certify in accordance with Module D, E or F the production

of one or more products having Module B certificate issued by another Notified Body. In such cases the certificate issued by RINA in accordance with the applicable production module is to be considered equivalent to RINA authorisation to market the product.



### Chapter 3 – EC type examination and issuance of the relevant certificates

### 1 APPLICATION

Prior to proceeding with the production of an item of marine equipment, hereafter referred to as *«product»*, the Manufacturer or his authorised representative established within the Community is to lodge an application for certification which includes the name and address of the Manufacturer, the place of manufacture and the designation of the type of product. The form to be used for the application is shown in Annex 1.

If the application is lodged by the authorised representative established within the Community, the name and address of this person are also to be included.

The application is to include:

- the technical documentation as described in [2];
- a sufficient number of samples, representative of the production envisaged, to carry out the tests foreseen in cases where the Manufacturer intends to perform type approval tests at the RINA Laboratory as per [2].

The application includes the Manufacturer's or his representative's indication of which manufacturing surveillance procedure he intends to adopt, if requested, as well as the Manufacturer's statement that the application has not been lodged simultaneously with another Notified Body and the authorisation granted to RINA to publish the data contained on the certificate.

At the time of submission of the application the Manufacturer is to inform RINA whether the product for which certification is requested has previously been refused by RINA or by another organisation.

# 2 ISSUE OF THE EC TYPE EXAMINATION CERTIFICATE (MODULE B)

### 2.1 Review of the technical documentation

### 2.1.1 Technical documentation

The technical documentation is to comprise all relevant data and means used by the Manufacturer to ensure that equipment complies with the essential requirements relating to it.

The technical documentation is to make it possible to understand the design, manufacture and operation of the product, and is to make it possible to assess compliance with the requirements of the relevant international standards.

The documentation is to include, so far as they are relevant to assessment:

- a general description of the type;
- the conceptual design, the build standard and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
- descriptions and explanations necessary for the understanding of drawings and schemes, including the operation of the product;
- the results of design calculations made, examinations carried out, etc.;
- preliminary test reports, if any;
- manuals for installation, use and maintenance:
- control and test procedures.

Moreover, where appropriate, the design documentation is to contain the following:

 attestations relating to the equipment incorporated in the appliance,

- attestations and certificates relating to the methods of manufacture and/or inspection and/or monitoring of the appliance,
- any other document that may be requested by RINA to improve its assessment.

### 2.1.2 Results of the documentation review

Where the documentation is incomplete, or otherwise lacking, the Manufacturer will be contacted by RINA in order to clarify any doubts and request any further information necessary to perform the examination.

Where, upon completion of the examination, the documentation is found to be satisfactory, RINA informs the Manufacturer of the positive outcome and arranges the dates for the type approval tests.

Where the documentation is found to be unsatisfactory, RINA informs the Manufacturer of the details that are considered as not complying with the applicable requirements and the reasons for the non-conformity, so that he may correct such non-conformities. It will not be possible to initiate the type approval testing phase until the Manufacturer has supplied the revised documentation complying with the requirements and/or he has undertaken to make the required changes, as applicable.

### 2.2 Type tests

### 2.2.1 Performance of the tests

Type tests are to be carried out by the laboratories defined in 2.2.2.

### 2.2.2 Testing laboratories

Laboratories are intended to mean:

- a) the RINA laboratory:
- b) independent laboratories;
- c) laboratories belonging to an Administration;
- d) laboratories other than those in a), b) and c), located in test rooms and/or production facilities belonging to the Manufacturer or designated by the latter as a location for type testing.

Such laboratories are to show that they:

- operate a quality system in accordance with ISO 17025 and therefore guarantee that testing is conducted in conformity with international instruments,
- are not involved, either directly or through the employer, in the design and manufacture of the product tested as this could affect their impartiality and independence.

RINA accepts type testing carried out by independent laboratories that:

- are certified and/or recognised by a full member of ILAC (International Laboratory Accreditation Cooperation) for the type tests concerned. A complete updated list of member organisations of ILAC can be viewed at www.ILAC.org,
- are certified and /or recognised by an Administration or by another IACS MED Notified Body.

Laboratories that have not obtained certification or recognition as above may be accepted subject to certification or assessment by RINA in accordance with its "RULES FOR THE ASSESSMENT OF TESTING LABORATORIES".

Laboratories as per item d) above may be accepted when they are assessed by RINA according to its "RULES FOR THE ASSESSMENT OF TESTING LABORATORIES",

### Chapter 3 – EC type examination and issuance of the relevant certificates

provided that testing is carried out with RINA personnel in attendance in order to ensure impartiality and objectivity.

### 2.2.3 Testing reports

Upon completion of the tests, a test report is to be prepared, with identification number and date, indicating accurately and clearly the test results and any other useful information.

Each test report is to contain at least the following details:

- title of the document (e.g. "Test Report");
- name and address of the laboratory, and the place where the tests were conducted, if different from the above:
- clear identification of the report and of each page so that it is recognisable as part of the parent document, as well as clear identification of the end of the report;
- name and address of the customer;
- identification of the method used;
- description, including the condition, and clear identification of the item(s) tested:
- date of receipt of the item(s) tested when this is a critical factor for the validity and application of the results, and the date(s) of testing;
- reference to sampling plans and procedures used by the laboratory or other bodies when this has a bearing on the validity or application of the results;
- test results, with the units of measurement when appropriate;
- the name(s), position(s) and signature(s) or equivalent identification of the person(s) authorising the issue of the test report;
- indication, if necessary, of the degree of approximation of the measurements:
- if relevant, a declaration stating that the results refer only to the items tested.

The report is to be signed by the person(s) in the laboratory in charge of testing and, if applicable, by the attending RINA Surveyor.

# 2.2.4 Acceptance of tests carried out by other Notified Bodies

In case type approval tests are partially or fully carried out under the supervision of a MED Notified Body or of a Notified Body of another EU Directive dealing with the same product (e.g. personal protective equipment directive), RINA reserves the possibility to accept the relevant testing reports provide that:

- a) the test standards are the same required by MED and used in the last applicable revision
- b) the testing reports comply with the requirements of [2.2.3].

### 2.3 Issue of the certificate

Where it finds that the tests have been conducted in accordance with the relevant international instruments and testing requirements and their outcome is positive, RINA issues the Manufacturer with a Marine Equipment EC Type Examination Certificate (Module B) indicating the test results and conclusions, the conditions of validity of the certificate and the description and necessary data for identification of the approved type. Further information, such as the list of the relevant parts of the technical documentation and other necessary details for the complete identification of the product with respect to the relevant requirements may be contained in an annex to the certificate.

Where the outcome is negative and the Marine Equipment EC Type Examination Certificate (Module B) cannot be issued due to unsatisfactory type test results, RINA will notify both the Ministry of Transport and Infrastructure and the European Commission. In such case the applicant may not submit a further application for certification until he has made all those modifications to the product which are necessary to meet the applicable requirements.

Where a Manufacturer reapplies for type approval, his submission is to include all the documents listed in [2.1.1], including the original test reports, the detailed reasons for the previous refusal and details of all modifications made to the equipment.

In any event, RINA reserves the right to require the repetition of tests conducted by other testing laboratories.

# 3 VALIDITY CONDITIONS FOR EC TYPE CERTIFICATES (MODULE B)

### 3.1 Certificate validity

The Marine Equipment EC Type Examination Certificate (Module B) is valid for 5 years, unless a different duration is specified in the reference standard. At the request of the Manufacturer, RINA renews the certificate subject to the satisfactory outcome of the relevant assessment in compliance with the applicable provisions of the international instruments.

RINA reserves the right to request the repetition of all or part of the type tests in connection with the renewal of the certificate.

If the reference standard requires the repetition of the type tests with a frequency greater than the certificate validity, RINA will consider on a case-by-case basis whether these tests are to be attended by a Surveyor. In any case, the Manufacturer is to keep detailed test reports to be made available to RINA whenever requested.

If, during the certificate's period of validity, the reference standards are modified in such a way as to affect the conformity of the product to the applicable standard, the certificate will no longer be considered valid starting from the date of entry into force of such modifications.

### 3.2 Modifications of existing certificates

The Manufacturer or his authorised representative is to inform RINA of all modifications to the approved product. RINA will assess whether testing and reassessment of the product are required for the issue of a new certificate.

### 3.3 Suspension and/or withdrawal of the certificate

RINA may suspend and/or withdraw a certificate in the event of serious non-compliance on the part of the Manufacturer – for example:

- significant non-conformities of the manufactured product or in the manufacturing process, with respect to the technical documentation submitted to RINA;
- serious shortcomings detected in service;
- significant changes made to the product without notifying RINA;
- unpaid fees.

Certification may also be withdrawn in the event of changes to the applicable standards and/or requirements which the Manufacturer is, or deems he is, unable to comply with. Rules for the certification of marine equipment in accordance with European Directive 96/98/EC and subsequent amendments

### Chapter 3 – EC type examination and issuance of the relevant certificates

Both the Ministry of Transport and Infrastructure and the European Commission are to be notified of such withdrawals.

### 4 AUTHORISATION TO MARKET THE PRODUCTS

It is to be noted that, upon issue of a Module B Certificate, the Manufacturer is not allowed to mark his equipment with the "wheel mark" followed by the RINA number or to market it (See Chapter 7, [2]).

# 1 ISSUE OF THE EC PRODUCTION QUALITY ASSURANCE CERTIFICATE (MODULE D)

### 1.1 General

For the purpose of issuing of Module D, the Manufacturer is to operate a quality system for production and final product inspection and testing of products already certified in accordance with Module B, at least equivalent to the harmonised standard EN ISO 9001:2000 in respect of those aspects dealt with in the previous harmonised standard EN ISO 9002:1994. This system is to be subject to surveillance by RINA.

### 1.2 Quality system

All the elements, requirements and provisions adopted by the Manufacturer are to be documented in a systematic and orderly manner in the form of written procedures and instructions. The quality system documentation is to permit a consistent interpretation of the quality programs, plan, manuals and records.

The quality system documentation is to include, in particular, an adequate description of:

- a) the quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality;
- the manufacturing, quality control and quality assurance techniques, processes and systematic actions that will be used;
- the examinations and tests that are to be carried out before, during and after manufacture, and the frequency with which they will be carried out;
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.;
- the means of monitoring the achievement of the required product quality and the effective operation of the quality system;
- f) a copy of the EC Type Examination Certificate (Module B) and the associated technical documentation.

RINA arranges for the assessment of the Manufacturer's quality system, also in relation to whether or not the system has already been certified by RINA, as stated below.

### 1.3 Assessment of Manufacturers with quality system not certified by RINA

The assessment of the Manufacturer's quality system is conducted by means of an examination of the documentation and an audit of first assessment at his premises.

These activities are carried out in accordance with the criteria contained in the "RULES FOR THE CERTIFICATION OF QUALITY SYSTEMS".

### 1.3.1 Documentation to be submitted

Prior to the assessment, the Manufacturer is to supply RINA with the following documentation:

- a) the quality documentation as per 1.2 above;
- all the procedures affecting the manufacture and testing of the products to be certified;
- an undertaking to fulfil the obligations arising from the quality system and to uphold it so that it remains adequate and efficient;

 d) the technical documentation for the approved type and a copy of the EC Type Examination Certificate (Module B).

Where this certificate has been issued by a Notified Body other than RINA, RINA may request the Manufacturer to submit the test reports on the basis of which the other Notified Body issued the type certificate (Module B).

RINA will examine the documentation and inform the Manufacturer whether it is sufficient or whether additional documents are necessary.

### 1.3.2 Audit of first assessment

The aim of the initial surveillance audit is to assess the quality assurance system adopted by the Manufacturer with particular reference to the production line(s) of the product(s) to be certified.

In general, as far as possible, the audit is to be scheduled so that it takes place during the actual manufacture of the product(s) to be certified.

Within the framework of the audit, particular attention is to be paid to the following documentation relative to the product(s) to be certified:

- quality management system documentation;
- inspection reports;
- reports of tests performed on manufactured products;
- testing equipment calibration data;
- qualifications of the personnel concerned.

It will also need to be verified that copies are available at the Manufacturer's premises of the MED Directive and of the technical standards applicable to the product(s) manufactured and that quality records are kept for the times prescribed in the MED Directive.

In the course of the audit, as far as possible, the Surveyor is to witness the tests carried out by the Manufacturer during the various stages of manufacturing and for the final acceptance of the product(s) in order to verify compliance with the applicable requirements.

Upon completion of the audit, the RINA Surveyors draw up the relevant report and provide the Manufacturer with a copy.

# 1.3.3 Issue of the certificate and authorisation to mark the products

Subject to the satisfactory outcome of the audit, RINA issues an EC Production Quality Assurance Certificate (Module D) to the Manufacturer for each product to be certified. The certificate or the annex to the certificate includes reference to the Marine Equipment EC Type Examination Certificate (Module B) of the relevant product. The data contained on the certificates relative to the products are communicated to the European Commission and subsequently published on the RINA INTERNET web page.

Upon receipt of the EC Production Quality Assurance Certificate (Module D), the Manufacturer is authorised to affix the CE mark (wheel mark followed by the RINA number, see Chapter 7, [2]) to all products covered by the certificate coming from the production line, without any further intervention by RINA.

### 1.3.4 Unsatisfactory result of the assessment

Should the surveillance be considered unsatisfactory, RINA notifies the Manufacturer of the findings detected and the reasons for which the certificate cannot be issued.

The applicant may not submit a further application for certification until he has made all those modifications to the

quality system and/or to the production line(s) of the product(s) to be certified which are necessary to meet the applicable requirements.

### 1.3.5 Periodical surveillance

The maintenance of Module D is subject to the satisfactory outcome of three-year surveillance cycles consisting of the following audits:

- annual audits of the quality assurance system;
- six-monthly audits of the production line(s) of the product(s) certified. These audits are required only for complex or critical products, as decided on a case-bycase basis;
- renewal audits of the quality assurance system at the start of a new three-year period (see item 1.3.6).

Figure 1 is a schematic diagram of the surveillance cycle. The aim of periodical surveillance is to verify that the quality assurance system adopted by the Manufacturer, with particular reference to the production line(s) of the product(s) certified, is maintained over time.

When the periodical surveillance becomes due, RINA and the Manufacturer agree on the date and the necessary arrangements.

The periodical surveillance is to be carried out within a «time window» of two months with respect to the official due date: i.e. not more than 30 days before and not more than 30 days after the date shown on the certificate. For each periodical audit, this calculation should be based on the date of the initial periodical surveillance, irrespective of the date on which the last periodical audit was actually carried out.

Within the framework of the annual surveillance audit of the quality system, in addition to the general quality management system aspects randomly audited using a rotation criteria, the following aspects relative to the product(s) certified are always to be verified for all products for which a Production Quality Assurance Certificate (Module D) has been issued:

- inspection reports;
- reports of tests performed on manufactured products;
- testing equipment calibration data;
- qualifications of the personnel concerned.

If intermediate six-monthly surveys are foreseen, these aspects are also the subject of the intermediate six-monthly audits. Aspects of the general management system not directly correlated to the product do not need to be verified during these surveys.

If possible, in the course of the audits, the Surveyor is to witness the inspections and tests carried out by the Manufacturer during the various stages of manufacturing and for the final acceptance of the product(s).

Upon completion of their intervention, the RINA Surveyors draw up the relevant report, provide the Manufacturer with a copy and endorse the EC Production Quality Assurance Certificate (Module D), extending its validity until the date of the next scheduled periodical audit.

RINA reserves the right to pay unannounced visits to the Manufacturer's premises, carrying out tests or causing tests to be carried out to check that the quality system management is functioning correctly.

### 1.3.6 Renewal of the certification

Upon completion of each three-year cycle, the assessment of the quality management system as stated in items 1.3.1 and 1.3.2 is repeated for renewal of the certificate.

## 1.3.7 Suspension and/or withdrawal of the certification

Should serious failures be detected in the course of periodical surveillance such as to show that the quality management system no longer complies with the applicable requirements, RINA notifies the Manufacturer of the reasons for which the certificate cannot be endorsed and immediately suspends the certification for all those products which could be affected by the failure detected, indicating the serial number from which the suspension takes effect and/or any other information necessary to identify the products suspended.

Any items of equipment manufactured during the period of suspension may be marked and marketed, provided that they are subjected to individual testing, in accordance with the applicable requirements, where this is possible and provided for by the MED Directive (Module F).

Upon completion of the corrective actions necessary, subject to the satisfactory outcome of a RINA audit to assess their effectiveness, the suspension lapses and the Manufacturer is notified of this by RINA.

In the event that the non-conformities that led to the suspension are not rectified by the agreed deadline, RINA withdraws the certification and notifies the Manufacturer accordingly.

The applicant may not submit a further application for surveillance until he has made all those modifications to the quality system which are necessary to meet the applicable requirements.

# 1.4 Manufacturers with quality system certified by RINA

The procedure described in 1.3 is applied, with the following modifications:

- it is necessary to submit at least the documentation as per 1.3.1 b) and d); in any event, RINA reserves the right to require further documents;
- an initial audit is to be conducted at least equivalent to the six-monthly audit of the production line(s) described in 1.3.7;
- periodical surveillance is to be conducted at least equivalent to the six-monthly survey of the production line(s) described in 1.3.7.

Annual audits are harmonised as far as possible with the dates of the periodical surveys in connection with the Manufacturer's quality system certification.

# 1.5 Manufacturers with quality system certified by a recognised Organisation other than RINA

The same provisions apply as described in 1.3 for Manufacturers with a quality system not certified by RINA. However, some relaxation of the certification process may be considered at the discretion of RINA on a case-by-case basis.

### 1.6 Manufacturers with products already certified by RINA in accordance with the MED Directive

Where a Manufacturer that produces a product certified by RINA in accordance with Module D of the MED Directive submits a request to certify other products, RINA decides in relation to the peculiarity of the new product(s) whether or not to carry out an initial assessment.

The periodical surveillance audits for such products are harmonised with the surveys due for the other products.

# 2 ISSUE OF THE EC PRODUCT QUALITY ASSURANCE CERTIFICATE (MODULE E)

### 2.1 General

Within the framework of this procedure the Manufacturer is to operate a quality system for final product inspection and testing at least equivalent to the harmonised standard EN ISO 9001:2000 in respect of those aspects dealt with in the previous harmonised standard EN ISO 9003:1994. This system is to be subject to surveillance by RINA.

### 2.2 Quality control system

All the elements, requirements and provisions adopted by the Manufacturer are to be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. This quality system documentation is to ensure common understanding of the quality programs, plans, manuals and records.

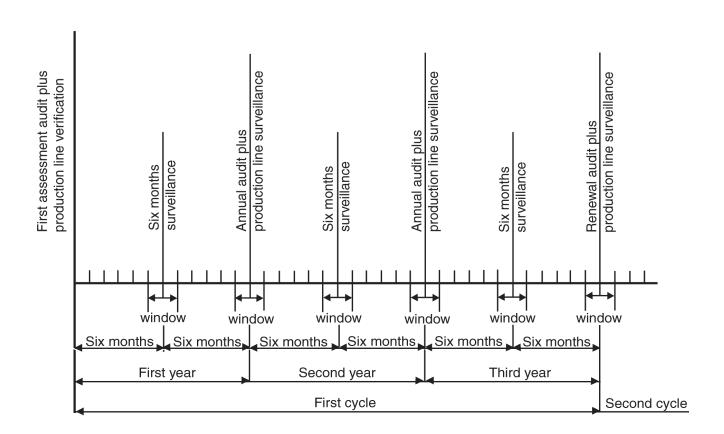
The quality system documentation is to include, in particular, an adequate description of:

- the examinations and tests that are to be carried out after manufacture, and the frequency with which they will be carried out;
- the product quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.;
- the means of monitoring the effective operation of the quality system.

### 2.3 Surveillance and certification procedures

The provisions in 1.3 apply, except that in general the six-monthly surveys are not required in this case.

Figure 1: Surveillance cycle



# 1 VERIFICATION IN ACCORDANCE WITH MODULE F

### 1.1 Verification of single products

### 1.1.1 Performance of the verification

Where, in the opinion of RINA, products are complex (composed of many parts of different origins assembled together) or not manufactured in series, all items of certified equipment are to be individually examined and tested.

Upon completion of the manufacture of one or more products, the Manufacturer is to contact RINA and request the testing of the items produced.

The appropriate examinations and tests in order to check that the product complies with the requirements of the international standards are carried out in the presence of a RINA Surveyor.

Each marked product is to be unequivocally identified by means of the serial number or other methods ensuring that it is impossible for a marked product which has not been tested to be put on the market.

### 1.1.2 Issue of the certificate

Subject to the satisfactory outcome of this examination and testing, a **Product Verification Certificate (Module F)** is issued and the Manufacturer is authorised to mark each approved product.

### 1.2 Verification of product lots

### 1.2.1 Performance of the verification

Where, in the opinion of RINA, products are simple (i.e. not composed of many parts of different origins assembled together) and/or manufactured in series, they are to be presented for statistical verification in the form of homogeneous lots.

Upon completion of the manufacture of one or more lots, the Manufacturer is to contact RINA and request the testing of the items produced.

The appropriate examinations and tests in order to check that the product complies with the requirements of the international standards are carried out on a statistical basis in the presence of a RINA Surveyor.

### 1.2.2 Composition of lots and sampling

In general, a lot consists of those products of a single type, grade, class, dimensions and composition manufactured in the same conditions and during a reasonable period of time.

It is the responsibility of the Manufacturer to establish the lot composition and to agree upon it with RINA. In general, the composition of the lot is to be established in accordance with the indication of specific standards, such as, for instance, ISO 2859 or EN 3 Pt 6.

At least one random sample is drawn from each lot; the specimens are individually examined and appropriate tests are carried out to ensure that they comply with the requirements of the international instruments which apply to them. Prior to examination and testing, the sampling and acceptance criteria are to be agreed between the Manufacturer and RINA on a case-by-case basis taking into account the specific standards, such as those indicated above.

### 1.2.3 Issue of the certificate

Subject to the satisfactory outcome of this examination and testing, a **Product Verification Certificate (Module F)** is issued and the Manufacturer is authorised to mark each item of equipment belonging to the approved lot. Each approved lot is to be unequivocally identified on the single products (or on their packaging), by means of the serial number or other methods (for example the period of manufacture) ensuring that it is impossible for marked products belonging to a lot which has not been subjected to the prescribed tests to be put on the market.

### 2 CERTIFICATE VALIDITY

Conformity Certificates (Module F) have unlimited validity.

### Chapter 6 - Verification of single products (Module G)

### 1 ISSUE OF MODULE G

### 1.1 Certification process

The process for the issue of the **Single Product Certificate (Module G)** consists of the following phases:

- examination of the technical documentation;
- examination of the product.

### 1.2 Review of the technical documentation

The technical documentation review process is similar to the one described in Chapter 3 [2.1] for the technical review to be carried out in connection with the type certification.

### 1.3 Examination of the single product and reporting

Provisions apply similar to those described in Chapter 3 [2.2] for type tests; however, in this case the inspections and tests prescribed by the applicable requirements are carried out directly on each product to be certified.

### 1.4 Issue of the certificate

Where the outcome of the examinations and tests performed is positive, RINA issues an **EC Unit Verification Certificate (Module G)** indicating the test results and conclusions, the conditions of validity of the certificate and the description and necessary data for identification of the approved type.

The Annex to the Certificate contains a list of the relevant sections of the technical documentation.

Where RINA refuses to issue an EC Unit Verification Certificate, detailed reasons for such refusal will be given to the applicant and notification is sent to the Ministry of Transport and Infrastructure and the European Commission.

The applicant may not submit a further application for certification until he has made all those modifications to the product which are necessary to meet the applicable requirements.

Where a Manufacturer reapplies for type approval, his submission is to include all the documents listed in Chapter 3 [2.1.1], including the original test reports, the detailed reasons for the previous refusal and details of all modifications made to the equipment.

Upon receipt of the certificate, the Manufacturer is authorised to mark the product in accordance with Chapter 7, [2].

### 1.5 Certificate Validity

Single Product Certificates (Module G) have unlimited validity, provided no subsequent modifications are made to the approved product.

### 1 DECLARATION OF CONFORMITY

### 1.1 General

The Manufacturer is to always draw up an **EC Declaration of conformity to type**, as described below, attesting that the product marketed complies with the applicable provisions of the international instruments.

### 1.2 Content of the Declaration of conformity

The **Declaration of conformity to type** is to include the following:

- the name and address of the Manufacturer or of his authorised representative established within the European Community,
- a description of the marine equipment indicating the model, brand, type, serial number, etc.,
- indication of RINA and its address as the Notified Body designated to carry out the certification procedures as per the above requirements,
- identification of the prototype certificate with reference to the applicable Marine Equipment EC Type Examination Certificate (Module B),
- identification of the production module applied,
- reference to the testing standards applied,
- identification of the Manufacturer's authorised signatory or representative established within the European Community.

An example of a Declaration of conformity is provided in Annex 2.

### 2 MARKING

### 2.1 The CE mark

Products referred to in Annex A.1 of the MED Directive which comply with the relevant international standards and have been certified in accordance with these requirements are to be indelibly marked as per Annex D of the MED Directive 96/98/EC (wheel mark symbol). Annex 3 shows the shape and the dimensions of the CE mark.

### 2.2 Mark affixing

The mark is to be affixed by the Manufacturer or his authorised representative established within the European Community. The mark may be affixed on the packages for material and products that are subject to further fabrication and for which traceability of the mark is not required.

The mark is to be followed by the identification number of the Notified Body which, having certified the production by issuing a Module D, E, F or G Certificate, has authorised the marking and the European marketing of the product. This number is to be followed by the last two digits of the year of manufacture of the product.

The RINA identification number is **0474**.

### DOMANDA PER LA VALUTAZIONE DELLA CONFORMITA' DI EQUIPAGGIAMENTO MARITTIMO, SECONDO LA DIRETTIVA 96/98/CE E SUCCESSIVI EMENDAMENTI, APPLICATION FOR CONFORMITY ASSESSMENT OF MARINE EQUIPMENT, IN ACCORDANCE WITH DIRECTIVE 96/98/EC AND SUBSEQUENT AMENDMENTS

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DECLARES THAT IT HAS NOT SUBMITTED A SIMILAR APPLICATION FOR THE CERTIFICATION OF THE EQUIPMENT INDICATED ABOVE TO ANOTHER NOTIFIED BODY

DATA:	TIMBRO E FIRMA:

Rules for the certification of marine equipment in accordance with European Directive 96/98/EC and subsequent amendments

### Annex 1 - Application for certification form

### DATE:

### STAMP AND SIGNATURE:

L'Azienda comunica di avere scelto per l'esecuzione delle prove di tipo ai fini del rilascio del Certificato di Esame CE del tipo (Modulo B) il seguente Laboratorio:

The Manufacturer hereby declares that he has chosen the following Laboratory to conduct the type tests required for the issue of the EC Type Examination Certificate (Module B):

Ragione Sociale Name			
Indirizzo			
Address			
Persona riferimento			
Reference person			
Partita IVA	Telefono	Fax	e-mail
Registration Number	Telephone		

### L'Azienda si impegna a:

- rispettare le prescrizioni contenute nella Direttiva 96/98/CE e nei successivi emendamenti applicabili nonché nelle norme del RINA applicabili;
- dare la necessaria assistenza ai tecnici del RINA durante le visite ai fini della certificazione e della sorveglianza;

### The Manufacturer shall:

- comply with the requirements of Directive 96/98/EC, as well as subsequent applicable amendments and RINA requirements;
- provide RINA Surveyors with the necessary assistance for surveys and certification during their attendance at the facility;

L'Azienda autorizza il RINA a pubblicare i dati inclusi nei certificati relativi ai prodotti oggetto di questa domanda

**The Manufacturer** authorises RINA to publish the data contained on the certificates relative to the products which are the subject of this Application.

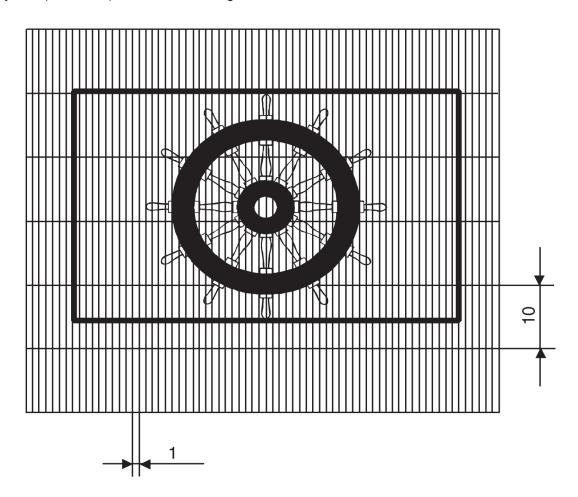
TIMBRO E FIRMA:	
STAMP AND SIGNATURE	

### **EC DECLARATION OF CONFORMITY**

We hereby declare that the following equipm	ent specified complies with Marine Equipment Directive
96/98/EC, as modified bydirectives as applicable}	
Type  Serial number(s)  Manufactured by:  Address	
This equipment has been tested to verify standards:	y compliance with the following regulations and testing
{*Delete as applicable}	ule B) No.* / Unit Verification Certificate (Module G) No.*on
	nent is retained at the following address:
Signed:	Date:
Name:	Position:
Address:	

Appointed by the Manufacturer as the responsible person for signing this Declaration.

The EC conformity mark (wheel mark) is to take the following form:



If the mark is reduced or enlarged the proportions in the above graduated drawing are to be respected.

The various components of the mark are to have substantially the same vertical dimension, which may not be less than 5 mm. However, this minimum dimension may be waived for small devices.

The mark is to be followed by the number of the Notified Body that issued the certificate relative to Module D, E, F or G, as applicable, and by the last two digits of the year of manufacture.

In the case of a piece of equipment certified by RINA in 2002, such notation is: 0474-02.

The mark may be affixed in any position provided there is no risk of confusion with any other marks or inscriptions affixed by the Manufacturer.

### MERCHANT SHIPPING NOTICE



# MSN 1734 (M+F)

# Type Approval of Marine Equipment (EC Notified Bodies)

Notice to 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 Craft

This Notice supersedes Merchant Shipping Notice No.M.1645 and MGN 43. The following text is to be inserted in MSN 1688 - end of para 1, and MSN 1714 - end of para 3:

'In the case of a ship of a Member State of the European Union, the performance standards applicable to equipment installed on or after 1 January 1999 are specified in the Merchant Shipping (Marine Equipment) Regulations 1999, as they may be amended from time to time.'

### Summary

The purpose of the Marine Equipment Directive is to enhance safety at sea and the prevention of marine pollution through the uniform application of the relevant international instruments relating to marine equipment for which EC type approval safety certificates are issued. This Notice gives information and guidance about the procedures for obtaining type approval in conformity with the Directive through Notified Bodies nominated by the United Kingdom.

### **Key Points:-**

- In recent years there has been significant development of specifications and testing requirements for many items of equipment which should ensure that equipment is manufactured to consistent standards.
- To gain type approval, equipment must satisfy testing standards and be manufactured in accordance with the EC conformity-assessment procedure as set out in Annex A of this Notice. The conformity assessment modules referred to in Annex A are contained in Annex B.
- The advantages of this type approval process are that the equipment will be accepted without detailed examination of each individual item on EU flagged ships and the shipowner can purchase equipment with similar assurance.
- The Directive will ensure the free movement of such equipment within the Community.

### 1 Introduction

1.1 The Merchant Shipping (Marine Equipment)
Regulations 1999 SI (1999 No 1957) provide
for the "type approval" of marine equipment,
of a safety or pollution prevention nature, for
use on board United Kingdom ships. This
legislation implements the European
Community (EC) Directive 96/98/EC of 20
December 1996 on Marine Equipment and

98/85/EC of 11 November 1998. Directive 98/85/EC contains an Annex A which amends Annex A of Council Directive 96/98/EC. After 30 April 1999, the testing standards in the amended Annex A must be used to obtain an EC type approval certificate. However, for equipment manufactured between 1 January 1999 and 30 April 1999, manufacturers may use the testing standards contained in Annex A of 96/98/EC.

- 1.2 The MCA has nominated organisations listed in Annex 1 of this Notice and accordingly those bodies are nominated as "Notified Bodies" (as referred to in the Merchant Shipping (Marine Equipment) Regulations 1999) to carry out approvals and undertake the examination, testing and certification of the equipment listed in Annex A of this Notice.
- 1.3 For equipment not listed but which requires type approval, manufacturers should contact the MCA or one of the Nominated Bodies listed in MSN 1735 for information.
- 1.4 Manufacturers with existing MCA type approval certificates will need to contact the Notified Bodies listed in Annex 1 of this Notice for information on the need for assessment and the marking to the new standards. All new equipment must comply with the international standard specified in Annex A.
- 1.5 Equipment will not be considered to comply with the relevant international standards unless -
  - .1 it satisfies the testing standards as specified in Annex A; and
  - .2 it has been manufactured in accordance with the EC conformity-assessment procedure as set out in Annex B and has been labelled with the mark of conformity, identification number and the last two digits of the year in which the mark was affixed as shown in Annex C to this Notice.
- 1.6 Unless there is a change in the required standards, existing type approved equipment already fitted on board ship will continue to be accepted providing it operates satisfactorily. If it needs to be replaced, it must be replaced with equipment which complies with the MS (Marine Equipment) Regulations 1999.
- 1.7 Equipment requiring type approval for new ships or existing ships should be type approved to the latest standards. The replacement of certain original equipment on existing ships is acceptable provided that equipment is approved to the appropriate international standard. If there is any doubt either the MCA or Notified Body should be contacted for clarification.

### 2 Type Approval Procedure

- 2.1 The application procedure for Type Approval for EC type-examination can be found at Annex 2.
- 2.2 The manufacturer or his authorised representative established within the community, must in respect of an EC type-examination certificate issued to him, keep a copy of the technical documentation submitted with the application and the EC type-examination certificate and any additions to it, for at least 10 years after the last item of equipment that the certificate relates to has been manufactured.

### 3. Issue of Type Approval

- 3.1 Providing that the Notified Body is satisfied the equipment complies in all respects with the specifications laid down by international standards and the relevant conformity-assessment procedure as described in Annex B is followed, subject to the provisions below, the Notified Body will issue a certificate of type approval in respect of the equipment stating the terms and conditions of approval. All new certificates of type approval will be valid for a period of up to 5 years.
- 3.2 A certificate of type approval refers only to equipment identical to that assessed. It is also a condition of issue of the certificate that a manufacturer shall consult with the Notified Body prior to the incorporation of any alteration to the build standard of the equipment for which the type approval certificate was originally issued.
- 3.3 Notified Bodies may require further testing and assessment to be undertaken in the event of a modification, or series of modifications, being considered to constitute sufficient departure from the build standard of the equipment that the certificate of type approval was originally issued.

### 4. Information About Type Approvals

4.1 Information concerning Type Approved Equipment and how to obtain type approval for equipment as listed in the appendices to the Annex can be obtained from:-

American Bureau of Shipping (Europe) American Bureau of Shipping House 1 Frying Pan Alley London E1 7HR

Tel: 0171 247 3255 Fax: 0171 377 2453

Lloyds Register of Shipping Type Approvals Department Engineering Services Lloyd's Register House 29 Wellesley Road Croydon CRO 2AJ

Tel: 0181 681 4040 Fax: 0181 681 6814

Defence Evaluation & Research Agency (DERA), Fraser Fort Cumberland Road Portsmouth PO4 9LJ Tel: 01705 334503

Fax: 01705 830017

BSI: British Standards Institution

Maylands Avenue Hemel Hempstead Herts, HP2 4SQ Tel: 01442 230442 Fax: 01442 231442

4.2 For equipment not listed which requires to be type approved, contact the MCA at:

MSPP2C Bay 2/17 Maritime and Coastguard Agency Spring Place, 105 Commercial Road Southampton SO15 1EG Tel: 01703 329186

Fax: 01703 329204

July 1999

MS 107/008/0040

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An executive agency of the Department of the Environment, Transport and the Regions

### **ANNEX 1**

# TYPE APPROVAL OF MARINE EQUIPMENT NOTIFIED BODIES

The Notified Bodies listed in Column 1 in the following tables are specified as those bodies which may undertake type approval of the product or production range of equipment listed in Column 2 of the table. For details of the specific procedures, modules and equipment the Notified Body has been authorised to carry out by the United Kingdom, the relevant Notified Body must be contacted.

For equipment not listed but which requires type approval, please contact the Maritime and Coastguard Agency.

### TABLE A

Column 1	Column 2
NOTIFIED BODY	EQUIPMENT CATEGORY
Lloyd's Register of Shipping	Life Saving Appliances Marine Pollution Prevention Fire Protection
American Bureau of Shipping (Europe)	Life Saving Appliances Marine Pollution Prevention Fire Protection
Defence Evaluation and Research Agency	Life Saving Appliances Radio Communication Equipment Navigation Equipment
British Standards Institution	Life Saving Appliances Fire Protection

# 1 Application for Type Approval for EC type-examination

- 1.1 An application for EC type-examination in respect of equipment shall be made in writing by the manufacturer or his authorised representative within the Community (referred to as applicant in this Notice) to a Notified Body. The application must include:
  - .1 the name and address of the manufacturer and, if the application is lodged by an authorised representative, the name and address of that person;
  - .2 a written declaration that the same or a similar application has not been lodged simultaneously with other Notified Bodies;
  - .3 the technical documentation stated in Annex D to this Notice; and
  - .4 place at the disposal of the Notified Body sufficient specimens representative of the production envisaged. The Notified Body may request further specimens if needed for carrying out the test programme.
- 1.2 In order to assess conformity of the product with the requirements of the relevant regulations and test standards, the technical documentation must cover the design, build standard, manufacture and functioning of the equipment.
- 1.3 Type approval tests are to be conducted at a United Kingdom Accreditation Services (UKAS) or equivalent National Body accredited laboratory unless no such laboratory is available. In that instance, an alternative laboratory recognised by the Notified Body as offering suitable and satisfactory guarantees of technical application of EN 45001 or ISO/IEC Guide 25 may be used.
- On an application made to it under paragraph (1) above a Notified Body is to;
  - examine the technical documentation submitted by the applicant and verify that the equipment has been manufactured in accordance with the technical documentation;

- .2 agree with the applicant the location where the examination and necessary tests are to be carried out; and
- .3 carry out, or have carried out, the appropriate examination and necessary tests to determine if the applicable international standards are satisfied.
- 1.5 Where the Notified Body is satisfied, after performing its functions under paragraph 1.4 above, that the product satisfies the applicable international standards, it shall issue an EC type-examination certificate to the applicant.

An EC type-examination certificate issued in accordance with the above shall include;

- .1 the name and address of the manufacturer;
- .2 details of the equipment to which it relates;
- .3 the results of any examinations or tests carried out;
- .4 conditions (if any) of its validity; and
- .5 the information necessary to identify the approved product.
- 1.6 A list of the relevant parts of the technical documentation including drawings and instructions will be annexed to the certificate and a copy kept by the Notified Body.
- 1.7 Where a Notified Body refuses to issue an EC type-examination certificate, it shall give in writing detailed reasons for its decision to the applicant with a copy to the MCA.
- 1.8 If an applicant applies for an EC type-examination for equipment in respect of which an EC type-examination certificate has been refused, the application to the Notified Body shall include the following relevant documentation:
  - .1 the original examination and test results;
  - .2 the detailed reasons provided by the Notified Body for the previous refusal; and

- .3 details of all modifications made to the equipment since the previous application.
- 1.9 If any modifications are made to equipment in respect of which an EC type-examination certificate has been issued, the applicant shall inform the Notified Body that issued the certificate.
- 1.10 If any modifications are such that they may affect the equipment's compliance with applicable international standards, the Notified Body shall satisfy itself, by further examinations and tests if necessary, that the equipment as modified complies with the applicable international standards and, if so satisfied, shall -
  - .1 approve the modifications to the equipment; and
  - .2 issue an addition to the original EC typeexamination certificate in respect thereof

### 1.11 A Notified Body must;

- .1 on request, provide flag state members and other Notified Bodies with all relevant information concerning the EC type examination certificates and additions thereto it has issued, including any it has withdrawn;
- .2 on request, provide other Notified Bodies with copies of the EC type-examination certificates and additions thereto it has issued; and
- on request provide other Notified Bodies with the annexes to the EC type-examination certificates it has issued.

Annex A.1: Equipment for which detailed testing standards already exist in international instruments

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 IN ADDITION TO THE TESTING STANDARDS SPECIFICALLY MENTIONED A NUMBER OF CIRCULARS OF THE IMO

# 1. Life-saving appliances

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Modules for conformity assessment <sup>(4)</sup>	B+ E	×	×
Mod	B+ B+ C D	×	×
	B+ C		
Testing standards <sup>(3)</sup>		IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)
Applicable regulations SOLAS 74 as amended, and the relevant resolutions and circulars of the IMO <sup>(2)</sup>		Regulation III/7.1 & III/34 Resolution MSC 48(66)	Regulation III/7.1.3, III/22.3.1, III/32.2.2 & III/34 Resolution MSC 48(66)
Regulation SOLAS 74 as amended where 'type approval' is required		Regulation III/4	Regulation III/4
Item designation		Lifebuoys	Position-indicating lights for life-saving appliances
Item No		A.1/1.1	A.1/1.2

Where module H appears in column six, module H plus design-examination certificate is to be understood.

ITU Recommendations cited are those referred to in the international conventions and the revelant resolutions and circulars of the IMO.

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.

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×	×	×	×	×				
×	×	×	×	×	×	×	×	×
IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66) EN 394, EN 396 + A1, EN 399 + A1	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)
Regulation III/7.1 & III/34 Resolution MSC 48(66)	Regulation III/7.2 & III/34 Resolution MSC 48(66)	Regulation III/7.3 & III/34, IMO Resolution MSC 48(66)	Regulation III/7.3 & III/34, Resolution MSC 48(66)	Regulation III/22.4, III/32.3 & III/34, Resolution MSC 48(66)	Regulation III/6.3 & III/34, Resolution MSC 48(66)	Regulation III/34, Resolution MSC 48(66)	Regulation III/34, Resolution MSC 48(66)	Regulation III/18 & III/34, Resolution MSC 48(66)
Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4
Lifebuoys self- activating smoke signals	Lifejackets	Immersion suits and anti-exposure suits	Immersion suits and anti-exposure suits classified as lifejackets	Thermal protective aids	Rocket parachute flares (pyrotechnics)	Hand flares (pyrotechnics)	Buoyant smoke signals (pyrotechnics)	Line-throwing appliances (pyrotechnics)
A.1/1.3	A.1/1.4	A.1/1.5	A.1/1.6	A.1/1.7	A.1/1.8	A.1/1.9	A.1/1.10	A.1/1.11

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×	×	×	×	×	×	×	×
IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)and modified by theappendix to MSC Circ./809²	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54 (66) and modified by the Appendix to MSC Circ./809	IMO Resolution A.689 (17) as amended by IMO Rresolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)
Regulation III/21, III/31 & III/34, Resolution MSC 48(66)	Regulation III/21, III/31 & III/34, Resolution MSC 48(66)	Regulation III/26.2 & III/34, IMO Resolution MSC 48(66), IMO MSC Circ. /809	Regulation III/26.2 & III/34, IMO Resolution MSC 48(66) IMO MSC Circ./809	Regulation III/13.4 & III/34, Resolution MSC 48(66) IMO MSC Circ./811	Regulation III/21, III/31 & III/34, IMO Resolution MSC 48 (66)	Regulation III/21, III/31, III/34, IMO Resolution MSC 48(66)	Regulation III/21, III/31, & III/34, IMO Resolution MSC 48(66)
Regulation III/4	Regulation III/4	Regulation III/4 & III/26.2.4	Regulation III/4 & III/26.2.4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4
Inflatable liferafts	Rigid liferafts	Automatically self-righting liferafts	Canopied reversible liferafts	Float-free arrangements for liferafts, (hydrostatic release units)	Lifeboats	Rigid rescue boats	Inflated rescue boats
A.1/1.12	A.1/1.13	A.1/1.14	A.1/1.15	A.1/1.16	A.1/1.17	A.1/1.18	A.1/1.19

<sup>1</sup> The modification by the Appendix to MSC Circ./809 is only applicable if the equipment is to be fitted on ro-ro passenger ships.

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×	×	×		×	×	×	×
IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66) and modified by the Appendix to MSC Circ./809 <sup>1</sup>	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by IMO Resolution MSC.54(66) and modified by the Appendix to MSC Circ/809 <sup>2</sup>	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)
Regulation III/26.3 & III/34 IMO Resolution MSC 48(66), IMO MSC Circ./809	Regulation III/23, III/33 & III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/26.3 & III/34, IMO Resolution MSC 48(66) IMO MSC Circ./809	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66)
Regulation III/4 & III/26.3.1	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4 & III/26.3.2	Regulation III/4	Regulation III/4
Fast rescue boats	Launching appliances using fall and winch (davits)	Float-free launching appliances for survival craft	Launching appliances for free-fall lifeboats	Liferaft launching appliances	Fast rescue boat launching appliances	Release mechanism for lifeboats, rescueboats and liferafts launched by a fall or falls	Marine evacuation systems
A.1/1.20	A.1/1.21	A.1/1.22	A.1/1.23	A.1/1.24	A.1/1.25	A.1/1.26	A.1/1.27

<sup>1</sup> The modification by the Appendix to MSC Circ/809 is only applicable if the equipment is to be fitted on ro-ro passenger ships. <sup>2</sup> The modification by the Appendix to MSC Circ/809 is only applicable if the equipment is to be fitted on ro-ro passenger ships.

			×	×	×	×	
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IMO Resolution A.689 (17) as amended by resolution MSC.54(66), MSC Circ./810 (section 3)	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	IMO Resolution A.658 (16) Annex 2	ETS 300.162, ETS 300.225, EN 300.828, EN 60945; IEC 61097-12, IEC 60945	EN 61097-1, EN 60945-3; IEC 61 097-1, IEC 60945	IMO Resolution A.384 (X) EN 8729; ISO 8729	ISO 613, 10316	EN 3-1/A1, 3-2, 3-3, 3-4, 3-5, 3-6
Regulation III/26.4 & III/34, IMO Resolution MSC 48(66) IMO MSC Circ./810	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/6.2.1, IMO Resolution A.694 (17), IMO Resolution A.809 (19), IMO Resolution A.813 (19)	Regulation III/6.2.2, IV/7.1.3, X/3, IMO Resolution A.530 (13), IMO Resolution A.694 (17), IMO Resolution A.802 (19), IMO Resolution A.813 (19), ITU-R M.628-2	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/34, IMO Resolution MSC 48(66) IMO Resolution A.602(15)
Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4	Regulation III/4. IV/14 & X/3	Regulation III/4	Regulation III/4	Regulation III/4
Means of rescue	Embarkation ladders	Retro-reflective materials	Survival craft two- way VHF radio telephone apparatus	9GHz SAR transponder (SART)	Radar reflector for lifeboats and rescue boats	Compass for lifeboats and rescue boats	Portable fire extinguishing equipment for lifeboats and rescue boats
A.1/1.28	A.1/1.29	A.1/1.30	A.1/1.31	A.1/1.32	A.1/1.33	A.1/1.34	A.1/1.35

×		× ×	×	IMO Resolution A.689 (17) as amended by resolution MSC.54(66)	Regulation III/34, IMO Resolution MSC 48(66)	Regulation III/4	Rescue boat ropulsion engine
×	_	×	×	IMO Resolution A.689 (17) as	Regulation III/34,	tion III/4	Regula
				MSC.54(66)			
×	X		×	IMO Resolution A.689 (17) as amended by resolution	Regulation III/34, IMO Resolution MSC 48(66)	111/4	Regulation III/4

2. Marine-pollution prevention

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rmity	Ð					
for conforr assessment	B+F	×	×	×	×	×
Modules for conformity assessment	B+ E	×	×	×	×	×
Mod	B+ D	×	×	×	×	×
	B+ C					
Testing standards <sup>(3)</sup>		MEPC 60 (33)	MEPC 5 (XIII)	MEPC 60 (33)	IMO Resolution A.444 (XI) MEPC 60 (33)	IMO Resolution A.586 (14)
Applicable regulation Marpol 73/78, as amended, and the relevant resolutions		Annex I, Regulation 16 (1) & (2)	Annex I, Regulation 15 (3) (b)	Annex I, Regulation 16(2)	Annex I, Regulation 16 (5)	Annex I, Regulation 15 (3)
Regulation Marpol 73/78 as amended where 'type approval' is required		Annex I, Regulation 16 (4), (5) & (7)	Annex I, Regulation 15 (3) (b)	Annex I, Regulation 16 (5)	Annex I, Regulation 16 (5)	Annex I, Regulation 15 (3)
Item designation		Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Oil/water interface detectors	Oil-content meters	Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Oil discharge monitoring and control system for an oil tanker
Item No		A.1/2.1	A.1/2.2	A.1/2.3	A.1/2.4	A.1/2.5

(1) Where IMO Resolutions are cited, onlt the testing standards contained in relevant parts of the Annexes to the Resolutions are applicable and exclude the provisions of the Resolutions themselves.

A.1/2.6	Sewage treatment plants	Annex IV, Regulation 8 (b)	Annex IV, Regulation 8 (b)	MEPC 2 (VI)	X	X	×	×	
A.1/2.7	Shipboard incinerators	Annex VI Regulation 16 (2)	Annex VI Regulation 16 (2)	MEPC 76(40)	×	×	×	×	

Fire protection

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mity	Ð							
Modules for conformity assessment	B+F		×					
asse	B+ ]		×					
Modi	B+ D	×	×	×	×	×	×	×
	B+ C							
Testing standards <sup>(1)</sup>		IMO Resolution A.687(17) IMO MSC/Circ. 549, IMO Resolution MSC 61(67) Annex 1, Parts 2 & 6, & Ann.2	EN 3-1/A1, 3-2, 3-3, 3-4, 3-5, 3-6	EN 366, EN 469 or EN 531, EN 532, EN 20811	EN 344, EN 344-2, EN 345, EN 345-2	EN 659	EN 443	EN 137
Applicable regulation SOLAS 74, as amended, and, the relevant resolutions and circulars of the IMO		Regulation II-2/34.8, Regulation II-2/49.3	Regulation II-2/6, IMO Resolution A.602 (15)	Regulation II-2/17.1.1.1	Regulation II-2/17.1.1.2	Regulation II-2/17.1.1.2	Regulation II-2/17.1.1.3	Regulation II-2/17.1.2.2
Regulation SOLAS 74, as amended, where 'type approval' is required		Regulation II-2/34.8, Regulation II-2/49.3	Regulation II-2/6.1	Regulation II-2/17.1.1.1	Regulation II-2/17.1.1.2	Regulation II-2/17.1.1.2	Regulation II-2/17.1.1.3	Regulation II-2/7.1.2
Item designation		Primary deck coverings	Portable fire extinguishers	Fireman's outfit: (protective clothing)	Fireman's outfit: boots	Fireman's outfit: gloves	Fireman's outfit: helmet	Self-contained compressed-air-operated breathing apparatus
Item No		A.1/3.1	A.1/3.2	A.1/3.3	A.1/3.4	A.1/3.5	A.1/3.6	A.1/3.7

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×	×	×	×	×	×	×
EN 138, EN 139	IMO Resolution A.800 (19)	IMO MSC Circ./668 as amended by IMO MSC Circ./728	IMO Resolution A.754 (18), IMO Resolution MSC.61 (67) Annex 1, Part 3 and Annex 2	IMO MSC/Circ.450/Rev.1 IMO MSC/Circ.677	IMO Resolution A.799 (19), IMO Resolution MSC.61(67) Annex 1, Part 1 and Annex 2	IMO Resolution A.753 (18), IMO Resolution A.754 (18), IMO Resolution MSC .61 (67) Annex 1, Part 3
Regulation II-2/17.1.2.1	Regulation II-2/12, II-2/36.1.2, II-2/36.2, II-2/41-2.5	Regulation II-2/10.1	Regulation II-2/3.3.5, II-2/16.1.1, II-2/3.4.4,	Regulation II-2/59.1.5, II-2/59.1.4, II-2/59.2	Regulation II-2/3.1, II-2/3.3.4, II-2/3.4.3, II-2/3.5	Regulation II-2/18.2.1
Regulation II-2/17.1.2	Regulation II-2/36.1.2, II-2/36.2, II-2/41-2.5	Regulation II-2/10.1	Regulation II-2/3.3.5, II-2/3.4.4	Regulation II-2/59.1.5, II-2/59.1.4, II-2/59.2	Regulation II-2/3.1, II-2/3.3.4, II-2/3.4.3, II-2/3.5	Regulation II-2/3.3.5, II-2/3.4.4 II-2/18.2.1
Air-supplied breathing apparatus for use with a smoke helmet or smoke mask	Sprinkler systems equivalent to that referred to in SOLAS Regulation II-2/12	Nozzles for fixed pressure water-spraying fire-extinguishing systems for machinery spaces	'A' and 'B' Class divisions, fire integrity	Devices to prevent the passage of flame into the cargo tanks in oil tankers	Non-combustible materials used in 'A', 'B' and 'C' class divisions	Materials other than steel for pipes penetrating 'A' or 'B' Class division
A.1/3.8	A.1/3.9	A.1/3.10	A.1/3.11	A.1/3.12	A.1/3.13	A.1/3.14

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×	×	×	×	×	×	×
×	×	×	×	×	×	×
IMO Resolution A.753 (18)	IMO Resolution A.754 (18), IMO Resolution MSC.61(67) Annex 1, Part 3	IMO Resolution A.754 (18), IMO Resolution MSC.61(67) Annex 1, Part 4	IMO Resolution A.653 (16), IMO Resolution MSC.61(67) Annex 1, Part 2, 5 & Annex 2 ISO 1716	IMO Resolution MSC.61 (67) Annex 1, Part 7	IMO Resolution A.652 (16), IMO Resolution MSC.61(67) Annex 1, Part 8	IMO Resolution A.688 (17), IMO Resolution MSC.61(67) Annex 1, Part 9
Regulation II-2/18.2.2	Regulation II-2/30.2, II-2/31.1, II-2/47	Regulation II-2/30.4.15	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-2/49.1, II-2/50.3.1	Regulation II-2/3.23.3	Regulation II-2/3.23.6, Regulation II-2/34	Regulation II-2/3.23.7, Regulation II-2/34
Regulation II-2/3.3.5, II-2/18.2.2	Regulation II-2/3.3.5, II-2/3.4.4, II-2/30.2, II-2/31.1, II-2/47	Regulation II-2/30.4.15	Regulation II-2/3.8, II-2/34.7, II-2/49.2	Regulation II-2/3.23.3	Regulation II-2/3.23.6	Regulation II-2/3.23.7
Materials other than steel for pipes conveying oil or fuel oil	Fire doors	Fire door control systems	Surface materials and floor coverings with low flame-spread characteristics	Draperies, curtains and other suspended textile materials and films	Upholstered furniture	Bedding components
A.1/3.15	A.1/3.16	A.1/3.17	A.1/3.18	A.1/3.19	A.1/3.20	A.1/3.21

Where the surface material is required to have a certain maximum calorific value, this shall be measured in accordance with ISO 1716.

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×	×	×	×
×	×	×	×
IMO Resolution A.754 (18), IMO Resolution MSC.61(67) Annex 1, Part 3 and Annex 2	IMO Resolution A.754 (18), IMO Resolution MSC.61(67) Annex 1, Part 3 and Annex 2	IMO Resolution A.754 (18), IMO Resolution MSC.61(67) Annex 1, Part 3 and Annex 2	IMO Resolution A.754 (18), IMO Resolution MSC.61(67) Annex 1, Part 3 and Annex 2, MSC Circ/727
Regulation II-2/16, II-2/32, II-2/48	Regulation II-2/16, II-2/32, II-2/48	Regulation II-2/18.1.1, II-2/18.1.2	Regulation II-2/33
Regulation II-2/3.3.5, II-2/16.11	Regulation II-2/3.3.5, II-2/16.11, II-2/18.1.1	Regulation II-2/3.3.5, II-2/18.1.1, II-2/18.1.2	Regulation II-2/3.3.5, II-2/33
Fire dampers	Non-combustible duct penetrations through 'A' class divisions	Electric cable transits through 'A' class divisions	Windows and side scuttles
A.1/3.22	A.1/3.23	A.1/3.24	A.1/3.25

Navigation equipment

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ormity nt	Ü	×	×	×	×
Modules for conformity assessment	B+F	×	×	×	×
lules fo	B+ E	×	×	×	×
Moc	B+ D	×	×	×	×
	B+ C				
Testing standards <sup>(2)</sup>		EN 61162-1, EN 60945, ISO 449, ISO 613, ISO 694, ISO 1069, ISO 2269, ISO 10316	EN 61162-1 EN 60945 ISO 11606 IEC 60945	EN 61162-1, EN 60945, EN 8728; IEC 61162-1, IEC 60945, ISO 8728	EN 60936, EN 60945, EN 61162-1; IEC 60936, IEC 60945, IEC 61162-1
Applicable regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO <sup>(1)</sup>		Regulation V/12 (b), Regulation X/3, IMO Resolution A.382 (X), IMO Resolution A.694 (17)	Regulation V/12 (b), Regulation X/3, IMO Resolution A.813 (19)	Regulation V/12 (d), IMO Resolution A.424(XI) IMO Resolution A.694 (17), IMO Resolution A.813 (19)	Regulation V/12 (g), Regulation V/12 (u), IMO Resolution A.477 (XII) IMO Resolution A.694 (17) IMO Resolution A.813 (19) IMO Resolution MSC64 (67) Annex 4
Regulation SOLAS 74 as amended where 'type approval' is required		Regulation V/12 (r), Regulation X/3	Regulation V/12 (r), Regulation X/3	Regulation V/12 (r)	Regulation V/12 (r)
Item designation		Magnetic compass	Electromagnetic compass	Gyro compass	Radar equipment
Item No		A.1/4.1	A.1/4.2	A.1/4.3	A.1/4.4

ITU Recommendations cited are those referred to in the international conventions and the relevant resolutions and circulars of the IMO. © ©

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.

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×	×	×	×	×	×
×	×	×	×	×	×
×	×	×	×	×	×
EN 60872, EN 60945, EN 61162-1; IEC 60872, IEC 60945, IEC 61162-1	EN 9875, EN 61162-1 EN 60945; IEC 9875, IEC 61162-1 IEC 60945,	EN 61023, EN 61162-1, EN 60945; IEC 61023, IEC 61162-1, IEC 60945	EN 60945 IEC 60945	EN 61162-1 EN 60945; IEC 61162-1, IEC 60945	EN 60945; IEC 60945
Regulation V/12 (j), IMO Resolution A.422 (XI), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.823 (19)	Regulation V/12 (k), Regulation X/3 IMO Resolution A.224 (VII), IMO Resolution A.694 (17), IMO Resolution A.813(19), IMO Resolution MSC.74(69) Annex 4	Regulation V/12(1) Regulation X/3, IMO Resolution A.478 (XII), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.824 (19)	Regulation V/12 (m), IMO Resolution A.694 (17), IMO Resolution A.813 (19)	Regulation V/12(n) Regulation X/3, IMO Resolution A.526 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19)	Regulation V/12(p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.665 (16), IMO Resolution A.694 (17), IMO Resolution A.813 (19)
Regulation V/12 (r)	Regulation V/12 (r), Regulation X/3	Regulation V/12 (r), Regulation X/3	Regulation V/12 (r)	Regulation V/12 (r), Regulation X/3	Regulation V/12 (r), Regulation X/3,
Automatic radar plotting aid (ARPA)	Echosounding equipment	Device to indicate speed and distance	Rudder angle, rpm, pitch indicator	Rate-of-turn indicator	Direction finder
A.1/4.5	A.1/4.6	A.1/4.7	A.1/4.8	A.1/4.9	A.1/4.10

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×	×	×	×
X	X	×	×
×	×	×	×
EN 61075, EN 61162-1 EN 60945; IEC 61075, IEC 61162-1 IEC 60945	EN 61075, EN 61162-1 EN 60945; IEC 61075, IEC 61162-1 IEC 60945	EN 61135, EN 61162-1 EN 60945; IEC 61135, IEC 61162-1 IEC 60945	EN 61108-1, EN 61162-1 EN 60945; IEC 61108-1, IEC 61162-1 IEC 60945
Regulation V/12(p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.818 (19)	Regulation V/12(p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.818 (19)	Regulation V/12 (p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.816 (19)	Regulation V/12 (p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution A.819 (19)
Regulation V/12 (r), Regulation X/3	Regulation V/12,(r) Regulation X/3	Regulation V/12 (r), Regulation X/3	Regulation V/12 (r), Regulation X/3
Loran-C equipment	Chayka equipment	Decca navigator equipment	GPS equipment
A.1/4.11	A.1/4.12	A.1/4.13	A.1/4.14

×	×	
×	×	
×	×	
×	×	
EN 61108-2, EN 61162-1 EN 60945; IEC 61108-2, IEC 61162-1 IEC 60945	ISO/TR 11674, EN 61162-1, EN 60945; ISO/TR 11674, IEC 61162-1, IEC 60945	IMO Resolution A.667 (16), ISO 799
Regulation V/12 (p), Regulation X/3, IMO Resolution A.529 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), IMO Resolution MSC.53(66)	Regulation V/19 IMO Resolution A.342(IX), as amended by IMO Resolution MSC 64(67) Annex 3, IMO Resolution A.694 (17), IMO Resolution A.813 (19)	Regulation V/17 (b), IMO Resolution A.426 (XI), IMO MSC/Circ.568/Rev.1
Regulation V/12 (r), Regulation X/3	Regulation V/19	Regulation V/17 (b)
A.1/4.15 GLONASS equipment	Auto-pilot (heading control system)	A.1/4.17 Mechanical pilot hoist
A.1/4.15	A.1/4.16	A.1/4.17

5. Radio-communication equipment

Modules for conformity assessment	Н			
	D.	×	×	×
	B+F	×	×	×
dules fo	B+ E	×	×	×
Moo	В+ О	×	×	×
	B+ C			
Testing standards <sup>(3)</sup>		ETS 300 162-2, ETS 300 338, EN 300 828, EN 60945; IEC 61097-3, IEC 61097-7 IEC 60945	ETS 300 162-2, ETS 300 338, ETS 300 828, EN 301 033, EN 60945; IEC 61097-3, IEC 61097-8, IEC 60945	ETS 300 065 + A1, EN 301 011, EN 60945; IEC 61097-6, IEC 60945
Applicable regulations SOLAS 74 as amended, and the relevant resolutions and circulars of the IMO(1)		Regulation IV/7.1.1, Regulation X/3, IMO Resolution A.524 (13), IMO Resolution A.803 (19), IMO Resolution A.813 (19), IMO Resolution A.813 (19), IMO Resolution MSC68(68) Annex 1, ITU-R 493, ITU-R 541	Regulation IV/7.1.2 Regulation X/3, IMO Resolution A.609 (15), IMO Resolution A.803 (19), IMO Resolution A.813 (19), IMO Resolution MSC68(68) Annex 1, ITU-R 493, ITU-R 541	Regulation IV/7.1.4, Regulation X/3, IMO Resolution A.525 (13), IMO Resolution A.694 (17), IMO Resolution A.813 (19), ITU-R 540, ITU-R 625
Regulation SOLAS 74 as amended where 'type approval' is required		Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3
Item designation		VHF radio installation capable of transmitting and receiving DSC and radiotelephony	VHF DSC watchkeeping receiver	NAVTEX receiver
Item No		A.1/5.1	A.1/5.2	A.1/5.3

ITU Recommendations cited are those referred to in the international conventions and the relevant resolutions and circulars of the IMO. E 6

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ETS 300 460 + A1, EN 300 829, EN 60945; IEC 61097-4, IEC 60945	ETS 300 067 & A1, EN 60945; IEC 61097-11, IEC 60945	ETS 300 066-2, EN 60945; IEC 61097-2, IEC 60945	ETS 300 372 EN 60945; IEC 61097-5, IEC 60945
Regulation IV/7.1.5, Regulation X/3, IMO Resolution A.570 (14), IMO Resolution A.664 (16), IMO Resolution A.694 (17), IMO Resolution A.813 (19)	Regulation IV/7.1.5, Regulation X/3, IMO Resolution A.694 (17), IMO Resolution A.700 (17), IMO Resolution A.806 (19), IMO Resolution A.813 (19), ITU-R 491, ITU-R 492, ITU-R 625, ITU-R 688	Regulation IV/7.1.6, Regulation X/3, IMO Resolution MSC56 (66), IMO Resolution A.694 (17), IMO Resolution A.694 (17), IMO Resolution A.763 (18), IMO Resolution A.763 (18), IMO Resolution A.810 (19), IMO Resolution A.810 (19), IMO Resolution A.813 (19),	Regulation IV/7.1.6 Regulation X/3 IMO Resolution A.661 (16), IMO Resolution A.662 (16), IMO Resolution A.694 (17), IMO Resolution A.812 (19), IMO Resolution A.813 (19), ITU-R 632-3
Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3
EGC receiver	HF marine safety information (MSI) equipment (HF NBDP receiver)	406 MHz EPIRB (COSPAS-SARSAT)	L-band EPIRB (INMARSAT)
A.1/5.4	A.1/5.5	A.1/5.6	A.1/5.7

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ETS 300 441, EN 301090; EN 60945; IEC 61097-15, IEC 60945	ETS 300 373 + A1, EN 60945; IEC 61097-9, IEC 60945	ETS 300 338, ETS 300 373 + A1, EN 60945; IEC 61097-3, IEC 60945	ETS 300 338, ETS 300373, EN 301 033, EN 60945; IEC 61097-3, IEC 61097-8, IEC 60945
Regulation IV/7.2, Regulation X/3, IMO Resolution A.383 (X), IMO Resolution A.694 (17), IMO Resolution A.813 (19), ITU-R M 219, ITU-R 693	Regulation IV/7.3, Regulation X/3, IMO Resolution A.421 (XI), IMO Resolution A.571 (14), IMO Resolution A.694 (17), IMO Resolution A.813 (19), ITU-R.219	Regulation IV/9.1.1, Regulation IV/10.1.2, Regulation X/3, IMO Resolution A.334 (IX), IMO Resolution A.610 (15), IMO Resolution A.694 (17), IMO Resolution A.804 (19), IMO Resolution A.813 (19), IMO Resolution MSC 68 (68) Annex 2, ITU-R M.219, ITU-R M.493, ITU-R M.541	Regulation IV/9.1.2, Regulation IV/10.1.3, Regulation X/3, IMO Resolution A.610 (15), IMO Resolution A.804 (17), IMO Resolution A.804 (19), IMO Resolution A.813 (19), IMO Resolution MSC68(68) Annex 2, ITU-R 493, ITU-R 541
Regulation IV/14, Regulation X/3,	Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3
2182 KHz Watch receiver	Two-tone alarm signal generator	MF radio installation capable of transmitting and receiving DSC and radiotelephony	MF radiotelephone DSC watchkeeping receiver
A.1/5.8	A.1/5.9	A.1/5.10	A.1/5.11

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IEC 61097-10, IEC 60945	ETS 300 460 + A1, EN 300 829, EN 60945; IEC 61097-4, IEC 60945	ETS 300 338, ETS 300 373 + A.1, ETS 300 067 + A1, EN 60945; IEC 61097-3, IEC 61097-9, IEC 61097-11, IEC 60945	ETS 300 338, ETS 300 373, EN 301 033, EN 60945; IEC 61097-3, IEC 61097-8, IEC 60945
Regulation IV/10.1.1, Regulation X/3, IMO Resolution A.570 (14), IMO Resolution A.694 (17), IMO Resolution A.698 (17), IMO Resolution A.808 (19), IMO Resolution A.813 (19)	Regulation IV/10.1.1 Regulation X/3, IMO Resolution A.570 (14), IMO Resolution A.663 (16), IMO Resolution A.664 (16), IMO Resolution A.694 (17), IMO Resolution A.807 (19), IMO Resolution A.813 (19), IMO Resolution MSC68(68) Annex 4	Regulation IV/10.2.1, Regulation X/3, IMO Resolution A.613 (15), IMO Resolution A.806 (19), IMO Resolution A.806 (19), IMO Resolution A.813 (19), IMO Resolution MSC68(68) Annex 3, ITU R 476, ITU-R 492, ITU R 493, ITU R 541, ITU R 493, ITU R 551,	Regulation IV/10.2.2, Regulation X/3, IMO Resolution A.613 (15), IMO Resolution A.806 (19), IMO Resolution A.813 (19), IMO Resolution A.813 (19), IMO Resolution A.813 (19), Annex 3, ITU R 493
Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3	Regulation IV/14, Regulation X/3	Regulation IV/14 Regulation X/3,
Immarsat-B SES	Immarsat-C SES	MF/HF radio installation capable of transmitting and receiving DSC, NBDP and radiotelephony	Radiotelephone MF/HF DSC watch keeping receiver
A.1/5.12	A.1/5.13	A.1/5.14	A.1/5.15

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X						
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TS 101 089, EN 60945,	IEC 60945					
Regulation IV/7.5,	Regulation X/3,	IMO Resolution A.694 (17),	IMO Resolution A.813 (19),	ICAO Convention	Annex 10 Radio Regulations	
Regulation IV/14,	Regulation X/3					
Aeronautical two	way VHF radio	telephone apparatus				
A.1/5.16						

# Official Journal of the European Communities

# **EC TYPE-EXAMINATION (MODULE B)**

- 1. A notified body must ascertain and attest that a specimen, representative of the production envisaged, complies with the provisions of the international instruments that apply to it.
- 2. The application for the EC typeexamination must be lodged by the manufacturer or his authorized representative established within the Community with a notified body of his choice.

The application must include:

- the name and address of the manufacturer and, if the application is lodged by the authorized representative, his name and address as well,
- a written declaration that the same application has not been lodged simultaneously with any other notified body,
- the technical documentation as described in point 3.

The applicant must place at the disposal of the notified body a specimen, representative of the production envisaged and hereinafter called "type" (1). The notified body may request further specimens if needed for the test programme.

- 3. The technical documentation must make it possible to assess the product's compliance with the requirements of the relevant international instruments. It must, as far as is relevant for such assessment, cover the design, the building standard, manufacture, installation and functioning of the product in accordance with the description of technical documentation set down in the Appendix to this Annex.
- 4. The notified body must:
- 4.1 examine the technical documentation and verify that the type has been manufactured in accordance with the technical documentation;
- 4.2 perform the appropriate examinations and necessary tests or have them performed to check whether the requirements of the relevant international instruments have actually been met;

- 4.3 agree with the applicant the location where the examinations and necessary tests will be carried out.
- 5. Where the type meets the provisions of the relevant international instruments, the notified body must issue an EC type-examination certificate to the applicant. The certificate must give the name and address of the manufacturer, details of the equipment, the conclusions of the examination, the conditions of its validity and the necessary data for identification of the approved type.

A list of the relevant parts of the technical documentation must be annexed to the certificate and a copy kept by the notified body.

If a manufacturer is refused a type-certification, the notified body must give detailed reasons for that refusal.

Where a manufacturer reapplies for typeapproval for equipment for which a typecertificate has been refused, his submission to the notified body must include all relevant documentation, including the original test reports, the detailed reasons for the previous refusal and details of all modifications made to the equipment.

- 6. The applicant must inform the notified body that holds the technical documentation concerning the EC type-examination certificate of all modifications to the approved product, which must receive additional approval where such changes may affect compliance with the requirements or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EC type-examination certificate.
- 7. Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the EC type-examination certificates and additions issued and withdrawn.
- 8. The other notified bodies may receive copies of the EC type-examination certificates and/or their additions. The Annexes to the

A type may cover several versions of the product provided that the differences between the versions do not affect the level of safety or the other requirements concerning the performance of the product.

certificates must be kept at the disposal of the other notified bodies.

9. The manufacturer or his authorized representative established within the Community must keep with the technical documentation copies of EC type-examination certificates and their additions for at least 10 years after the last product has been manufactured.

#### CONFORMITY TO TYPE (MODULE C)

- 1. A manufacturer or his authorized representative established within the Community must ensure and declare that the products concerned conform to type as described in the EC type-examination certificate and satisfy the requirements of the international instruments that apply to them. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity.
- 2. The manufacturer must take all measures necessary to ensure that the manufacturing process ensures that the manufactured products conform to type as described in the EC type-examination certificate and comply with the requirements of the international instruments that apply to them.
- 3. The manufacturer or his authorized representative established within the Community must keep a copy of the declaration of conformity for at least 10 years after the last product has been manufactured.

# PRODUCTION-QUALITY ASSURANCE (MODULE D)

- 1. A manufacturer who satisfies the obligations of point 2 must ensure and declare that the products concerned conform to type as described in the EC type-examination certificate. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.
- 2. The manufacturer must operate an approved quality system for production, final product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

# 3. Quality system

3.1 The manufacturer must lodge an application for assessment of his quality system with a notified body of his choice for the products concerned.

The application must include:

- all relevant information for the product category envisaged,
- the documentation concerning the quality system,
- the technical documentation of the approved type and a copy of the EC type-examination certificate.
- 3.2 The quality system must ensure that the products conform to type as described in the EC type-examination certificate.

All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality-system documentation must permit a consistent interpretation of the quality programmes, plan, manuals and records.

It must, in particular, include an adequate description of:

- the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,
- the manufacturing, quality-control and quality-assurance techniques, processes and systematic actions that will be used,
- the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out,
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.,
- the means of monitoring the achievement of the required product quality and the effective operation of the quality system.

3.3 The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with those requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience of assessment in the product technology concerned. The assessment procedure must include a visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4 The manufacturer must undertake to fulfill the obligations arising out of the quality system as approved and to uphold it so that it remains adequate and efficient.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must assess the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

- 4. Surveillance under the responsibility of the notified body
- 4.1 The purpose of surveillance is to make sure that the manufacturer duly fulfills the obligations arising out of the approved quality system.
- 4.2 The manufacturer must allow the notified body access for inspection purposes to the locations of manufacture, inspection and testing and storage and must provide it with all necessary information, in particular;
- the quality-system documentation,
- the quality records, such as inspection reports and test data, calibration data,

qualification reports of the personnel concerned,

- 4.3 The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.4 In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and. if a test has taken place, with a test report.
- 5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities;
- the documentation referred to in the second indent of the second paragraph of point 3.1,
- the updating referred to in the second paragraph of point 3.4,
- the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.
- 6. Each notified body must, on request provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

# PRODUCT-QUALITY ASSURANCE (MODULE E)

- 1. A manufacturer who satisfies the obligations of point 2 ensures and declares that the products concerned conform to type as described in the EC type-examination certificate. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity. The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.
- 2. The manufacturer must operate an approved quality system for final inspection and

testing as specified in point 3 and must be subject to surveillance as specified in point 4.

- 3. Quality system
- 3.1 The manufacturer must lodge an application for assessment of his quality system for the products concerned with a notified body of his choice.

The application must include:

- all relevant information for the product category envisaged,
- documentation concerning the quality system,
- the technical documentation of the approved type and a copy of the EC type-examination certificate.
- 3.2 Under the quality system, each product must be examined and appropriate tests must be carried out in order to ensure its compliance with the relevant requirements of the international instruments. All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. That quality-system documentation must ensure common understanding of the quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

- the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality,
- the examination and tests that will be carried out after manufacture,
- the means of monitoring the effective operation of the quality system,
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.
- 3.3 The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with the requirements in

respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4 The manufacturer must undertake to fulfill the obligations arising out of the quality system as approved and to maintain it in an appropriate and efficient manner.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decisions. The notification must include the conclusions of the examination and the reasoned assessment decision.

- 4. Surveillance under the responsibility of the notified body
- 4.1 The purpose of surveillance is to make sure that the manufacturer duly fulfills the obligations arising out of the approved quality system.
- 4.2 The manufacturer must allow the notified body access for inspection purposes to the locations of inspection, testing and storage and must provide it with all necessary information, in particular:
- the quality-system documentation,
- the technical documentation,
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

- 4.3 The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.4 In addition, the notified body may pay unannounced visits to the manufacturer. During such visits the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.
- 5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:
- the documentation referred to in the third indent of the second paragraph of point 3.1,
- the updating referred to in the second paragraph of point 3.4,
- the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.
- 6. Each notified body must on request provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

## PRODUCT VERIFICATION (MODULE F)

- 1. A manufacturer or his authorized representative established within the Community must check and attest that the products subject to point 3 conform to the type as described in the EC type-examination certificate.
- 2. The manufacturer must take all measures necessary to ensure that the manufacturing process ensures that the products conform to type as described in the EC type examination certificate. He must affix the mark to each product and must draw up a declaration of conformity.
- 3. The notified body must carry out the appropriate examinations and tests in order to check that the product complies with the requirements of the international instruments either by examination and testing of every

- product as specified in point 4 or by examination and testing of products on a statistical basis, as specified in point 5, at the choice of the manufacturer.
- 3a. The manufacturer or his authorized representative established within the Community must keep a copy of the declaration of conformity for at least 10 years after the last product has been manufactured.
- 4. Verification by examination and testing of every product
- 4.1 All products must be individually examined and appropriate tests must be carried out in order to verify their conformity to type as described in the EC type-examination certificate.
- 4.2 The notified body must affix its identification symbol or cause it to be affixed to each approved product and draw up a written certificate of conformity relating to the tests carried out.
- 4.3 The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificate of conformity on request to the flag Member State administration.
- 5. Statistical verification
- 5.1 The manufacturer must present his products in the form of homogeneous lots and must take all measures necessary to ensure that the manufacturing process ensures the homogeneity of each lot produced.
- 5.2 All products must be available for verification in the form of homogeneous lots. A random sample must be drawn from each lot. Products in a sample must be individually examined and appropriate tests must be carried out to ensure that they comply with the requirements of the international instruments which apply to them and to determine whether the lot is to be accepted or rejected.
- 5.3 In the case of accepted lots, the notified body must affix its identification symbol or cause it to be affixed to each product and must draw up a written certificate of conformity relating to the tests carried out. All products in the lot may be put on the market except those products from the sample which are found not to comply.

If a lot is rejected, the notified body or the competent authority must take appropriate measures to prevent that lot's being put on the market. In the event of frequent rejection of lots the notified body may suspend statistical verification.

The manufacturer may, under the responsibility of the notified body, affix the latter's identification symbol during the manufacturing process.

5.4 The manufacturer or his authorized representative established within the Community must ensure that he is able to supply the notified body's certificates of conformity on request to the flag Member State administration.

## **UNIT VERIFICATION (MODULE G)**

- 1. The manufacturer must ensure and declare that the product concerned, which has been issued with the certificate referred to in point 2, complies with the requirements of the international instruments that apply to it. The manufacturer or his authorized representative established within the Community must affix the mark to the product and draw up a declaration of conformity.
- 2. The notified body must examine the individual product and carry out appropriate tests to ensure that it complies with the relevant requirements of the international instruments.

The notified body must affix its identification number or cause it to be affixed to the approved product and must draw up a certificate of conformity concerning the tests carried out.

3. The aim of the technical documentation is to enable compliance with the requirements of the international instruments to be assessed and the design, manufacture and operation of the product to be understood.

## FULL-QUALITY ASSURANCE (MODULE H)

1. A manufacturer who satisfies the obligations of paragraph 2 must ensure and declare that the products concerned comply with the requirements of the international instruments that apply to them. The manufacturer or his authorized representative established within the Community must affix the mark to each product and draw up a written declaration of conformity.

The mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.

2. The manufacturer must operate an approved quality system for design, manufacture, final product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

## 3. Quality system

3.1 The manufacturer must lodge an application for assessment of his quality system with a notified body.

The application must include:

- all relevant information for the product category envisaged and
- documentation concerning the quality system.
- 3.2 The quality system must ensure that the products comply with the requirements of the international instruments that apply to them.

All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. The quality-system documentation must ensure common understanding of the quality policies and procedures such as quality programmes, plans, manuals and records.

It must, in particular, include an adequate description of:

- the quality objectives and the organizational structure, responsibilities and powers of the management with regard to product quality;
- the technical design specifications, including standards, that will be applied and the assurance that the essential requirements of the international instruments that apply to the products will be met;
- the design-control and design-verification techniques, processes and systematic actions that will be used in the design of the products pertaining to the product category covered;

- the corresponding manufacturing, quality-control and quality-assurance techniques, processes and systematic actions that will be used:
- the examinations and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out;
- the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc; and
- the means of monitoring the achievement of the required design and product quality and the effective operation of the quality system.
- 3.3 The notified body must assess the quality system to determine whether it satisfies the requirements laid down in point 3.2. It must presume compliance with the requirements in respect of quality systems that implement the relevant harmonized standard.

The auditing team must have at least one member with experience as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer's premises.

The manufacturer must be notified of the decision. The notification must include the conclusions of the examination and the reasoned assessment decision.

3.4 The manufacturer must undertake to fulfill the obligations arising from the quality system as approved and to uphold it so that it remains adequate and efficient.

The manufacturer or his authorized representative established within the Community must keep the notified body that has approved the quality system informed of any intended updating of that quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements laid down in point 3.2 or whether a reassessment is required.

The manufacturer must be notified of its decisions. The notification must include the conclusions of the examination and the reasoned assessment decision.

- 4. EC surveillance under the responsibility of the notified body
- 4.1 The purpose of surveillance is to make sure that the manufacturer duly fulfills the obligations arising out of the approved quality system.
- 4.2 The manufacturer must allow the notified body access for inspection purposes to the locations of design, manufacture, inspection and testing and storage and must provide it with all necessary information, in particular:
- the quality-system documentation,
- the quality records as provided for in the design part of the quality system, such as the results of analyses, calculations, tests, etc,
- the quality records as provided for in the manufacturing part of the quality system, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned etc.
- 4.3 The notified body must periodically carry out audits to make sure that the manufacturer maintains and applies the quality system and must provide the manufacturer with audit reports.
- 4.4 In addition the notified body may pay unannounced visits to the manufacturer. During such visits, the notified body may carry out tests or cause tests to be carried out to check that the quality system is functioning correctly, if necessary. The notified body must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.
- 5. The manufacturer must, for at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:
- the documentation referred to in the second indent of the second paragraph of point 3.1,
- the updating referred to in the second paragraph of point 3.4,
- the decision and reports from the notified body referred to in the final paragraph of point 3.4, point 4.3 and point 4.4.
- 6. Each notified body must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning the quality-system approvals issued and withdrawn.

# 7. Design examination

- 7.1 The manufacturer must lodge an application for examination of the design with a single notified body.
- 7.2 The application must make it possible to understand the design, manufacture and operation of the product and to assess compliance with the requirements of international instruments.

## It must include:

- the technical design specifications, including standards, that have been applied and
- the necessary supporting evidence for their adequacy, in particular where the standards specified in Article 5 have not been applied in full. Such supporting evidence must include the results of tests carried out by an appropriate laboratory of the manufacturer's or on his behalf.
- 7.3 The notified body must examine the application and where the design complies with those provisions of the international instruments that apply it must issue an EC design-examination certificate to the applicant. The certificate must include the conclusions of the examination, the conditions of its validity, the data necessary for identification of the approved design and, if relevant, a description of the product's functioning.
- 7.4 The applicant must keep the notified body that has issued the EC design-examination certificate informed of any modification to the approved design. Modifications to the approved design must receive additional approval from the notified body that issued the EC design-examination certificate where such changes may affect compliance with the relevant requirements of the international instruments or the prescribed conditions for use of the product. Such additional approval must be given in the form of an addition to the original EC design-examination certificate.
- 7.5 The notified bodies must, on request, provide flag Member State administrations and the other notified bodies with the relevant information concerning:
- the EC design-examination certificates and additions issued and
- the EC design-approvals and additional approvals withdrawn.

## Appendix to Annex B

# Technical documentation to be supplied by the manufacturer to the notified body

The provisions set down in this Appendix apply to all modules of Annex B.

The technical documentation referred to in Annex B must comprise all relevant data and means used by the manufacturer to ensure that equipment complies with the essential requirements relating to it.

The technical documentation must make it possible to understand the design, manufacture and operation of the product, and must make it possible to assess compliance with the requirements of the relevant international instruments.

The documentation must, so far as they are relevant to assessment, include:

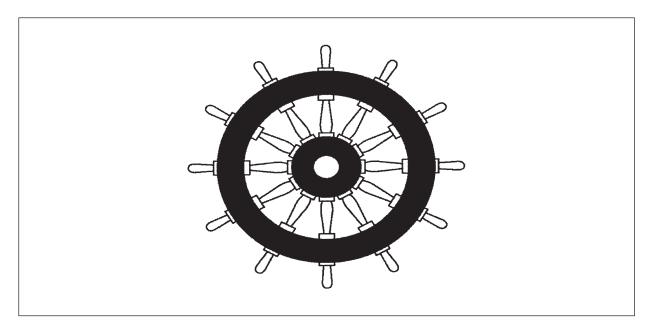
- a general description of the type,
- conceptual-design, build standard and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc,
- descriptions and explanations necessary for the understanding of those drawings and schemes, including the operation of the product,
- the results of design calculations made, impartial examinations carried out, etc,
- impartial test reports,
- manuals for installation, use and maintenance.

Where appropriate, the design documentation must contain the following:

- attestations relating to the equipment incorporated in the appliance,
- attestations and certificates relating to the methods of manufacture and/or inspection and/or monitoring of the appliance,
- any other document that makes it possible for the notified body to improve its assessment.

# Mark of conformity

The mark of conformity must take the following form:



If the mark is reduced or enlarged the proportions given in the above graduated drawing must be respected.

The various components  $\,$  of the mark must have substantially the same vertical dimension, which may not be less than  $5~\mathrm{mm}$ .

That minimum dimension may be waived for small devices.

# TECHNICAL DOCUMENTATION SUPPLIED BY THE MANUFACTURER TO THE NOTIFIED BODY

- 1. The technical documentation must comprise all relevant data or means used by the manufacturer to ensure that the equipment complies with the relevant international standard.
- 2. The technical documentation must enable understanding of the design, manufacture and operation of the product and assessment of conformity with the relevant international standards.
- 3. The technical documentation shall, so far as is relevant to the particular assessment include:-
  - .1 a general description of the specimen;
  - .2 conceptual design, build standard and manufacturing drawings and schemes of components, and relevant supporting drawings;
  - .3 descriptions and explanations necessary for the understanding of those drawings and schemes referred to in (2) above, including any necessary descriptions and explanations of the equipment;
  - .4 results of design calculations made, impartial examinations carried out, etc.;

- .5 impartial test reports; and
- .6 manuals for installation, use and maintenance.
- 4. Where appropriate, the design documentation must contain the following elements:-
  - .1 attestations relating to the equipment incorporated in the appliance;
  - .2 attestations and certificates relating to the methods of manufacture and/or inspection and/or monitoring of the specimen; and
  - .3 any other document making it possible for the notified body to better perform its assessment.
- 5. A specimen may cover several versions of the equipment provided that the differences between the versions do not affect the level of safety or the other relevant international standards.

# (Annex C of EU Marine Equipment Directive)

# MINIMUM CRITERIA TO BE TAKEN INTO ACCOUNT BY MEMBER STATES FOR THE DESIGNATION OF BODIES

- 1. Notified bodies must fulfil the requirements of the relevant EN 45000 series.
- 2. A notified body must be independent and must not be controlled by manufacturers or by suppliers.
- 3. A notified body must be established within the territory of the Community.
- 4. Where type-approvals are issued by a notified body on behalf of a Member State, the Member State must ensure that the qualifications, technical experience and staffing of the notified body are such as will enable it to issue type-approvals which comply with the requirements of this Directive and to guarantee a high level of safety.
- 5. A notified body must be in a position to provide maritime expertise.

A notified body is entitled to perform conformity-assessment procedures for any economic operator established within or outwith the Community.

A notified body may perform conformity-assessment procedures in any Member State or State outwith the Community using either its home-based means or the personnel of its branch office abroad.

If a subsidiary of a notified body performs conformity-assessment procedures, all documents relating to the conformity-assessment procedures must be issued by and in the name of the notified body and not in the name of the subsidiary.

A subsidiary of a notified body which is established in another Member State may, however, issue documents relating to conformity-assessment procedures if it is notified by that Member State.



# **MERCHANT SHIPPING NOTICE**

# MSN 1734 Amendment 5 (M+F)

# **Approval of Marine Equipment (EC Notified 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 Craftnsert Audience eg, Shipowners, Masters etc

This Notice amends Merchant Shipping Notice No. MSN 1734 (M+F) and revokes MSN 1734 (M+F) Amendment 4.

## 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**

The Marine Equipment Directive ("MED") enhances safety at sea and the prevention of marine pollution, through the uniform application of international instruments relating to marine equipment for which EC type approval safety certificates are issued. The MED is implemented in UK law by the Merchant Shipping (Marine Equipment) Regulations 1999 and Merchant Shipping Notice MSN 1734.

This Notice contains a new Annex A.1 to Merchant Shipping Notice MSN 1734. The new Annex A.1 updates the international standards used as a basis for type approval for marine equipment. It also provides, as set out in the footnotes to each section of the Annex, for transitional arrangements for equipment manufactured before 10 December 2011. As provided for in Commission Directive 2010/68/EU, these transitional provisions apply until 10 December 2013.

## **Key Points:-**

- This Notice further amends MSN 1734 (M+F), and revokes and replaces MSN 1734 (M+F) Amendment 4. It has effect from 10 December 2011.
- This Notice implements Commission Directive 2010/68/EU of 22 October 2010.
- This Notice updates the United Kingdom's designated Notified Body contact list.

## 1. Introduction

1.1 The Merchant Shipping (Marine Equipment) Regulations 1999 (SI 1999 No 1957, amended by S.I. 2009 No. 2021) ("the Regulations") provide for the "type approval" of marine equipment, of a safety or pollution prevention nature, for use on board United Kingdom ships, and on board other ships as set out in regulation 4 of those Regulations. The Regulations, together with Merchant Shipping Notice MSN 1734 (M+F)) implement Council Directive 96/98/EC of 20 December 1996 on Marine Equipment (Official Journal No. L315, 25.11.98, p.14) ("the MED").

# 2. Amendments to Directive and to MSN 1734 (M+F) Annex A.1

- 2.1 In response to further changes to the testing standards developed by those organisations listed in Article 2(n) of the MED, the European Commission issued Directive 2010/68/EU amending the MED (O.J. No. L 305. 20.11.2010). This amending Directive, which is required to be applied by Member States of the European Union from 10<sup>th</sup> December 2011, makes two provisions:
  - (a) Article 1 and the Annex to the Directive revoke and replace Annex A to the MED.
  - (b) Article 2 of the Directive provides that equipment manufactured before 10 December 2011, in accordance with the type-approval procedures in place at its time of manufacture, can continue to be placed on the market and on board a ship for the two year period until 10 December 2013.
- 2.2 On 10 December 2011 Annex A.1 to MSN 1734 is revoked and replaced by Annex A to this Merchant Shipping Notice. This replacement of Annex A.1 implements in UK law as from that date the revocation and replacement of Annex A.1 to the MED.
- 2.3 On 10 December 2011 the transitional arrangements set out in Article 2 of the Directive are implemented in UK law by the following provisions in Annex A.1 to this Merchant Shipping Notice. These transitional arrangements are created in respect of equipment listed in the new Annex A.1 which is newly listed, or which formerly appeared in Annex A.2 of the MED.
  - 2.3. (1) Where \*\*Trans is marked against an Item number in Annex A, the equipment need not satisfy the otherwise applicable standards in circumstances where the conditions in either paragraph (2) or (3) apply.
  - 2.3. (2) In respect of equipment placed on the market, supplied for use or exposed for supply within the UK on or before 10 December 2013, the conditions are that the equipment was manufactured in accordance with the procedures for type-approval in force in a member State immediately before 10 December 2011.
  - 2.3 (3) In respect of equipment placed on or before 10 December 2013 on board a ship the relevant safety certificate of which was issued by or on behalf of a member State in accordance with the relevant international convention, the condition is that the equipment was manufactured in accordance with the procedures for type approval in force in a member State immediately before 10 December 2011.

Note: These conditions relate to transitional provision in Directive 2010/68/EU and are relevant for the purposes of the Merchant Shipping (Marine Equipment) Regulations 1999 as amended by the Merchant Shipping (Marine Equipment) (Amendment) Regulations 2009.

2.4 On 10 December 2011 MSN 1734 (M+F) Amendment 4 is revoked.

- 3. Update to UK designated EC Notified Body listing.
- 3.1 Annex 1 of this MSN contains an updated list of the UK's designated EU Notified Bodies. The list in Annex 1 replaces paragraph 4 to MSN 1734 (M+F) and revokes MSN 1734 Amendment 4, as from 10 December 2011.
- 3.2 A listing of notified bodies designated by EU Member States and the EFTA countries (EEA Members) is available on the Notified Bodies co-ordination group (MarED) website <a href="http://www.mared.org">http://www.mared.org</a>.
- 3.3 For equipment not listed in the amended Annex A.1 which requires to be type approved, reference should be made to MSN 1735 (as amended from 10 December 2011 by Amendment 5 to that MSN), or contact the MCA at: the address given in the More Information section.

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

1. The Stationery Office Ltd, Customer Services, PO Box 29, Norwich NR3 1GN; or from the EUR-Lex website: www.eur-lex.europa.eu

# **More Information**

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

Tel: +44 (0) 23 8032 9100

Fax: +44 (0) 23 8032 9Insert extension

e-mail: MTU@mcga.gov.uk

General Inquiries: <u>infoline@mcga.gov.uk</u>

MCA Website Address: www.mcga.gov.uk

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Please note that all addresses and

telephone numbers are correct at time of publishing

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## LIST OF UK DESIGNATED EU NOTIFIED BODIES

The Notified Bodies are specified as those bodies which may undertake type approval of the product or production range of equipment listed in Annex A.1. For details of specific procedures, modules and equipment the Notified Body has been authorised to carry out by the United Kingdom, the relevant Notified Body must be contacted.

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

Fax: 0207 377 2453

Email: abs-eur@eagle.org

BTTG Testing & Certification Ltd Unit 14 Wheel Forge Way Trafford Park Manchester M17 1EH

Tel: 0161 873 6543 Fax: 0161 848 7378

Email: cabutcher@bttg-cert.co.uk

The British Standards Institution Trading as BSI Kitemark House Maylands Avenue Hemel Hempstead Herts HP2 4SQ

Tel: +44 (0)8450 765600 Fax: +44 (0)8450 765601

Email: Jitesh.pankhania@bsigroup.com

INSPEC International Ltd 56, Leslie Hough Way Salford Greater Manchester M6 6AJ England

Tel: +44 (0) 161 737 0699 Fax: +44 (0) 161 736 0101

Email: certification@inspec-international.com

London Design Support Office Lloyd's Register EMEA 71 Fenchurch Street London EC3M 4BS

Tel: 020 7423 2416 Fax: 020 7423 1645 Email: fire.safety@lr.org

QINETIQ Ltd.

Cody Technology Park

Ivley Road

Farnborough GU14 0LX Tel: 01252 394 009 Fax: 01252 397 058

Email: rasharp1@qinetiq.com

The Loss Prevention Certification Board (LPCB)

BRE Global Ltd, incorporating LPCB

**Bucknalls Lane** 

Garston WD25 9XX

Tel: 01923 664 100 Fax: 01923 664 103

E-mail: phillipss@bre.co.uk

Warrington Certification Ltd

Holmesfield Road

Warrington

Cheshire. WA1 2DS Tel: 01925 646 669 Fax: 01925 646 667

Email: janet.murrell@exova.com

British Approvals Board for Telecommunications

Octagon House, Concorde Way, Segensworth North Fareham, PO15 5RL

Hampshire

Tel: 01932 251200 Fax: 01932 251201

Email: contact@babt.com

Sira Certification Service

Rake Lane Eccleston Chester

Cheshire CH4 9JN United Kingdom Tel: 01244 670900 Fax: 01244 681330

Email: info@siracertification.com

#### Annex A

#### ANNEX A

# List of acronyms used

- A.1, Amendment 1 concerning Standard Documents other than IMO.
- A.2, Amendment 2 concerning Standard Documents other than IMO.
- AC, Amending Corrigendum concerning Standard Documents other than IMO.
- CAT, Category for radar equipment as defined in section 1.3 of IEC 62388 (2007)

Circ., Circular.

COLREG, International Regulations for Preventing Collisions at Sea.

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

EN, European Standard.

ETSI, European Telecommunication Standardisation Institute.

FSS, International Code for Fire Safety Systems.

FTP, International Code for Application of Fire Test Procedures.

HSC, High Speed Craft Code.

IBC, International Bulk Chemical Code.

ICAO, International Civil Aviation Organization.

IEC, International Electro-technical Commission.

IMO, International Maritime Organization.

ISO, International Standardisation Organisation.

ITU, International Telecommunication Union.

LSA, Life saving appliance.

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

MEPC, Marine Environment Protection Committee

MSC, Maritime Safety Committee.

NOx, Nitrogen Oxides.

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

SOx, Sulphur Oxides.

Reg., Regulation.

Res., Resolution.

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

# Notes applicable to the whole of Annex A.1

- a) General: in addition to the testing standards specifically mentioned, a number of provisions, which must be checked during type-examination (type approval) as referred to in the modules for conformity assessment in Annex B, are to be found in the applicable requirements of the international conventions and the relevant resolutions and circulars of the IMO.
- b) Column 1: Items where transitional arrangements apply are marked \*Trans or \*\*Trans and appropriate footnote applies
- c) 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.
- d) Column 5: International conventions and testing standards apply in their up-to-date version. For the purpose of identifying correctly the relevant standards, test reports, certificates of conformity and declarations of conformity shall identify the specific testing standard applied and its version.
- e) Column 5: Where two sets of identifying standards are separated by "or", each set fulfils all the testing requirements to meet IMO Performance Standards; thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant International Instruments. Conversely, when other separators (comma) are used all the listed references apply.
- f) Column 6: Where module H appears, module H plus design-examination certificate is to be understood.
- g) The requirements laid down in this annex shall be without prejudice to carriage requirements in the international conventions.

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

Annex A.1 - Equipment for which detailed testing standards already exist in international instruments

1. Life-saving appliances

Notes applicable to section 1: Life saving appliances.

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

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		B+D B+E B+F	B+D B+E B+F	8 B B + + + B E D	
		-IMO Res. MSC.81(70).	-IMO Res. MSC.81(70)	-IMO Res. MSC.81(70).	
	4	-Reg. III/7, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, II, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-Reg. III/7, -Reg. III/26, -Reg III/36, -Reg III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) II, IV, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-Reg. III/7, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, II, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	
	3	-Reg. III/4, -Reg. X/3.	-Reg. III/4, -Reg. X/3.	-Reg. III/4, -Reg. X/3.	
	2	Lifebuoys	Position- indicating lights for life-saving appliances: (a) for survival craft and rescue boats, (b) for lifebuoys, (c) for	Lifebuoys self- activating smoke-Reg. X/3. signals	
	1	A.1/1.1	A.1/1.2	A.1/1.3	

_	2	က	4	2	9
A.1/1.4	Lifejackets	-Reg. III/4, -Reg. X/3.	-Reg. III/7, -Reg. III/22, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, II, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, -IMO MSC/Circ.922.	-IMO Res. MSC.81(70).	8 8 + + + E E E
A.1/1.5	Immersion suits and anti- exposure suits not classified as lifejackets: - Insulated or not insulated.	-Reg. III/4, -Reg. X/3.	-Reg. III/7, -Reg. III/22, -Reg. III/32, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, II, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	8 8 + + + F E D
A.1/1.6	Immersion suits and anti- exposure suits classified as lifejackets: - Insulated or non-insulated.	-Reg. III/4, -Reg. X/3.	-Reg. III/7, -Reg. III/22, -Reg. III/32, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, II, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	8 8 + + + E E C
A.1/1.7	Thermal protective aids	-Reg. III/4, -Reg. X/3	-Reg. III/22, -Reg. III/32, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, II, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	8 + + 8 + E 7 + E
A.1/1.8	Rocket parachute flares (pyrotechnics)	-Reg. III/4, -Reg. X/3.	-Reg. III/6, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, III, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	8 8 8 + + + T II II

-Reg. III/4, -Reg. X/3Reg. X/3Reg. X/3Reg. X/3Reg. X/3Reg. X/3Reg. X/3Reg. X/3IMO Res. MSC 36(63)-(1994 HSC Code) 8, -IMO Res. MSC 48(66)-(LSA Code) 1, IV, -IMO Res. MSC 97(73)-(2000 HSC Code) 8, -IMO MSC/Circ.809 including Add.1, -IMO MSC/Circ.811Reg. III/26,	-Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, IV, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, -IMO MSC/Circ.809 including Add.1, -IMO MSC/Circ.811Reg. III/26, -Reg. III/34,
-Reg. III/26,	-Reg. III/26, -Reg. III/34,
1SC.36(63)-(1994 HSC Code) 8, 1SC.48(66)-(LSA Code) I, IV, 1SC.97(73)-(2000 HSC Code) 8, 2irc.809 including Add.1,	-IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, -IMO MSC/Circ.809 including Add.1, -IMO MSC/Circ.811.
-Reg. III/4, -Reg. X/3. -Reg. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, IV, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, -IMO MSC/Circ.811.	
	ints -Reg. III/4, -Reg. X/3. its) -Reg. III/4, -Reg. X/3.
	rnts -Reg. III/4, -Reg. X/3. its) -Reg. III/4, -Reg. X/3.
■ II	Canopled reversible liferafts arrangements for liferafts (hydrostatic release units)

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	B + D G + F	B + D B + F G + F	8 8 8 8 8 4 + 4 9 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		B 0
2	-IMO Res. MSC.81(70), -ISO 15372 (2000).	-IMO Res. MSC.81(70), -IMO MSC/Circ.1006, G -ISO 15372 (2000).	-IMO Res. MSC.81(70).		
4	-Reg. III/21, -Reg. III/31, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, V, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-Reg. III/26, -Reg. III/34, -IMO Res. MSC.48(66)-(LSA Code) I,V, -IMO MSC/Circ.809 including Add.1, -IMO MSC/Circ.1016, -IMO MSC/Circ.1094.	-Reg. III/23, -Reg. III/33, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.		-Reg. III/16, -Reg. III/23, -Reg. III/33
က	-Reg. III/4, -Reg. X/3.	-Reg. III/4.	-Reg. III/4, -Reg. X/3.	Moved to A.2/1.3	
2	Inflated rescue boats	Fast rescue boats	Launching appliances using-Reg. III/4, falls (davits)	Float free launching appliances for survival craft	Launching
~	A.1/1.19	A.1/1.20	A.1/1.21	A.1/1.22	

2 3		-Pag 11/12	4	5	9
Liferaft - Reg. III/16, - Reg. III/16, - Reg. III/16, appliances - Reg. X/3 IMO Res. N - IMO		-Reg -Reg -IMO -IMO	-Reg. III/12, -Reg. III/16, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	Д + + + В В В
Fast rescue boat launching -Reg. III/4Reg appliances -IMO (Davits) -IMO	-Reg. III/4.	-Reg -Reg -IMO -IMO	-Reg. III/26, -Reg. III/34, -IMO Res. MSC.48(66)-(LSA Code) I, VI, -IMO MSC/Circ.809 including Add.1.	-IMO Res. MSC.81(70).	0 H H H D
Release mechanism for (a) Lifeboats and rescue boats and (b) Liferafts Launched by a fall or falls		-Reg -Reg -IMC -IMC	-Reg. III/16, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	B B + + B F E
-Reg Marine evacuation -Reg. X/3Reg systems -Reg. X/3IIMC		-Reg -Reg -IMO -IMO	-Reg. III/15, -Reg. III/26, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	B + F G
-Reg. III/4, -IMC -Reg. X/3IMC -IMC		-Reg -Reg -IMC -IMC	-Reg. III/26, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70), -IMO MSC/Circ.810.	B + D + F F

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A.1/1.29 *Trans (see Note*)	Embarkation ladders	-Reg. III/4, -Reg. III/11, -Reg. X/3.	-Reg. III/11, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.48(66)-(LSA Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-IMO Res. MSC.81(70), -ISO 5489 (2008).	B + D B + F
A.1/1.30	Retro-reflective materials	-Reg. III/4, -Reg. X/3.	-Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	B + D -IMO Res. A.658(16). B + E B + F	B B + + B + F E E D
A.1/1.31	Survival craft two-way VHF radio telephone apparatus	Moved to A.1/5.17 and A.1/5.18	d A.1/5.18		
A.1/1.32	9 GHz SAR transponder (SART)	Moved to A.1/4.18			
A.1/1.33	Radar reflector for lifeboats and rescue boats	-Reg. III/4, -Reg. X/3.	-Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, V, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, -IMO Res. MSC.164(78).	B + D -EN ISO 8729 (1998).B + E B + F	8 8 . - + + 
A.1/1.34	Compass for lifeboats and rescue boats	Moved to A.1/4.23			
A.1/1.35	Portable fire - extinguishing equipment for lifeboats and rescue boats	Moved to A.1/3.38			
A.1/1.36	Lifeboat / rescue boat propulsion engine	-Reg. III/4, -Reg. X/3.	-Reg. III/34, -IMO Res. MSC.48(66)-(LSA Code) IV, V.	-IMO Res. MSC.81(70).	B B + + B + F E

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A.1/1.37	Rescue boat propulsion -Reg. III/4 engine-outboard -Reg. X/3. motor	-Reg. III/4, -Reg. X/3.	-Reg. III/34, -IMO Res. MSC.48(66)-(LSA Code) V.	-IMO Res. MSC.81(70).	B + D B + E B + F
A.1/1.38	Searchlights for use in lifeboats and rescue boats	-Reg. III/4, -Reg. X/3.	-Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, V, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	B B + F B + F F F F F F F F F F F F F F
A.1/1.39	Open reversible liferafts	-Reg. III/4, -Reg. X/3.	-IMO Res. MSC.36(63)-(1994 HSC Code) 8, Annex 10, -IMO Res. MSC.48(66)-(LSA Code) 1, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, Annex 11.	-IMO Res. MSC.36(63)-(1994 HSC Code) Annex 10, -IMO Res. MSC.97(73)-(2000 HSC Code) Annex 11.	B + D + F
A.1/1.40	Mechanical pilot hoist	Moved to A.1/4.48			
A.1/1.41	Winches for survival craft and rescue boats	-Reg. III/4, -Reg. X/3.	-Reg. III/16, -Reg. III/17, -Reg. III/24, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) 1, VI, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70).	В В В + + + В В В В
A.1/1.42	Pilot ladder	Moved to A.1/4.49			
A.1/1.43 **Trans (see Note**)	Rigid/inflated rescue boats	-Reg. III/4, -Reg. X/3.	-Reg. III/21, -Reg. III/31, -Reg. III/34, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, V, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-IMO Res. MSC.81(70), -IMO MSC/Circ.1006. ISO 15372 (2000)	B B + + D -

2. Marine pollution prevention

N O	Item designation	Regulation MARPOL 73/78 where "type approval" is required	Regulations of MARPOL 73/78 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
~	6	e	4	ĸ	ď
A.1/2.1	Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	-Annex I, Reg 14.	Annex I, Reg. 14, -IMO MEPC.1/Circ.643.	(49), rc.643.	0 0 1 + + + 8 8 8
A.1/2.2	Oil/water interface detectors	-Annex I, Reg. 32.	-Annex I, Reg. 32.	-IMO Res. MEPC.5(XIII).	B + D B + E B + F
A.1/2.3	Oil-content meters	- Annex I, Reg. 14.	Annex I, Reg. 14, -IMO MEPC.1/Circ.643.	-IMO Res. MEPC.107(49), -IMO MEPC.1/Circ.643.	B B + + B + E
A.1/2.4	Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.)	Deliberately left blank			

1	2	3	4	2	9
A.1/2.5	Oil discharge monitoring and control system for oil tankers	-Annex I, Reg. 31.	-Annex I, Reg. 31.	-IMO Res. MEPC.108(49).	B + E B + F
A.1/2.6	Sewage systems	-Annex IV, Reg. 9.	-Annex IV, Reg. 9.	-IMO Res. MEPC.159(55).	B + D B + E B + F
A.1/2.7	Shipboard incinerators	-Annex VI, Reg. 16.	-Annex VI, Reg.16.	-IMO Res. MEPC.76(40).	B + D B + E G + F
A.1/2.8 *Trans (see Note*)	On board NOx monitoring and recording devices	-Annex VI, Reg. 13, -NOx Technical Code, -IMO Res. MEPC.177(58).	-Annex VI, Reg. 13, -NOx Technical Code, -IMO Res. MEPC.177(58), -IMO MEPC.1/Circ.638.	-IMO Res. MEPC.103(49), -IMO Res. MEPC.177(58).	B + + + B + E D
A.1/2.9 *Trans (see Note*)	Other technological methods to limit SOx emissions	Other technological methods to limit SOx emissions	-Annex VI, Reg. 14.	-IMO Res. MEPC.170(57)	B + D B + E G + F

3. Fire protection equipment

Item designation	Regulation SOLAS 74 where "type on approval" is required	Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable	Testing standards	Modules for conformity assessment
		=======================================		
2	က	4	5	9
Primary decks	-Reg. II-2/4,	-Reg. II-2/4, -Reg. II-2/6.	TP Part	B + D
covering		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	2 and Part 6 or Annex 2, -IMO MSC/Circ.1102,	ш
			-IMO MSC/Circ.1120.	
		-Reg. II-2/4, Reg. II-2/10, -Reg. II-2/19,	-EN 3-6 (1995) including A.1 (1999),	
Portable fire		-Reg. II-2/20, -IMO Res. A.951(23),	-EN 3-7 (2004) including A.1 (2007),	B + D
extinguishers		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-EN 3-8 (2006) includina AC (2007).	Ш IL + + 0 М
	Code) 4.	LIMO Res. MSC.98(73)-(FSS Code) 4,	-EN 3-9 (2006)	
		-IMO MSC/Circ.1239, IMO MSC/Circ.1275	including AC (2007).	
		FIMO (MOO) (C= 2: -17: 0:		

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2	Protective clothing for fire fighting: -EN 469 (2005) including A1 (2006) and AC (2006) Protective clothing for fire fighting – Reflective clothing for B + specialised fire- fighting: -EN 1486 (2007). Protective clothing for fire fighting – -EN 1486 (2007). Protective clothing with a reflective outer surface: -ISO 15538 (2001).	-EN ISO 20344 (2004) including A1 (2007) and AC (2005), -EN ISO 20345 (2004) including A1 (2007) and AC (2007).	-EN 659 (2003) including A1 (2008).
4	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 3.
3	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 3.
2	Fire-fighter's outfit: protective clothing (close proximity clothing)	Fire-fighter's outfit: boots	Fire-fighter's outfit: gloves
-	A.1/3.3	A.1/3.4	A.1/3.5

9	B + + B + F F F	8 8 + + + F E	B + + B + F E
2	-EN 443 (2008).	-EN 136 (1998) B + Including AC (2003), B + Including AC (2006), B + Including AC (2006).	-EN 14593-1 (2005), -EN 14593-2 (2005) including AC (2005), -EN 14594 (2005).
4	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 3.	-IMO Res. MSC.36(63)-(1994 HSC Code) 7.
3	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 3.	-Reg. X/3IMO Res. MSC.36(63)-(1994 HSC Code) 7. Note: This equipment is only for high speed craft built under provisions of the 1994 HSC Code.
2	Fire-fighter's outfit: helmet	Self-contained compressed-air-operated breathing apparatus Note: For use in accidents involving dangerous goods a positive pressure type mask is required.	Compressed air line breathing apparatus
1	A. 1/3.6	A. 1/3.7	A. 1/3.8

9	B + D B + E B + F	1165, B + D B + E B + F
2	B + D-IMO Res. A.800(19). B + F-B-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-F-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-B-F-B-F-B	-IMO MSC/Circ.1165, B + D Appendix A. B + F
4	-Reg. II-2/7, -Reg. II-2/9, -Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 8. -IMO MSC/Circ.912.	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 7.
က	-Reg. II-2/7, -Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 8.	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 7.
2	Sprinkler systems components for accommodation spaces, service spaces and control stations equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited to nozzles and their performance). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces and cargo pump-rooms
-	A. 1/3.9	A.1/3.10 *Trans (see Note*)

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	'A' & 'B' Class divisions fire integrity	'A' Class:	-Reg.II-2/9, and,	-IMO Res.	(
A.1/3.11	ose[o, ∇, (e)	-Reg. II-2/3.2.	- A' Class: - Reg. II-2/3.2.	MSC.61(67)-(FTP B + Code) Annex 1 Part 3B +	ж в + + П П
	(a) A class divisions, (b) 'B' class divisions.	'B' Class: -Reg. II-2/3.4.	'B' Class: -Reg. II-2/3.4.	and Annex 2, -IMO MSC/Circ.1120.	B + F
	Devices to prevent the			(FOOC) FOOT NE	
A.1/3.12	passage of flame into the	-Reg. II-2/4, -Reg. II-2/16.	-Reg II-2/4, -Reg II-2/16.	-EN 12074 (2001), -ISO 15364 (2007), -IMO MSC/Circ.677.	B + T
	cargo tanks ın tankers				
A.1/3.13	Non- combustible	3,	-Reg. II-2/3, -Reg. II-2/5, -Reg. II-2/9.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part	+ +
	materials	-Reg. X/3.	-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	1, -IMO MSC/Circ.1120.	π + π
	Materials other than steel for				
A.1/3.14	pipes penetrating 'A'	Item included in A.1/3.26 and A.1/3.27	.26 and A.1/3.27		
	or 'B' Class division				

ode) 7, 7	teg. II-2/4, MO Res. MSC.36(63)-(1994 HSC Code) 7, MO Res. MSC.97(73)-(2000 HSC Code) 7, MO MSC/Circ.1120.	-Reg. II-2/4, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, 10, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, 10, -IMO MSC/Circ.1120.	Materials other than steel for pipes conveying oil or fuel oil -Reg. II-2/4, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, fittings, (b) valves, (c) flexible pipe assemblies.
	teg. II-2/9.	Reg. II-2/9.	Fire Doors -Reg. II-2/9.

9	□ Ⅲ ⊬ + + + 8 8 8
9	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 4.
4	-Reg. II-2/9, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.
3	-Reg. II-2/9, -Reg. X/3.
2	Fire door control systems components.  Note: When the term "system components" is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international requirements are fulfilled.
1	A. 1/3.17

ant 2 nex 120, 120, B + E B + F S d in SO	8 B + + + D III II	+ + +
	art 102 120	art B + D B + E 102, B + F
7)-(FTF nex 1 Pi, or Anii, or Anii (2002); (2002) have aterial is aterial is leasure (easure); e with 1	7)-(FTP) nex 1 Pa )/Circ.11	7)-(FTP) nex 1 Pa //Circ.11
MO Res. 1SC.61(6) Ani nd Part 5 MO MSC SO 1716 Interest and pequired to ertain meal be mall be	MO Res. (1SC.61(6) (2ode) Ani MO MSC MO MSC	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 8, -IMO MSC/Circ.1102,
720 8077 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	720677	720877
de) 7,	de) 7, de) 7.	de) 7, de) 7,
ASC Coo	4SC Coc	150 Coc
-(1994 H	)-(1994 H	)-(1994 H
C.36(63 C.97(73 c.1120.	C.36(63) C.97(73)	C.36(63) C.97(73)
II-2/3, II-2/5, II-2/6, II-2/9, Res. MS Res. MS	II-2/3, II-2/9, Res. MS Res. MS	-Reg. II-2/3, -Reg. II-2/5, -Reg. II-2/9, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.
-Reg. -Reg. -IMO -IMO	-Reg. -Reg. -IMO	-Reg -Reg -IMO
9. II-2/3, 11-2/5, 12. II-2/6, 13. X/3.	g. II-2/3, g. II-2/9, g. X/3.	-Reg. II-2/3, -Reg. II-2/5, -Reg. II-2/9, -Reg.X/3.
Å     Å     Å       Å     Å     Å       Ø     Ø     Ø       Ø     Ø     Ø	-Reç d-Reç -Reç	7, 7, 7, 7, 9, 9, 7, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9,
Is and verings relations of the ction of the ction of visions, austible	es, s and uspender naterials	ered
Surface material floor coving with low spread characte (a) deccovenes (b) paint systems (c) floor covers, (d) pipe insulatic covers, (e) adhe used in constructions (f) comb ducts.	Draperi curtains other st textile n and film	Upholstered furniture
1/3.18	/3.19	٩.1/3.20
	als and overlings  w flame- w flame- iteristics corative is -Reg. II-2/3, -Reg. II-2/3, -Reg. II-2/6, -Reg. II-2/9, -Reg. II-2/9	materials and floor coverings with low flame-spread characteristics (a) decorative veneers (b) paint systems, (c) floor coverings, (d) pipe insulation covering (d) pipe insulation covers (f) combustible ducts.  Draperies, (f) combustible ducts.  Draperies, curtains and other suspended-Reg. II-2/3, eveneral floor coverings, (f) combustible ducts.  Draperies, curtains and other suspended-Reg. II-2/3, eveneral floor coverings and films

R + D	лшц Ошц 1 + + + + + + + + + + + + + + + + + + +		
Code) Annex 1 Part B 9,	;/Circ.1102, ;/Circ.1120. 7)-(FTP lex 1 Part ;/Circ.1120.		
- IMO MSC - IMO MSC - IMO MSC	-IMO Res. MSC.61(6 Code) Anr 3, -IMO MSC	-IMO Res. MSC.61(6 Code) Anr 3, -IMO MSC	-IMO Res. MSC.61(6 Code) Anr 3, -IMO MSC
Code) 7, Code) 7.			
3)-(1994 HSC 3)-(2000 HSC			
-Reg. II-2/3, -Reg. II-2/9, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-Reg. II-2/9.	II-2/9.	II-2/9.
-Reg. -IMO .	-Reg.	-Reg	-Reg
-Reg. II-2/3, -Reg. II-2/9, -Reg. X/3.	-Reg. II-2/9.	-Reg. II-2/9. Moved to A. 1/3.26	teg. II-2/9.  oved to A.1/3.26  oved to A.1/3.26
Bedding -Re components -Re	Fire dampers -Re	dampers ustible trations gh 'A' class ons	dampers ustible trations gh 'A' class ons ric Cable sits through ass
A.1/3.21 Bec			A.1/3.22 Fire Corr Corr Corr Corr Corr Corr Corr Co

9	O III ii	O.W.	O III ii	0.111.11
	8 B B + B B B B B B B B B B B B B B B B	8 + + 8 + + 8 + + 1 - +	8 8 8 + + + E E E E E E E E E E E E E E E E E	8 B B 1 + + +
5	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 3, -IMO MSC/Circ.1120.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 3, -IMO MSC/Circ.1120.	-ISO 6182-1 (2004). Or, EN 12259-1 (1999) including A1 (2001), A2 (2004) and A3 (2006).	-EN 14540 (2004) B + E including A.1 (2007). B + F
	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Pa 3, -IMO MSC/Circ.11	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Pa 3, -IMO MSC/Circ.11	-ISO 6182 Or, EN 12259 including A2 (2004) (2006).	-EN 14540 (2004) including A.1 (200
4	-Reg. II-2/9, -IMO MSC.1/Circ.1276.	-Reg. II-2/9.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.44(65), -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 8, -IMO MSC/Circ.912.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.
3	-Reg. II-2/9.	-Reg. II-2/9.	-Reg. II-2/7, -Reg. II-2/10, -Reg. X/3.	-Reg. II-2/10, -Reg. X/3.
2	Penetrations through 'A' class divisions (a) electric cable latransits, (b) pipe, duct, trunk, etc penetrations.	Penetrations through 'B' class divisions (a) electric cable transits, (b) pipe, duct, trunk, etc penetrations.	Sprinkler systems (limited to sprinkler heads). (Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)	Fire hoses
1	A.1/3.26	A. 1/3.27	A. 1/3.28	A.1/3.29

9	8 + + B 8 + E
5	-EN 60945 (2002), -IEC 60092-504 (2001), -IEC 60533 (1999), and as applicable to: a) Category 1: (safe area): -EN 50104 (2002) including A.1 (2004) Oxygen, -EN 60079-29-1 (2007). b) Category 2: (explosive gas atmospheres): -EN 50104 (2002) including A.1 (2004) Oxygen, -EN 50104 (2002) -EN 50104 (2002) -EN 50104 (2002) -EN 50104 (2002) -EN 50104 (2007), -IEC 60079-10 (2007), -IEC 60079-11 (2006), -IEC 60079-15 (2006), -IEC 60079-26
4	-Reg. II-2/4, -Reg. VI/3, -IMO Res. MSC.98(73)-(FSS Code) 15.
3	Portable oxygen analysis and gas-Reg. II-2/4, detection equipment
2	Portable oxygen analysis and gas detection equipment
1	A. 1/3.30

2	П	3	4	5	9
Nozzles for fixed sprinkler systems, for stem delete high speed craft (HSC)	Item delete	d as it is cc	Item deleted as it is covered by A.1/3.9 and A.1/3.28		
Fire restricting materials (except turniture) for high speed craft	-Reg. X/3.		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 10.	B + B + F E B + F
Fire restricting materials for furniture for high speed craft	-Reg. X/3.		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 10.	B + D B + E B + F
Fire resisting divisions for high-Reg. X/3. speed craft	-Reg. X/3.		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.	B + D B + E B + F
Fire doors on high speed craft	-Reg. X/3.		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.	B + D B + E B + F
Fire dampers on -Reg. X/3. high speed craft	-Reg. X/3.		-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO MSC/Circ.1120.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.	8 + + 8 + E 7 + E

		Res. 11(67)-(FTP B + E Annex 1 Part B + F			16	
	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 11.			-EN 3-6 (1995) including A1 (1999), -EN 3-7 (2004) including A1 (2007), -EN 3-8 (2006) including AC (2007).	-EN 3-6 (1995) including A1 (1999), -EN 3-7 (2004) including A1 (2007), -EN 3-8 (2006) including AC (2007).	-EN 3-6 (1995) including A1 (1999) -EN 3-7 (2004) including A1 (2007) -EN 3-8 (2006) including AC (2007) -IMO MSC/Circ.116 -IMO Res. A.752(18 Or, -ISO 15370 (2001).
	C Code) 7, C Code) 7.			C Code) 8, de) I, IV, V, C Code) 8.	C Code) 8, le) I, IV, V, C Code) 8. C Code) 7, C Code) 7, de) 7.	C Code) 8, le) I, IV, V, C Code) 8. C Code) 7, de) 7.
	-IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.			-Reg. III/34, -IMO Res. A.951(23), -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, V, -IMO Res. MSC.97(73)-(2000 HSC Code) 8.	-Reg. III/34, -IMO Res. A.951(23), -IMO Res. MSC.36(63)-(1994 HSC Code) 8, -IMO Res. MSC.48(66)-(LSA Code) I, IV, V, -IMO Res. MSC.97(73)-(2000 HSC Code) 8Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.97(73)-(FSS Code) 7.	-Reg. III/34, -IMO Res. A.951(23), -IMO Res. MSC.36(63)-(1994 HSC CodIMO Res. MSC.48(66)-(LSA Code) I, IVIMO Res. MSC.97(73)-(2000 HSC CodIMO Res. MSC.36(63)-(1994 HSC CodIMO Res. MSC.97(73)-(FSS Code) 7
	-IMO Res. MSC. -IMO Res. MSC.			-Reg. III/34, -IMO Res. A.951(23), -IMO Res. MSC.36(63) -IMO Res. MSC.48(66)	-Reg. III/34, -IMO Res. A.957 -IMO Res. MSCIMO Res. MSCIMO Res. MSCIMO Res. MSCIMO Res. MSC.	-Reg. III/34, -IMO Res. A.957 -IMO Res. MSCIMO Res. MSC.
	Reg. X/3.			-Reg. III/4, -Reg. X/3.	0,	SS
Danatrations	- able	oenetrations.				su su
- Dan	throutersis through the size of the size o	bene	=		A. 1/3.38 equipm lifeboarescue equiva water-restingue to 1/3.39 system machir spaces cargo prooms	

2	dash	3	4	5	9
-Reg. II-2/4In systems -Reg. II-2/4In components -In -II -II -II -II -II -II -II -II -II		<u> </u>	-Reg. II-2/4, -IMO Res. A.567(14), -IMO Res. MSC.98(73)-(FSS Code) 15, -IMO MSC/Circ.353, -IMO MSC/Circ.387, -IMO MSC/Circ.485, -IMO MSC/Circ.731,	-IMO MSC/Circ.353, -IMO MSC/Circ.387, -IMO MSC/Circ.450 Rev.1, -IMO MSC/Circ.485, -IMO MSC/Circ.731.	В В В + + + В Б
Nozzles for deep fat cooking equipment fire -Reg. II-2/1, -R. extinguishing -Reg. II-2/10, -IIV systems -Reg. X/3IIV manual type).	g-Reg. II-2/1, -Reg. II-2/10, -Reg. X/3.	ሗሗ号	-Reg. II-2/1, -Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-ISO 15371 (2009).	B + D B + E B + F
-Reg. II-2/10, -Reg. X/3, -IINO Res. MSC.98(73)-(FSS -IIN Code) 3.		\$ ≥ ≥ ≥	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 3.	-IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 1, -IMO Res. MSC.98(73)-(FSS Code) 3.	B + D B + E B + F

_	2	3	4	2	9
A.1/3.45	Equivalent fixed gas fire extinguishing systems components (extinguishing medium, head valves and nozzles) for machinery spaces and cargo pump rooms	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 5.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 5, -IMO MSC/Circ.848, -IMO MSC.1/Circ.1317.	-IMO MSC/Circ.848, B + I -IMO MSC.1/Circ.1317. B + B	B B + + + B B
A.1/3.46	Equivalent fixed gas fire extinguishing systems for machinery spaces (aerosol systems)	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 5.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 5, -IMO MSC.1/Circ.1317.	-IMO MSC.1/Circ.1270.	8 B + + + B B

9	ОШ Ц + + + 8 8 8
5	-IMO MSC/Circ.670.
4	-Reg. II-2/10, -IMO Res. MSC.98(73)-(FSS Code) 6 -IMO MSC.1/Circ.1239.
က	-Reg. II-2/10.
2	Concentrate for Fixed High Expansion Foam Fire Extinguishing Systems for Machinery Spaces and Cargo Pump Rooms.  Note: The fixed high expansion foam fire extinguishing system (including those systems which use inside air from their working spaces for their intended performance), for machinery spaces and cargo pump rooms must still be tested with the approved concentrate to the satisfaction of the
_	A.1/3.47

9	○ Ⅲ Ⅲ + + + 8 8 8						
5	and indicating and indicating ent. Electrical lons in ships: 2 (1997) g AC(1999) 2006). uupply ent: 1997) g AC(1999), g AC(1900) g AC(1900) g AC(2000), g AC(2000)	(2001), -IEC 60533 (1999).					
4	-Reg. II-2/7, -IMO Res. MSC.36(63)-(19-11MO Res. MSC.98(73)-(73)-(73)-(73)-(73)-(73)-(73)-(73)-						
3	for ns, -Reg. II-2/7, es, -Reg. X/3, ion -IMO Res. MSC.98(73)-(FSS Code) 9.						
2	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces						
1	A. 1/3.51						

_				
9	B + D B + E B + F	B + D B + E F F	8 + + + F E D	
2	-EN 1866 (2005), EN 1866-1 (2007). Or, -ISO 11601 (2008).	Sounders -EN 54-3 (2001) including A1(2002) and A2(2006), -IEC 60092-504 (2001), -IEC 60533 (1999).	-EN 60945 (2002), -IEC 60092-504 (2001), -IEC 60533 (1999), and as applicable to: a) Category 4: (safe area) -EN 50104 (2002) including A.1 2004 Oxygen. b) Category 3: (explosive gas atmospheres) -EN 50104 (2002) including A.1 2004 Oxygen, -EN 50104 (2002) including A.1 2004 Oxygen, -EN 60079-29-1	
4	-Reg. II-2/4, -Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 4.	-Reg. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7, -IMO Res. MSC.98(73)-(FSS Code) 4.  -Reg. II-2/7, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(FSS Code) 9IMO Res. MSC.98(73)-(FSS Code) 9Reg. II-2/4, -Reg. VI/3, -IMO Res. MSC.98(73)-(FSS Code) 15.		
င	-Reg. II-2/10, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 4.	-Reg. II-2/7, -Reg. X/3, -IMO Res. MSC.98(73)-(FSS Code) 9.	-Reg. II-2/4, Reg. VI/3.	
2	Non-portable and transportable fire extinguishers	Alarm devices	Fixed oxygen analysis and gas-Reg. II-2/4, detection Reg. VI/3. equipment	
_	A.1/3.52	A.1/3.53	A. 1/3.54	

9	B + D B + F B + F	B + + B B + F	0 B B + + + B B B	8 B B + + + E E E	0 U L + + + 8 8 8	
2	-EN 15182-1 (2007), -EN 15182-3 (2007).	-EN 671-1 (2001) including AC (2002).	-IMO MSC/Circ.798.  MSC.1/Circ.1312.		-IMO MSC/Circ.553, -IMO MSC.1/Circ.1312.	
4	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code) 7, -IMO Res. MSC.97(73)-(2000 HSC Code) 7.	-Reg. II-2/10, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg. II-2/10.8.1, -IMO Res. MSC.98(73)-(FSS Code) 14, -IMO MSC.1/Circ.1239, -IMO MSC.1/Circ.1276.	-Reg. II-2/10, -IMO Res. MSC.98(73)-(FSS Code) 6, 14, -IMO MSC.1/Circ.1239, -IMO MSC.1/Circ.1276.	-IMO Res. MSC.4(48)-(IBC Code).	
3	-Reg. II-2/10, -Reg. X/3.	-Reg. II-2/10, -Reg. X/3.			-IMO Res. MSC.4(48)-(IBC Code).	
2	Dual purpose type nozzles (spray/jet type)	Fire hoses (reel type)	Medium Expansion Foam Fire Extinguishing Systems components - Fixed Deck Foam for	Fixed Low Expansion Foam Fire Extinguishing Systems components for Machinery Spaces and Tanker Deck Protection.	Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers	
1	A. 1/3.55 *Trans (see Note*)	A. 1/3.56 *Trans (see Note*)	A.1/3.57 *Trans (see Note*)	A.1/3.58 *Trans (see Note*)	A.1/3.59 *Trans (see Note*)	

9	8 8 8 + + + F E D	8 B + + F P E D					
2	-IMO MSC.1/Circ.1268.	-IMO MSC.1/Circ.1271.					
4	-Reg. II-2/10, -IMO Res. MSC.98(73)-(FSS Code) 7.	-Reg. II-2/10, -IMO Res. MSC.98(73)-(FSS Code) 6.					
င	-Reg. II-2/10.	-Reg. II-2/10.					
2	Nozzles for fixed pressure waterspraying fire-extinguishing systems for cabin balconies	Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms Note: Inside air high expansion foam systems for the protection of machinery spaces and cargo pump rooms shall be tested with the approved concentrate to the satisfaction of the					
_	A.1/3.60 *Trans (see Note*)	A.1/3.61 *Trans (see Note*)					

4. Navigation equipment

Notes applicable to section 4: Navigation equipment.

Column 5: Wherever reference is made to EN 61162 series or IEC 61162 series, the intended item layout shall be taken into account to determine the applicable standard of EN 61162 series or IEC 61162 series.

No.	ltem 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
-	c	~	7	ĸ	ď
-	4	ס	***	7	o
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Magnetic	.Red.//	-Reg. V/19, -IMO Res. A 382(X)	-ISO 1069 (1973), -ISO 25862 (2009), -EN 60945 (2002). Or	B + E
- : :	compass		-IMO Res. A.694(17).	-1SO 1069 (1973), -1SO 25862 (2009).	ш + <u>м</u> О
				-IEC 60945 (2002).	
				-EN 60945 (2002),	
				-EN 61162 series;	
		004 1//18		-ISO 22090-2 (2004),	
		-Nag. V/10,		including	
		-Reg. V/19, Deg X/3	-Reg. V/19,	Corrigendum 2005,	
		-INO Res	-IMO Res. A.694(17),	-EN 62288 (2008).	B + D
7/7 2			-IMO Res. MSC.36(63)-(1994 HSC Code) 13,	Or,	B + E
7. 1/4.2	THD (magnetic		-IMO Res. MSC.97(73)-(2000 HSC Code) 13,	-IEC 60945 (2002),	B + F
			-IMO Res. MSC.116(73),	-IEC 61162 series.	Ŋ
			-IMO Res. MSC.191(79).	-ISO 22090-2 (2004),	
		14150.97(73)-(2000		including	
		130 COUE) 13.		Corrigendum 2005,	
				-IEC 62288	
				Ed.1.0(2008).	

9	(), BB++ BB++ CB++			1) 06, B + E G + F		
2	-EN ISO 8728 (1998), -EN 60945 (2002), -EN 61162 series, -EN 62288 (2008). Or, -ISO 8728 (1997), -IEC 60945 (2002), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).			-EN ISO 9875 (2001) including ISO Technical Corrigendum 1: 2006,-EN 60945 (2002),-EN 61162 series,-EN 62288 (2008). Or,-ISO 9875 (2000) including ISO Technical Corrigendum 1: 2006,-IEC 60945 (2002),-IEC 60945 (2002),-IEC 61162 series,-IEC 61288		
4	-Reg. V/19, -IMO Res. A.424(XI), -IMO Res. A.694(17), -IMO Res. MSC.191(79).	.1/4.35 and A.1/4.36		-Reg. V/19, -IMO Res. A.224(VII), -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.74(69) Annex 4, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).		
င	-Reg. V/18.	Moved to A.1/4.34, A.1/4.35 and A.1/4.36	Moved to A.1/4.34	-Reg. V/18, -Reg. X/3, -IMO Res. Echo - sounding MSC.36(63)-(1994 equipment HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.		
2	Gyro compass	Radar equipment	Automatic radar plotting aid (ARPA)	Echo - sounding equipment		
7	A.1/4.3	A.1/4.4	A.1/4.5	A.1/4.6		

9	0 H H H D		0 H H + + + 0 H D		Ошц + + + ввв
5	-EN 60945 (2002), -EN 61023 (2007), -EN 61162 series, -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61023 (2007), -IEC 61162 series, -IEC 62288 -IEC 62288 -IC 62208).		-EN 60945 (2002), -EN 61162 series, -ISO 20672 (2007), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 series, -ISO 20672 (2007), -IEC 62288 Ed.1.0(2008).		-EN 60945 (2002), -EN 61075 (1993), -EN 61162 series, -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61075 (1991), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).
4	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. A.824(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.96(72), -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).	.1/4.21 and A.1/4.22	-Reg. V/19, -IMO Res. A.526(13), -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).		-Reg. V/19, -IMO Res. A.694(17), -IMO Res. A.818(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).
3	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	Moved to A.1/4.20, A.1	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	Deliberately left blank	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Speed and distance measuring equipment (SDME)	Rudder angle, rpm, pitch indicator	Rate-of-turn indicator	Direction finder	Loran-C equipment
1	A.1/4.7	A.1/4.8	A.1/4.9 *Trans (see Note*)	A.1/4.10	A. 1/4.11

9	B + + B C + + B		B + B B + E G + F	О Ш
5	-EN 60945 (2002), -EN 61075 (1993), -EN 61162 series, -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61075 (1991), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).		-EN 60945 (2002), -EN 61108-1 (2003), -EN 61162 series, -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61108-1 (2003), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).	-EN 60945 (2002), -EN 61108-2 (1998), -EN 61162 series, -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61108-2 (1998), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).
4	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. A.818 (19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).		-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code), -IMO Res. MSC.112(73), -IMO Res. MSC.191(79).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.113(73), -IMO Res. MSC.191(79).
3	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	Deliberately left blank	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Chayka equipment	Decca navigator equipment	GPS equipment	GLONASS equipment
1	A.1/4.12	A.1/4.13	A.1/4.14	A.1/4.15

_	2	3	4	5	9
A.1/4.16	Heading control system (HCS)	-Reg. V/18.	-Reg. V/19, -IMO Res. A.342(IX), -IMO Res. A.694(17), -IMO Res. MSC.64(67) Annex 3, -IMO Res. MSC.191(79).	-ISO 11674 (2006), -EN 60945 (2002), -EN 61162 series, -EN 62288 (2008). E Or, -ISO 11674 (2006), -IEC 60945 (2002), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).	B + + B B + + B
A.1/4.17	Mechanical pilot hoist	Mechanical pilot Moved to A.1/1.40			
A.1/4.18	9 GHz SAR transponder (SART)	-Reg. III/4, -Reg. IV/14, -Reg. V/18, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. III/6, -Reg. IV/7, -IMO Res. A.530(13), -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, -ITU-R M.628-3(11/93).	-EN 60945 (2002), -EN 61097-1 (2007). Or, -IEC 60945 (2002), -IEC 61097-1 (2007).	B B + + + B B F E D
A.1/4.19	Radar equipment for high-speed craft	Moved to A.1/4.37			

9	B B + + + B B	В В В + + + В В В	О Ш Ц + + + В В Б
5	-EN 60945 (2002), -EN 61162 series, -ISO 20673 (2007), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 series, -ISO 20673 (2007), -IEC 62288 Ed.1.0(2008).	-EN 60945 (2002), -EN 61162 series, -ISO 22554 (2007), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 series, -ISO 22554 (2007), -IEC 62288 Ed.1.0(2008).	-EN 60945 (2002), -EN 61162 series, -ISO 22555 (2007), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 series, -ISO 22555 (2007), -IEC 62288 Ed.1.0(2008).
4	-Reg. V/19, -IMO Res. A.526(13), -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).
က	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Rudder angle indicator	Propeller revolution indicator	Pitch indicator
_	A.1/4.20 *Trans (see Note*)	A.1/4.21 *Trans (see Note*)	A. 1/4.22 *Trans (see Note*)

_	2	က	4	2	9
A.1/4.23	Compass for lifeboats and rescue boats	-Reg. III/4, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. III/34, -IMO Res. MSC.48(66)-(LSA Code) IV, V, -IMO Res. MSC.36(63)-(1994 HSC Code) 8, 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, 13.	- ISO 25862 (2009).	8 B B + + + E E E E
A. 1/4.24	Automatic radar plotting aid (ARPA) for high- speed craft	Automatic radar plotting aid (ARPA) for high- speed craft			
A.1/4.25	Automatic tracking aid (ATA)	Moved to A.1/4.35			
A.1/4.26	Automatic tracking aid (ATA) for high speed craft	Moved to A.1/4.38			
A.1/4.27	Electronic plotting aid (EPA)	Moved to A.1/4.36			
A.1/4.28	Integrated bridge system	Moved to A.2/4.30			

9	ОШЦ + + + ВВВ	В В Н Н Н Н В В В
5	-EN 60945 (2002), -EN 61162 Series, -IEC 61996-1 (2007- 11), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61996-1 (2007- -IEC 61996-1 (2007- -IEC 62288 Ed.1.0(2008).	-EN 60945 (2002), -EN 61162 Series, -EN 61174 (2008), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 61174 (2008), -IEC 62288 Ed.1.0(2008).
4	-Reg. V/20, -IMO Res. A.694 (17), -IMO Res. A.861 (20), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. A.817(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13 -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.232(82), -IMO Res. MSC.232(82), -IMO SN.1/Circ.266.  [ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested].
က	-Reg. V/18, -Reg. V/20, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Voyage data recorder (VDR)	Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)
_	A. 1/4.29	A. 1/4.30

9	B B + + B B + + C B E E	ОШЦ + + + ВВВО	О Ш L + + + В В В О
5	-ISO 16328 (2001), -EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008). Or, -ISO 16328 (2001), -IEC 60945 (2002), -EN 61162 Series, -IEC 62288 Ed.1.0(2008).	-EN 60945 (2002), -EN 61162 Series, -EN 61993-2 (2001), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 61993-2 (2001), -IEC 62288 Ed.1.0(2008).	-EN 60945 (2002), -EN 61162 Series, -EN 62065 (2002), -EN 62288 (2008). Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 62065 (2002), -IEC 62085 -IEC 62085 -IEC 62089
4	-IMO Res. A.694(17), -IMO Res. A.821(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.74(69), -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79), -ITU-R M. 1371-3(2007) Annex 3 shall only be applicable in accordance with requirements of IMO Res.MSC.74(69).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.74(69), -IMO Res. MSC.191(79).
	-Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -Reg. X/3, -IMO Res. identification system equipment (AIS) MSC.97(73)-(2000 HSC Code) 13, -IMO Res. HSC Code) 13.	-Reg. V/18.
2	Gyro compass for high-speed craft	Universal automatic identification system equipment (AIS)	Track control system (working at ship's speed from minimum manoeuvring speed up to 30 knots)
_	A.1/4.31	A.1/4.32	A.1/4.33

9	В В В	В В В	В В Н
	В В В	+ + +	В В В
	В В В	В В	В В
2	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008), -EN 62388 (2008). Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 62288 Ed.1.0(2008)IEC 62388 Ed.1.0(2007).	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008), -EN 62388 (2008), Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 62288 Ed.1.0(2008), -IEC 62388 Ed.1.0(2008).	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008), -EN 62388 (2008). Or, -IEC 60945 (2002), -IEC 60288 Ed.1.0(2008)IEC 62388 Ed.1.0(2007).
4	-Reg. V/19.	-Reg. V/19,	-Reg. V/19,
	-IMO Res. A.278(VIII),	-IMO Res. A.278(VIII),	-IMO Res. A.278(VIII),
	-IMO Res. A.823(19),	-IMO Res. A.694(17),	-IMO Res. A.694(17),
	-IMO Res. MSC.191(79),	-IMO Res. MSC.191(79),	-IMO Res. MSC.191(79),
	-IMO Res. MSC.192(79),	-IMO Res. MSC.192(79),	-IMO Res. MSC.192(79),
	-ITU-R M. 628-3(11/93),	-ITU-R M. 628-3(11/93),	-ITU-R M. 628-3(11/93),
	-ITU-R M. 1177-3(06/03).	-ITU-R M. 1177-3(06/03).	-ITU-R M. 1177-3(06/03).
ဇ	-Reg. V/18.	-Reg. V/18.	-Reg. V/18.
2	Radar	Radar	Radar
	equipment CAT	equipment CAT	equipment CAT
	1	2	3
_	A.1/4.34	A.1/4.35	A.1/4.36

9	О Ш Ц + + + В В В	ОШЦ + + + ВВВ	ОШЦ + + + ВВВ ОШЦ
2	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008), -EN 62388 (2008). Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 62288 Ed.1.0(2008). -IEC 62388 Ed.1.0(2007).	-EN 60945 (2002), -EN 61162 Series, -EN 62288 (2008), -EN 62388 (2008). Or, -IEC 60945 (2002), -IEC 61162 Series, -IEC 62288 Ed.1.0(2008). -IEC 62388 Ed.1.0(2007).	-EN ISO 8729 (1998), B + -EN 60945 (2002), B + Or, B + -ISO 8729 (1997), G
4	-IMO Res. A.278(VIII), -IMO Res. A.694(17), -IMO Res. A.820(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79), -IMO Res. MSC.192(79), -ITU-R M. 628-3(11/93), -ITU-R M. 1177-3(06/03).	-IMO Res. A.278(VIII), -IMO Res. A.694(17), -IMO Res. A.820(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79), -IMO Res. MSC.192(79), -ITU-R M. 628-3(11/93), -ITU-R M. 1177-3(06/03).	-Reg. V/19, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.164(78).
က	Radar -Reg. X/3, -IMO Res. high speed craft HSC Code) 13, applications -IMO ResIMO Res. CAT 1H, CAT MSC.97(73)-(2000 HSC Code) 13.	-Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Radar equipment for high speed craft applications (CAT 1H, CAT 2H and CAT 3H)	Radar equipment approved with a chart option, namely: a) CAT 1 with Chart option, b) CAT 2 with Chart option, c) CAT 1for HSC with Chart option, d) CAT 2 for HSC with Chart	Radar reflector
_	A.1/4.37	A.1/4.38	A.1/4.39

9	B+D B+E B+F G	B+D B+E G	B+D B+E B+F G	B+D B+E B+F G
2		-ISO 22090-3 (2004), -EN 60945 (2002), -EN 61162 series, -EN 62288 (2008).  Or, -ISO 22090-3 (2004), BIEC 60945 (2002), -IEC 61162 series, -IEC 61288 -IEC 610608).	-ISO 17884 (2004), BEN 60945 (2002). B-Or, ISO 17884 (2004), G-IEC 60945 (2002).	-ISO 16273 (2003), BEN 60945 (2002). B-Or, BISO 16273 (2003), GIEC 60945 (2002).
4	-IMO Res. A.694(17), -IMO Res. A.822(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.191(79).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.116(73), -IMO Res. MSC.191(79).	-IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-IMO Res.A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.94(72), -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
က	-Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Heading control system for high speed craft	Transmitting heading device THD (GNSS method)	Searchlight for high speed craft	Night vision equipment for high speed craft
_	A.1/4.40	A.1/4.41	A.1/4.42	A. 1/4.43

9	B+D B+E B+F G		□ Ⅲ ℍ + + + □ Ⅲ ℍ
3	-EN 60945 (2002), -IEC 61108-4 (2004), -EN 61162 series. Or, -IEC 60945 (2002), -IEC 61108-4 (2004), -IEC 61162 series.		-ISO 22090-1 (2002) including Corr.1 (2005), -EN 60945 (2002), -EN 61162 series, -EN 62288 (2008). Or, -ISO 22090-1 (2002) including Corr.1 (2005), -IEC 60945 (2002), -IEC 60945 (2002), -IEC 60288
4	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.114(73).	overed by A.1/4.38	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.116(73), -IMO Res. MSC.191(79).
ဇ	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	Item deleted, as it is covered by A.1/4.38	-Reg. V/18. -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Differential beacon receiver for DGPS and DGLONASS Equipment	Chart facilities for shipborne radar	Transmitting heading device THD (Gyroscopic method)
_	A.1/4.44	A. 1/ 4.45 *Trans (see Note*)	A.1/4.46

9	□ Ⅲ Ⅲ + + + © B B	+ + + F E F	— Н Н Н Н Н	О ш н
S	-EN 60945(2002), -EN 61162 series, -EN 61996-2 (2008), -EN 62288 (2008). B + -IEC 60945 (2002), B + -IEC 61162 series, G -IEC 61996-2 (2007), -IEC 62288 -IEC 62288 -IC 62288	B + D -IMO Res.A.889(21). B + E B + F	B + D -IMO Res. A.889(21) B + E ISO 799 (2004). B + F G	-EN 60945 (2002), -EN 61108-1 (2003), -EN 61108-4 (2004), -EN 61162 series, -EN 62288 (2008). B+E Or, -IEC 60945 (2002), B+F -IEC 61108-1 (2003), G -IEC 61108-4 (2004), -IEC 61162 series, -IEC 62288 Ed.1.0(2008).
4	-Reg. V/20, -IMO Res. A.694(17), -IMO Res. MSC.163(78), -IMO Res. MSC.191(79).	-Reg. V/23, -IMO Res. A.889(21), -IMO MSC/Circ.773.	-Reg. V/23 -IMO Res. A.889(21) -IMO MSC/Circ.773.	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.114(73), -IMO Res. MSC.191(79).
က	-Reg. V/20.	-Reg. V/23.	-Reg. V/23, -Reg. X/3.	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.
2	Simplified voyage data recorder (S- VDR)	Mechanical pilot hoist	Pilot ladder	DGPS Equipment
_	A.1./4.47	A. 1/4.48	A.1/4.49	A. 1/ 4.50 *Trans (see Note*)

1	2	ဇ	4	2	9
A.1/ 4.51 *Trans (see Note*)	DGL ONASS Equipment	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13.	-Reg. V/19, -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 13, -IMO Res. MSC.97(73)-(2000 HSC Code) 13, -IMO Res. MSC.114(73), -IMO Res. MSC.191(79).	-EN 60945 (2002), -EN 61108-2 (1998), -EN 61108-4 (2004), -EN 61162 series, -EN 62288 (2008)EN 62288 (2002), -IEC 60945 (2002), -IEC 61108-2 (1998), -IEC 61108-4 (2004), -IEC 61162 series, -IEC 62288 -IEC 62288 -IEC 62288	B+D B+E B+F G
A. 1/4.52 **Trans (see Note**)	Daylight signalling lamp	-Reg. V/18, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.97(73)-(2000 HSC Code).	-Reg. V/19, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code), -IMO Res. MSC.95(72), -IMO Res. MSC.97(73)-(2000 HSC Code).	-EN 60945 (2002) -ISO 25861 (2007). E Or, -IEC 60945 (2002), E -ISO 25861 (2007).	B+D B+E B+F

# 5. Radiocommunication equipment

Notes applicable to section 5: Radiocommunication equipment.

Column 5: In case of conflicting requirements between IMO MSC/Circ.862 and the product testing standards, the IMO MSC/Circ.862 requirements shall take precedence. Wherever reference is made to EN 61162 series or IEC 61162 series, the intended item layout shall be taken into account to determine the applicable standard of EN 61162 series or IEC 61162 series.

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	9
A.1/5.1	VHF radio capable of transmitting and receiving DSC and radiotelephony	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/7, -Reg. X/3, -IMO Res. A.385(X), -IMO Res. A.524(13), -IMO Res. A.803(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO Res. MSC.97(3)-(10,95), -ITU-R M.489-2 (10,95), -ITU-R M.493-12 (03,07), -ITU-R M.541-9 (05/04), -ITU-R M.689-2 (11,93).	-ETSI EN 300 162-1 V1.4.1 (2006-05), -ETSI EN 300 338 V1.2.1 (1999-04), -ETSI EN 300 828 V1.1.1 (1998-03), -ETSI EN 301 925 V1.2.1 (2006-12), -EN 60945 (2002), -IEC 61097-3 (1994), -IEC 61097-7 (1996), -EN 61162 series, -IMO MSC/Circ.862.	□ □ □ + + + B B B

A.1/5.2	VHF DSC watch-keeping receiver	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/7, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. A.803(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO COMSAR Circ.32, -ITU-R M.489-2 (10/95), -ITU-R M.493-12 (03/07), -ITU-R M.541-9 (05/04).	-ETSI EN 300 338 V1.2.1 (1999-04), -ETSI EN 300 828 V1.1.1 (1998-03), -ETSI EN 301 033 V1.2.1 (2005-05), -EN 60945 (2002), -IEC 61097-3 (1994), -IEC 61097-8 (1998).	О Ш L + + + 8 8
A.1/5.3	NAVTEX receiver	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/7, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO Res. MSC.148(77), -IMO COMSAR Circ.32, -ITU-R M.540-2 (06/90), -ITU-R M.625-3 (10/95).	-ETSI EN 300 065-1 V1.2.1 (2009-01), -ETSI EN 301 011 V1.1.1 (1998-09), -EN 60945 (2002), -IEC 61097-6 (2005- 12).	8 B + + + E E E
A.1/5.4	EGC receiver	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/7, -Reg. X/3, -IMO Res. A.570(14), -IMO Res. A.694(16), -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO COMSAR Circ.32.	-ETSI ETS 300 460 Ed.1 (1996-05), -ETSI ETS 300 460/ A1 (1997-11), -ETSI EN 300 829 V1.1.1 (1998-03), -EN 60945 (2002), -IEC 61097-4 (1994).	8 H H H H H H H H H H H H H H H H H H H

A.1/5.5	HF marine safety information (MSI) equipment (HF NBDP receiver)	-Reg. IV/14, -Reg. X/3, -Reg. X/3, -IMO Res. information MSC.36(63)-(1994 (MSI) equipment HSC Code) 14, (HF NBDP HSC Code) 14, -IMO Res. HSC Code) 14	-Reg. IV/7, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. A.699(17), -IMO Res. A.700(17), -IMO Res. A.806(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO COMSAR Circ.32, -ITU-R M.491-1 (07/86), -ITU-R M.492-6 (10/95), -ITU-R M.625-3 (10/95), -ITU-R M.625-3 (10/95), -ITU-R M.688 (06/90),	-ETSI ETS 300 067 Ed.1 (1990-11), -ETSI ETS 300 067/ B + E A1 Ed.1 (1993-10), -EN 60945 (2002), -EN 61162 Series.	O III II
A.1/5.6	406 MHz EPIRB (COSPAS- SARSAT)	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/7, -Reg. X/3, -IMO Res. A.662(16), -IMO Res. A.694(17), -IMO Res. A.810(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO MSC/Circ.862, -IMO COMSAR Circ.32, -ITU-R M.633-3 (05/04), -ITU-R M.690-1 (10/95).	-ETSI EN 300 066 V 1.3.1 (2001-01), -EN 60945 (2002), -IEC 61097-2 (2008), -IMO MSC/Circ.862. B + D Note: IMO B + E MSC/Circ.862 is B + F applicable only to the optional remote activation device, not to the EPIRB itself.	O III II
A.1/5.7	L- band EPIRB (INMARSAT)	Deliberately left blank			
A.1/5.8	2182 kHz watch receiver	Deliberately left blank			
A.1/5.9	Two-tone alarm generator	Deliberately left blank			

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-ETSI EN 300 338 V1.2.1 (1999-04), -ETSI ETS 300 373-1 V1.2.1 (2002-10), -EN 60945 (2002), -IEC 61097-3 (1994), -IEC 61097-9 (1997), -EN 61162 series, -IMO MSC/Circ.862.	-ETSI EN 300 338 V1.2.1 (1999-04), -ETSI EN 301 033 V1.2.1 (2005-05), -EN 60945 (2002), -IEC 61097-3 (1994), -IEC 61097-8 (1998).
-Reg. IV/9, -Reg. IV/10, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO COMSAR Circ.32, -ITU-R M.493-12 (03/07), -ITU-R M.541-9 (05/04).	-Reg. IV/9, -Reg. IV/10, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. A.804(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO COMSAR Circ.32, -ITU-R M.493-12 (03/07), -ITU-R M.541-9 (05/04), -ITU-R M.1173 (10/95).
MF radio capable of transmitting and receiving DSC and radiotelephony -Reg. IV/14, -Reg. X/3, IMO and ITU MSC.36(63)-(1994 decisions, the requirements for Two Tone Alarm MSC.97(73)-(2000 transmission on H3E are no longer applicable in the testing standards	-Reg. IV/14, -Reg. X/3, -IMO Res. MF DSC watch- MSC.36(63)-(1994 keeping receiver HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.
MF radio capable of transmitting and receiving DSC and radiotelephony IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards	MF DSC watch- keeping receiver
A.1/5.10	A.1/5.11

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-EN 60945 (2002), -IEC 61097-10 (1999), -IMO MSC/Circ 862.	-ETSI ETS 300 460 Ed.1 (1996-05), -ETSI ETS 300 460/ A1 (1997-11), -ETSI EN 300 829 V1.1.1 (1998-03), -EN 60945 (2002), -IEC 61097-4 (2007), -IEC 61162 series, -IMO MSC/Circ.862.
-Reg. IV/10, -Reg. X/3, -IMO Res. A.570(14), -IMO Res. A.694(17), -IMO Res. A.808(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO MSC/Circ.862, -IMO COMSAR Circ.32.	-Reg. IV/10, -Reg. X/3, -Reg. X/3, -Reg. X/3, -Reg. X/3, -IMO Res. A.570(14), -ETSI ETS 300 -ETSI ETSI ETS 300 -ETSI ETSI ETS 300 -ETSI ETSI ETS 300 -ETSI ETSI ETSI ETSI ETSI ETSI ETSI ETSI
-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.
Inmarsat-B SES	Inmarsat-C SES
٩.1/5.12	٩.1/5.13

A.1/5.14	MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony -Reg. IV/14 -IMO and ITU MSC.36(6 decisions, the requirements for IMO Res. Two Tone Alarm MSC.97(7) generator and transmission on A3H are no longer applicable in testing standards.	4, 3)-(1994 3)-(2000 3)-(2000	-Reg. IV/10, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. A.806(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)- (2000 HSC Code) 14, -IMO Res. MSC.97(73)- (2000 HSC Code) 14, -IMO MSC/Circ.862, -IMO COMSAR Circ.32, -ITU-R M.491-1 (07/86), -ITU-R M.492-6 (10/95), -ITU-R M.541-9 (05/04), -ITU-R M.551-9 (05/04), -ITU-R M.625-3 (10/95), -ITU-R M.625-3 (10/95), -ITU-R M.1173 (10/95),	-ETSI ETS 300 067 Ed.1 (1990-11), -ETSI ETS 300 067/ A1 Ed.1 (1993-10), -ETSI EN 300 338 V1.2.1 (1999-04), -ETSI EN 300 373-1 B + E V1.2.1 (2002-10), -ET SI EN 300 373-1 B + F -ET SI EN 300 373-1 -ET SI EN
A.1/5.15	MF/HF DSC watch keeping receiver	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/10, -Reg. X/3, -IMO Res. A.694(17), -IMO Res. A.806(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO COMSAR Circ.32, -ITU-R M.493-12 (03/07), -ITU-R M. 541-9 (05/04).	-ETSI EN 300 338 V1.2.1 (1999-04), -ETSI EN 301 033 B + D V1.2.1 (2005-05), B + E -EN 60945 (2002), B + F -IEC 61097-3 (1994), -IEC 61097-8 (1998).
A.1/5.16	Aeronautical two way VHF radio telephone apparatus	Moved to A.2/5.8		

A.1/5.17	Portable survival Reg. IV/14 Craft two-way MSC.36(6) VHF HSC Code radiotelephone IMO Res. MSC.36(77)	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. III/6, -IMO Res. A.694(17), -IMO Res. A.809(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, -IMO Res. MSC.149(77), -ITU-R M.489-2 (10/95).	-ETSI EN 300 225 V1.4.1 (2004-12), -EN 300 828 V1.1.1 (1998-03), -EN 60945 (2002), -IEC 61097-12 (1996).	8 8 + + + F E D
A.1/5.18	Fixed survival craft two-way VHF radiotelephone apparatus	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. III/6, -IMO Res. A.694(17), -IMO Res. A.809(19), -IMO Res. MSC.36(63)-(1994 HSC Code) 8, 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, -ITU-R M.489-2 (10/95).	-ETSI EN 301 466 V1.2.1 (2001-01), -EN 60945 (2002), -IEC 61097-12 (1996).	8 8 + + + F E D
A1/ 5.19	Inmarsat-F SES	-Reg. IV/14, -Reg. X/3, -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14.	-Reg. IV/10, -IMO Res. A.570 (14), -IMO Res. A.808 (19), -IMO Res. A.694 (17), -IMO Res. MSC.36(63)-(1994 HSC Code) 14, -IMO Res. MSC.97(73)-(2000 HSC Code) 14, -IMO MSC/Circ.862, -IMO COMSAR Circ.32.	-EN 60945 (2002), -IEC 61097-13 (2003), -IMO MSC/Circ.862.	○ Ш 止 + + + B B B

6. Equipment required under COLREG 72

No.	Item designation	Regulation COLREG 72 where "type approval" is	Regulations of COLREG and the relevant resolutions and circulars of the IMO, as	Modules for Testing standards conformity	Modules for conformity
-	,	required	applicable 4	ı	assessment
-	7	•	+	•	•
A.1/6.1	Navigation lights	Navigation lights  -COLREG Annex   1/14.	-COLREG Annex I/14, -IMO Res. A.694(17), -IMO Res. MSC.253(83).	-EN 14744 (2005) including AC (2006), -EN 60945 (2002). Or, -EN 14744 (2005) including AC (2006), -IEC 60945 (2002).	B + E B + E G + F

# 7. Bulk carrier safety equipment

No items in Annex A.1.

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

Modules for conformity assessment
Modules fo Conformity assessmen
Regulations of SOLAS 74 and the relevant resolutions and circulars of the IMO, as applicable
Regulation SOLAS 74 where "type approval" is required
Item designation
o O

9	8 8 + + + E E E
5	-IEC 60092-0504 (2001), -IEC 60529 (2001), -IMO Res. MSC.188(79), -IMO MSC.1/Circ. 1291.
4	-Reg. II-1/22-1, -Reg. II-1/23-3, -Reg. XII/12 -IMO Res. MSC.188(79), -IMO MSC.1/Circ. 1291.
3	- IMO Res. MSC.188(79), -IMO MSC.1/Circ. 1291.
2	Water level detectors
1	A.1/8.1 **Trans (see Note**)

## Note

- (1) Where \*Trans is marked against an Item number, the equipment need not satisfy the otherwise applicable standards in circumstances where the conditions in either paragraph (2) or (3) apply.
- (2) In respect of equipment placed on the market, supplied for use or exposed for supply within the UK on or before 6th April 2012, the conditions are that the equipment was manufactured in accordance with the procedures for type-approval in force in a member State immediately before 6<sup>th</sup> April 2010.
- (3) In respect of equipment placed on or before 6<sup>th</sup> April 2012 on board a ship the relevant safety certificate of which was issued by or on behalf of a member State in accordance with the relevant international convention, the condition is that the equipment was manufactured in accordance with the procedures for type approval in force in a member State immediately before 6th April 2010

These conditions relate to transitional provision in Directive 2009/26/EC and are relevant for the purposes of the Merchant Shipping (Marine Equipment) Regulations 1999 as amended by the Merchant Shipping (Marine Equipment) (Amendment) Regulations 2009.

# Note \*

- (1) Where \*\*Trans is marked against an Item number in Annex A, the equipment need not satisfy the otherwise applicable standards in circumstances where the conditions in either paragraph (2) or (3) apply.
- the conditions are that the equipment was manufactured in accordance with the procedures for type-approval in force in a member State (2) In respect of equipment placed on the market, supplied for use or exposed for supply within the UK on or before 10 December 2013, immediately before 10 December 2011.
- on behalf of a member State in accordance with the relevant international convention, the condition is that the equipment was (3) In respect of equipment placed on or before 10 December 2013 on board a ship the relevant safety certificate of which was issued by or manufactured in accordance with the procedures for type approval in force in a member State immediately before 10 December 2011.

Note: These conditions relate to transitional provision in Directive 2010/68/EU and are relevant for the purposes of the Merchant Shipping (Marine Equipment) Regulations 1999 as amended by the Merchant Shipping (Marine Equipment) (Amendment) Regulations 2009.

# **ANNEX 6: List of Notified Bodies**

# 2

Organisation	Product family, product /Intended use/Product range	Procedure/Modules	Tasks performed by the body
Lloyd's Register Verification Limited	Live-saving appliances Marine-pollution prevention Navigation equipment Fire protection Radio-communication equipment COLREG 72-Equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art. 10.1 (i), Annex B - Module B
BSI	Live-saving appliances Fire protection	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art. 10.1 (i), Annex B - Module B
BRITISH APPROVALS BOARD FOR TELECOMMUNICATIONS	Navigation equipment Radio-communication equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art. 10.1 (i), Annex B - Module B
QINETIQ LTD	Live-saving appliances Navigation equipment Radio-communication equipment COLREG 72-Equipment	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.1 (i), Annex B - Module B
INSPEC International Ltd.	Fire protection	Production quality assurance Product quality assurance EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art.10.1 (i), Annex B - Module B
BTTG Certification Services	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B
SIRA CERTIFICATION SERVICE	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B

# Germany

Organisation	Product family, product /Intended use/Product range	Procedure/Modules	Tasks performed by the body
GERMANISCHER LLOYD SE	Live-saving appliances Marine-pollution prevention Navigation equipment Fire protection Radio-communication equipment COLREG 72-Equipment	Conformity to type Production quality assurance Product quality assurance Product verification Full quality assurance Unit verification EC type-examination	Art. 10.1 (i) (a), Annex B - Module C Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (ii) (d), Annex B - Module F Art. 10.1 (ii), Annex B - Module H Art. 10.3, Annex B - Module G Art. 10.1 (i), Annex B - Module B
BSH-Cert beim BUNDESAMT FÜR SEESCHIFFAHRT UND HYDROGRAPHIE	Live-saving appliances Navigation equipment Radio-communication equipment COLREG 72-Equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art.10.1 (i), Annex B - Module B
BERUFSGENOSSENSCHAFT FÜR TRANSPORT UND VERKEHRSWIRTSCHAFT DIENSTSTELLE SCHIFFSSICHERHEIT PRÜF- UND ZERTIFIZIERUNGSSTELLE	Live-saving appliances Marine-pollution prevention	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art. 10.1 (i), Annex B - Module B
	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B

# ITALY

Organisation	Product family, product /Intended	Procedure/Modules	Tasks performed by the body
ISTITUTO GIORDANO S.P.A.	Live-saving appliances Fire protection	Production quality assurance Product quality assurance EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art.10.1 (i), Annex B - Module B
ITALCERT SRL	Fire protection	Production quality assurance EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art.10.1 (i), Annex B - Module B
RINA Services S.P.A.	Live-saving appliances Marine-pollution prevention Navigation equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art.10.1 (i), Annex B - Module B
	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B
CSI SPA	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.1 (i), Annex B - Module B
LAPI LABORATORIO PREVENZIONE INCENDI SPA	Fire protection	Production quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B

Organisation	Product family, product /Intended use/Product range	Procedure/Modules	Tasks performed by the body
NEMKO AS	Navigation equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art. 10.1 (i), Annex B - Module B
	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B
	Radio-communication equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art.10.1 (i), Annex B - Module B
DET NORSKE VERITAS AS	Live-saving appliances Marine-pollution prevention Navigation equipment Fire protection Radio-communication equipment COLREG 72-Equipment	Production quality assurance Product quality assurance Product verification Unit verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art. 10.3, Annex B - Module G Art.10.1 (i), Annex B - Module B
SINTEF NBL AS	Fire protection	Production quality assurance Product quality assurance Product verification EC type-examination	Art. 10.1 (i) (b), Annex B - Module D Art. 10.1 (i) (c), Annex B - Module E Art. 10.1 (i) (d), Annex B - Module F Art.10.1 (i), Annex B - Module B

13.8.2008

#### REGULATION (EC) No 765/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

#### of 9 July 2008

setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Articles 95 and 133 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee (1),

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty (2),

Whereas:

- (1) It is necessary to ensure that products benefiting from the free movement of goods within the Community fulfil requirements providing a high level of protection of public interests such as health and safety in general, health and safety at the workplace, protection of consumers, protection of the environment and security, while ensuring that the free movement of products is not restricted to any extent greater than that which is allowed under Community harmonisation legislation or any other relevant Community rules. Provision should, therefore, be made for rules on accreditation, market surveillance, controls of products from third countries and the CE marking.
- (2) It is necessary to establish an overall framework of rules and principles in relation to accreditation and market surveillance. That framework should not affect the substantive rules of existing legislation setting out the provisions to be observed for the purpose of protecting public interests such as health, safety and protection of consumers and of the environment, but should aim at enhancing their operation.
- (1) OJ C 120, 16.5.2008, p. 1.
- (2) Opinion of the European Parliament of 21 February 2008 (not yet published in the Official Journal) and Council Decision of 23 June 2008

- (3) This Regulation should be seen as complementary to Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products (3).
- 4) It is very difficult to adopt Community legislation for every product which exists or which may be developed; there is a need for a broad-based, legislative framework of a horizontal nature to deal with such products, to cover lacunae, in particular pending revision of existing specific legislation, and to complement provisions in existing or future specific legislation, in particular with a view to ensuring a high level of protection of health, safety, the environment and consumers, as required by Article 95 of the Treaty.
- (5) The framework for market surveillance established by this Regulation should complement and strengthen existing provisions in Community harmonisation legislation relating to market surveillance and the enforcement of such provisions. However, in accordance with the principle of *lex specialis*, this Regulation should apply only in so far as there are no specific provisions with the same objective, nature or effect in other existing or future rules of Community harmonisation legislation. Examples can be found in the following sectors: drug precursors, medical devices, medicinal products for human and veterinary use, motor vehicles and aviation. The corresponding provisions of this Regulation should not therefore apply in the areas covered by such specific provisions.
- (6) Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety (4) established rules to ensure the safety of consumer products. Market surveillance authorities should have the possibility of taking the more specific measures available to them under that Directive.
- (7) However, in order to achieve a higher level of safety for consumer products, the market surveillance mechanisms provided for in Directive 2001/95/EC should be reinforced as regards products presenting a serious risk, in accordance with the principles established by this Regulation. Directive 2001/95/EC should therefore be amended accordingly.

<sup>(3)</sup> See page 82 of this Official Journal.

<sup>(4)</sup> OJ L 11, 15.1.2002, p. 4.

- (8) Accreditation is part of an overall system, including conformity assessment and market surveillance, designed to assess and ensure conformity with the applicable requirements.
- (9) The particular value of accreditation lies in the fact that it provides an authoritative statement of the technical competence of bodies whose task is to ensure conformity with the applicable requirements.
- (10) Accreditation, though so far not regulated at Community level, is carried out in all Member States. The lack of common rules for that activity has resulted in different approaches and differing systems throughout the Community, with the result that the degree of rigour applied in the performance of accreditation has varied between Member States. It is therefore necessary to develop a comprehensive framework for accreditation and to lay down at Community level the principles for its operation and organisation.
- (11) The establishment of a uniform national accreditation body should be without prejudice to the allocation of functions within Member States.
- (12) Where Community harmonisation legislation provides for the selection of conformity assessment bodies for its implementation, transparent accreditation, as provided for in this Regulation, ensuring the necessary level of confidence in conformity certificates, should be considered by the national public authorities throughout the Community the preferred means of demonstrating the technical competence of those bodies. However, national authorities may consider that they possess the appropriate means of carrying out this evaluation themselves. In such cases, in order to ensure the appropriate level of credibility of evaluations carried out by other national authorities, they should provide the Commission and the other Member States with the necessary documentary evidence demonstrating the compliance of the conformity assessment bodies evaluated with the relevant regulatory requirements.
- (13) A system of accreditation which functions by reference to binding rules helps to strengthen mutual confidence between Member States as regards the competence of conformity assessment bodies and consequently the certificates and test reports issued by them. It thereby enhances the principle of mutual recognition and therefore the provisions of this Regulation on accreditation should apply in relation to bodies carrying out conformity assessments in both the regulated and the non-regulated areas. The issue at stake is the quality of certificates and test reports irrespective of whether they fall within the regulated or the non-regulated area, and no distinction should therefore be made between those areas.
- (14) For the purposes of this Regulation, not-for-profit operation by a national accreditation body should be understood

- as an activity that is not intended to add any gain to the resources of the body's owners or members. While national accreditation bodies do not have the objective of maximising or distributing profits, they may provide services in return for payment, or receive income. Any excess revenue that results from such services may be used for investment to develop their activities further, as long as it is in line with their main activities. It should accordingly be emphasised that the primary objective of national accreditation bodies should be to support or engage actively in activities that are not intended to produce any gain.
- (15) Since the purpose of accreditation is to provide an authoritative statement of the competence of a body to perform conformity assessment activities, Member States should not maintain more than one national accreditation body and should ensure that that body is organised in such a way as to safeguard the objectivity and impartiality of its activities. Such national accreditation bodies should operate independently of commercial conformity assessment activities. It is therefore appropriate to provide that Member States ensure that, in the performance of their tasks, national accreditation bodies are deemed to exercise public authority, irrespective of their legal status.
- (16) For the assessment and continued monitoring of the competence of a conformity assessment body, it is essential to determine its technological knowledge and experience and its ability to carry out assessment. It is therefore necessary that the national accreditation body possess the relevant knowledge, competence and means for the proper performance of its tasks.
- (17) Accreditation should in principle be operated as a self-supporting activity. Member States should ensure that financial support exists for the fulfilment of special tasks.
- (18) In those cases where it is not economically meaningful or sustainable for a Member State to establish a national accreditation body, that Member State should have recourse to the national accreditation body of another Member State and should be encouraged to have such recourse to the fullest extent possible.
- (19) Competition between national accreditation bodies could lead to the commercialisation of their activity, which would be incompatible with their role as the last level of control in the conformity assessment chain. The objective of this Regulation is to ensure that, within the European Union, one accreditation certificate is sufficient for the whole territory of the Union, and to avoid multiple accreditation, which is added cost without added value. National accreditation bodies may find themselves in competition on the markets of third countries, but that must have no effect on their activities inside the Community, or on the cooperation and peer evaluation activities organised by the body recognised under this Regulation.

- (20) In order to avoid multiple accreditation, to enhance acceptance and recognition of accreditation certificates and to carry out effective monitoring of accredited conformity assessment bodies, conformity assessment bodies should request accreditation by the national accreditation body of the Member State in which they are established. Nevertheless, it is necessary to ensure that a conformity assessment body is able to request accreditation in another Member State in the event that there is no national accreditation body in its own Member State or where the national accreditation body is not competent to provide the accreditation services requested. In such cases, appropriate cooperation and exchange of information between national accreditation bodies should be established.
- (21) In order to ensure that national accreditation bodies fulfil the requirements and obligations provided for in this Regulation, it is important that Member States support the proper functioning of the accreditation system, monitor their national accreditation bodies regularly and take appropriate corrective measures within a reasonable timeframe where necessary.
- (22) In order to ensure the equivalence of the level of competence of conformity assessment bodies, to facilitate mutual recognition and to promote the overall acceptance of accreditation certificates and conformity assessment results issued by accredited bodies, it is necessary that national accreditation bodies operate a rigorous and transparent peer evaluation system and regularly undergo such evaluation.
- (23) This Regulation should provide for the recognition of a single organisation at European level in respect of certain functions in the field of accreditation. The European cooperation for Accreditation (the EA), whose main mission is to promote a transparent and quality-led system for the evaluation of the competence of conformity assessment bodies throughout Europe, manages a peer evaluation system among national accreditation bodies from the Member States and other European countries. That system has proved to be efficient and to provide mutual confidence. The EA should, therefore, be the first body recognised under this Regulation and Member States should ensure that their national accreditation bodies seek and maintain membership of the EA for as long as it is so recognised. At the same time, the possibility of changing the relevant body recognised under this Regulation should be provided for, in case there is a need for it in the future.
- (24) Effective cooperation among national accreditation bodies is essential for the proper implementation of peer evaluation and with regard to cross-border accreditation. In the interests of transparency, it is, therefore, necessary to provide for an obligation on national accreditation bodies to exchange information among themselves and to provide the national authorities and the Commission with relevant information. Updated and accurate information concerning

- the availability of accreditation activities operated by national accreditation bodies should also be made public and, therefore, accessible, in particular to conformity assessment bodies.
- (25) Sectoral accreditation schemes should cover the fields of activity where general requirements for the competence of conformity assessment bodies are not sufficient to ensure the necessary level of protection where specific detailed technology or health and safety-related requirements are imposed. Given the fact that the EA has at its disposal a broad range of technical expertise, it should be requested to develop such schemes, especially for areas covered by Community legislation.
- (26) For the purpose of ensuring the equivalent and consistent enforcement of Community harmonisation legislation, this Regulation introduces a Community market surveillance framework, defining minimum requirements against the background of the objectives to be achieved by Member States and a framework for administrative cooperation including the exchange of information among Member States.
- (27) In the case of economic operators in possession of test reports or certificates attesting conformity issued by an accredited conformity assessment body, where the relevant Community harmonisation legislation does not require such reports or certificates, market surveillance authorities should take due account of them when performing checks on product characteristics.
- (28) Cooperation between competent authorities at national level and across borders in exchanging information, investigating infringements and taking action to bring about their cessation, even before the placing on the market of dangerous products, by reinforcing measures to identify them, mainly in seaports, is essential to the protection of health and safety and to guaranteeing the smooth functioning of the internal market. National consumer protection authorities should cooperate, at national level, with national market surveillance authorities and should exchange information with them relating to products which they suspect present a risk.
- (29) Risk assessment should take all relevant data into account, including, where available, data on risks that have materialised with respect to the product in question. Account should also be taken of any measures that may have been taken by the economic operators concerned to alleviate the risks.
- (30) Situations of serious risk posed by a product require rapid intervention, which may entail the withdrawal of the product, its recall or the prohibition of its being made available on the market. In those situations it is necessary to have access to a system of rapid exchange of information between Member States and the Commission. The system

provided for in Article 12 of Directive 2001/95/EC has proved its effectiveness and efficiency in the field of consumer products. To avoid unnecessary duplication, that system should be used for the purposes of this Regulation. Moreover, coherent market surveillance throughout the Community requires a comprehensive exchange of information on national activities in this context which goes beyond this system.

- (31) Information exchanged between competent authorities should be subject to the strictest guarantees of confidentiality and professional secrecy and be handled in accordance with rules on confidentiality pursuant to the applicable national law or, as regards the Commission, Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents (1), in order to ensure that investigations are not compromised and that the reputations of economic operators are not prejudiced. Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (2) and Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data (3) apply in the context of this Regulation.
- (32) Community harmonisation legislation provides for specific procedures establishing whether or not a national measure restricting the free movement of a product is justified (safeguard clause procedures). Those procedures apply following a rapid exchange of information on products presenting a serious risk.
- (33) Points of entry at the external borders are well placed to detect unsafe non-conforming products or products to which the CE marking has been affixed falsely or in a misleading manner even before they are placed on the market. An obligation on authorities in charge of the control of products entering the Community market to execute checks on an adequate scale can therefore contribute to a safer market place. In order to increase the effectiveness of such checks, those authorities should receive all the necessary information concerning dangerous non-conforming products from the market surveillance authorities well in advance.
- (34) Council Regulation (EEC) No 339/93 of 8 February 1993 on checks for conformity with the rules on product safety
- (1) OJ L 145, 31.5.2001, p. 43.

in the case of products imported from third countries (4) lays down rules regarding the suspension of the release of products by customs authorities and provides for further measures including the involvement of market surveillance authorities. It is therefore appropriate that those provisions, including the involvement of market surveillance authorities, be incorporated in this Regulation.

- (35) Experience has shown that products which are not released are often re-exported and subsequently enter the Community market at other points of entry, thus undermining the customs authorities' efforts. Market surveillance authorities should therefore be given the means of proceeding with the destruction of products if they deem it appropriate.
- (36) Within one year of the publication of this Regulation in the Official Journal of the European Union, the Commission should present an in-depth analysis in the realm of consumer safety markings, followed by legislative proposals where necessary.
- (37) The CE marking, indicating the conformity of a product, is the visible consequence of a whole process comprising conformity assessment in a broad sense. General principles governing the CE marking should be set out in this Regulation so as to make them immediately applicable and to simplify future legislation.
- (38) The CE marking should be the only marking of conformity indicating that a product is in conformity with Community harmonisation legislation. However, other markings may be used as long as they contribute to the improvement of consumer protection and are not covered by Community harmonisation legislation.
- (39) It is necessary for Member States to provide for appropriate means of redress in the competent courts and tribunals in respect of measures taken by the competent authorities which restrict the placing on the market of a product or which require its withdrawal or recall.
- (40) Member States may find it useful to establish cooperation with the stakeholders concerned, including sectoral professional organisations and consumer organisations, in order to take advantage of available market intelligence when establishing, implementing and updating market surveillance programmes.
- (41) The Member States should lay down rules on penalties applicable to infringements of the provisions of this Regulation and ensure that they are implemented. Those

<sup>(2)</sup> OJ L 281, 23.11.1995, p. 31. Directive as amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).

<sup>(3)</sup> OJ L 8, 12.1.2001, p. 1.

<sup>(4)</sup> OJ L 40, 17.2.1993, p. 1. Regulation as last amended by Regulation (EC) No 1791/2006 (OJ L 363, 20.12.2006, p. 1).

penalties should be effective, proportionate and dissuasive and could be increased if the relevant economic operator has previously committed a similar infringement of the provisions of this Regulation.

- (42) In order to achieve the objectives of this Regulation, it is necessary for the Community to contribute to the financing of activities required to implement policies in the field of accreditation and market surveillance. Financing should be provided in the form of grants to the body recognised under this Regulation without a call for proposals, in the form of grants after a call for proposals, or by the award of contracts to that or to other bodies, depending on the nature of the activity to be financed and in accordance with Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities (¹) (the Financial Regulation).
- (43) For some specialised tasks, such as the production and revision of sectoral accreditation schemes, and for other tasks related to the verification of the technical competence and the facilities of laboratories and certification or inspection bodies, the EA should initially be eligible for Community financing, since it is well adapted to providing the necessary technical expertise in this respect.
- (44) Given the role of the body recognised under this Regulation in the peer evaluation of accreditation bodies and its ability to assist the Member States with the management of that peer evaluation, the Commission should be in a position to provide grants for the functioning of the secretariat of the body recognised under this Regulation, which should provide ongoing support for accreditation activities at Community level.
- (45) A partnership agreement should be signed, in accordance with the provisions of the Financial Regulation, between the Commission and the body recognised under this Regulation in order to fix the administrative and financial rules on the financing of accreditation activities.
- (46) In addition, financing should also be available to bodies other than the body recognised under this Regulation for other activities in the field of conformity assessment, metrology, accreditation and market surveillance, such as the drawing-up and updating of guidelines, inter-comparison activities linked to the operation of safeguard clauses, preliminary or ancillary activities in connection with the implementation of Community legislation in those areas and programmes of technical assistance and cooperation with third countries as well as the enhancement of policies in those areas at Community and international level.
- OJ L 248, 16.9.2002, p. 1. Regulation as last amended by Regulation (EC) No 1525/2007 (OJ L 343, 27.12.2007, p. 9).

- (47) This Regulation respects the fundamental rights and observes the principles reflected in the Charter of Fundamental Rights of the European Union.
- (48) Since the objective of this Regulation, namely to ensure that products on the market covered by Community legislation fulfil requirements providing a high level of protection of health and safety and other public interests while guaranteeing the functioning of the internal market by providing a framework for accreditation and market surveillance, cannot be sufficiently achieved by the Member States and can therefore, by reason of its scale and effects, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS REGULATION:

#### CHAPTER I

#### **GENERAL PROVISIONS**

#### Article 1

#### Subject matter and scope

- 1. This Regulation lays down rules on the organisation and operation of accreditation of conformity assessment bodies performing conformity assessment activities.
- 2. This Regulation provides a framework for the market surveillance of products to ensure that those products fulfil requirements providing a high level of protection of public interests, such as health and safety in general, health and safety at the workplace, the protection of consumers, protection of the environment and security.
- 3. This Regulation provides a framework for controls on products from third countries.
- 4. This Regulation lays down the general principles of the CE marking.

#### Article 2

#### **Definitions**

For the purposes of this Regulation the following definitions shall apply:

1. 'making available on the market' shall mean any supply of a product for distribution, consumption or use on the Community market in the course of a commercial activity, whether in return for payment or free of charge;

- 2. 'placing on the market' shall mean the first making available of a product on the Community market;
- 'manufacturer' shall mean any natural or legal person who manufactures a product or has a product designed or manufactured, and markets that product under his name or trademark;
- 4. 'authorised representative' shall mean any natural or legal person established within the Community who has received a written mandate from a manufacturer to act on his behalf in relation to specified tasks with regard to the latter's obligations under the relevant Community legislation;
- 5. 'importer' shall mean any natural or legal person established within the Community who places a product from a third country on the Community market;
- 6. 'distributor' shall mean any natural or legal person in the supply chain, other than the manufacturer or the importer, who makes a product available on the market;
- 'economic operators' shall mean the manufacturer, the authorised representative, the importer and the distributor;
- 'technical specification' shall mean a document that prescribes technical requirements to be fulfilled by a product, process or service;
- 9. 'harmonised standard' shall mean a standard adopted by one of the European standardisation bodies listed in Annex I to Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services (¹) on the basis of a request made by the Commission in accordance with Article 6 of that Directive:
- 10. 'accreditation' shall mean an attestation by a national accreditation body that a conformity assessment body meets the requirements set by harmonised standards and, where applicable, any additional requirements including those set out in relevant sectoral schemes, to carry out a specific conformity assessment activity;
- 11. 'national accreditation body' shall mean the sole body in a Member State that performs accreditation with authority derived from the State;
- 12. 'conformity assessment' shall mean the process demonstrating whether specified requirements relating to a product, process, service, system, person or body have been fulfilled;
- OJ L 204, 21.7.1998, p. 37. Directive as last amended by Council Directive 2006/96/EC (OJ L 363, 20.12.2006, p. 81).

- 13. 'conformity assessment body' shall mean a body that performs conformity assessment activities including calibration, testing, certification and inspection;
- 14. 'recall' shall mean any measure aimed at achieving the return of a product that has already been made available to the end user;
- 15. 'withdrawal' shall mean any measure aimed at preventing a product in the supply chain from being made available on the market:
- 16. 'peer evaluation' shall mean a process for the assessment of a national accreditation body by other national accreditation bodies, carried out in accordance with the requirements of this Regulation, and, where applicable, additional sectoral technical specifications;
- 17. 'market surveillance' shall mean the activities carried out and measures taken by public authorities to ensure that products comply with the requirements set out in the relevant Community harmonisation legislation and do not endanger health, safety or any other aspect of public interest protection;
- 18. 'market surveillance authority' shall mean an authority of a Member State responsible for carrying out market surveillance on its territory;
- 'release for free circulation' shall mean the procedure laid down in Article 79 of Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code (2);
- 20. 'CE marking' shall mean a marking by which the manufacturer indicates that the product is in conformity with the applicable requirements set out in Community harmonisation legislation providing for its affixing;
- 21. 'Community harmonisation legislation' shall mean any Community legislation harmonising the conditions for the marketing of products.

#### CHAPTER II

#### ACCREDITATION

#### Article 3

#### Scope

This Chapter shall apply to accreditation, used on a compulsory or voluntary basis, relating to conformity assessment, whether that assessment is compulsory or not, and irrespective of the legal status of the body performing the accreditation.

<sup>(2)</sup> OJ L 302, 19.10.1992, p. 1. Regulation as last amended by Regulation (EC) No 1791/2006 (OJ L 363, 20.12.2006, p. 1).

#### Article 4

#### General principles

- 1. Each Member State shall appoint a single national accreditation body.
- 2. Where a Member State considers that it is not economically meaningful or sustainable to have a national accreditation body or to provide certain accreditation services, it shall, as far as possible, have recourse to the national accreditation body of another Member State.
- 3. A Member State shall inform the Commission and the other Member States where, in accordance with paragraph 2, recourse is had to the national accreditation body of another Member State.
- 4. On the basis of the information referred to in paragraph 3 and Article 12, the Commission shall draw up and update a list of national accreditation bodies which it shall make publicly available.
- 5. Where accreditation is not operated directly by the public authorities themselves, a Member State shall entrust its national accreditation body with the operation of accreditation as a public authority activity and grant it formal recognition.
- 6. The responsibilities and tasks of the national accreditation body shall be clearly distinguished from those of other national authorities.
- 7. The national accreditation body shall operate on a not-for-profit basis.
- 8. The national accreditation body shall not offer or provide any activities or services that conformity assessment bodies provide, nor shall it provide consultancy services, own shares in or otherwise have a financial or managerial interest in a conformity assessment body.
- 9. Each Member State shall ensure that its national accreditation body has the appropriate financial and personnel resources for the proper performance of its tasks, including the fulfilment of special tasks, such as activities for European and international accreditation cooperation and activities that are required to support public policy and which are not self-financing.
- 10. The national accreditation body shall be a member of the body recognised under Article 14.
- 11. National accreditation bodies shall establish and maintain appropriate structures to ensure the effective and balanced involvement of all interested parties within both their organisations and the body recognised under Article 14.

#### Article 5

#### Operation of accreditation

- 1. A national accreditation body shall, when requested by a conformity assessment body, evaluate whether that conformity assessment body is competent to carry out a specific conformity assessment activity. Where it is found to be competent, the national accreditation body shall issue an accreditation certificate to that effect.
- 2. When a Member State decides not to use accreditation, it shall provide the Commission and the other Member States with all the documentary evidence necessary for the verification of the competence of the conformity assessment bodies it selects for the implementation of the Community harmonisation legislation in question.
- 3. National accreditation bodies shall monitor the conformity assessment bodies to which they have issued an accreditation certificate.
- 4. Where a national accreditation body ascertains that a conformity assessment body which has received an accreditation certificate is no longer competent to carry out a specific conformity assessment activity or has committed a serious breach of its obligations, that accreditation body shall take all appropriate measures within a reasonable timeframe to restrict, suspend or withdraw the accreditation certificate.
- 5. Member States shall establish procedures for the resolution of appeals, including, where appropriate, legal remedies against accreditation decisions or the absence thereof.

#### Article 6

#### Principle of non-competition

- 1. National accreditation bodies shall not compete with conformity assessment bodies.
- 2. National accreditation bodies shall not compete with other national accreditation bodies.
- 3. National accreditation bodies shall be permitted to operate across national borders, within the territory of another Member State, either at the request of a conformity assessment body in the circumstances set out in Article 7(1), or, if they are asked to do so by a national accreditation body in accordance with Article 7(3), in cooperation with the national accreditation body of that Member State.

#### Article 7

#### **Cross-border accreditation**

1. Where a conformity assessment body requests accreditation it shall do so with the national accreditation body of the Member State in which it is established or with the national accreditation body to which that Member State has had recourse in accordance with Article 4(2).

However, a conformity assessment body may request accreditation by a national accreditation body other than those referred to in the first subparagraph in any one of the following situations:

- (a) where the Member State in which it is established has decided not to establish a national accreditation body and has not had recourse to the national accreditation body of another Member State in accordance with Article 4(2);
- (b) where the national accreditation bodies referred to in the first subparagraph do not perform accreditation in respect of the conformity assessment activities for which accreditation is sought;
- (c) where the national accreditation bodies referred to in the first subparagraph have not successfully undergone peer evaluation under Article 10 in respect of the conformity assessment activities for which accreditation is sought.
- 2. Where a national accreditation body receives a request pursuant to paragraph 1(b) or (c), it shall inform the national accreditation body of the Member State in which the requesting conformity assessment body is established. In such cases, the national accreditation body of the Member State in which the requesting conformity assessment body is established may participate as an observer.
- 3. A national accreditation body may request another national accreditation body to carry out part of the assessment activity. In such a case, the accreditation certificate shall be issued by the requesting body.

#### Article 8

#### Requirements for national accreditation bodies

A national accreditation body shall fulfil the following requirements:

- it shall be organised in such a manner as to make it independent of the conformity assessment bodies it assesses and of commercial pressures, and to ensure that no conflicts of interest with conformity assessment bodies occur:
- it shall be organised and operated so as to safeguard the objectivity and impartiality of its activities;
- it shall ensure that each decision relating to the attestation of competence is taken by competent persons different from those who carried out the assessment;
- 4. it shall have adequate arrangements to safeguard the confidentiality of the information obtained;
- it shall identify the conformity assessment activities for which it is competent to perform accreditation, referring, where appropriate, to relevant Community or national legislation and standards;
- 6. it shall set up the procedures necessary to ensure efficient management and appropriate internal controls;

- it shall have a number of competent personnel at its disposal sufficient for the proper performance of its tasks;
- 8. it shall document the duties, responsibilities and authorities of personnel who could affect the quality of the assessment and of the attestation of competence;
- it shall establish, implement and maintain procedures for monitoring the performance and competence of the personnel involved;
- 10. it shall verify that conformity assessments are carried out in an appropriate manner, meaning that unnecessary burdens are not imposed on undertakings and that due account is taken of the size of an undertaking, the sector in which it operates, its structure, the degree of complexity of the product technology in question and the mass or serial nature of the production process;
- 11. it shall publish audited annual accounts prepared in accordance with generally accepted accounting principles.

#### Article 9

#### Compliance with requirements

- 1. Where a national accreditation body does not meet the requirements of this Regulation or fails to fulfil its obligations hereunder, the Member State concerned shall take appropriate corrective action or shall ensure that such corrective action is taken, and shall inform the Commission thereof.
- 2. Member States shall monitor their national accreditation bodies at regular intervals in order to ensure that they fulfil the requirements laid down in Article 8 on a continuing basis.
- 3. Member States shall take the utmost account of the results of peer evaluation under Article 10 when carrying out the monitoring referred to in paragraph 2 of this Article.
- 4. National accreditation bodies shall have in place the necessary procedures to deal with complaints against the conformity assessment bodies they have accredited.

#### Article 10

#### Peer evaluation

- 1. National accreditation bodies shall subject themselves to peer evaluation organised by the body recognised under Article 14.
- 2. Stakeholders shall have the right to participate in the system set up for the supervision of peer evaluation activities, but not in individual peer evaluation procedures.
- 3. Member States shall ensure that their national accreditation bodies regularly undergo peer evaluation as required by paragraph 1.

- 4. Peer evaluation shall be operated on the basis of sound and transparent evaluation criteria and procedures, in particular concerning structural, human resource and process requirements, confidentiality and complaints. Appropriate appeal procedures against decisions taken as a result of such evaluation shall be provided for.
- 5. Peer evaluation shall ascertain whether the national accreditation bodies meet the requirements laid down in Article 8, taking into account the relevant harmonised standards referred to in Article 11.
- 6. The outcome of peer evaluation shall be published and communicated by the body recognised under Article 14 to all Member States and the Commission.
- 7. The Commission shall, in cooperation with the Member States, oversee the rules and the proper functioning of the peer evaluation system.

#### Article 11

### Presumption of conformity for national accreditation bodies

- 1. National accreditation bodies that demonstrate conformity with the criteria laid down in the relevant harmonised standard, the reference of which has been published in the Official Journal of the European Union, by having successfully undergone peer evaluation under Article 10 shall be presumed to fulfil the requirements laid down in Article 8.
- 2. National authorities shall recognise the equivalence of the services delivered by those accreditation bodies which have successfully undergone peer evaluation under Article 10, and thereby accept, on the basis of the presumption referred to in paragraph 1 of this Article, the accreditation certificates of those bodies and the attestations issued by the conformity assessment bodies accredited by them.

#### Article 12

#### Information obligation

- 1. Each national accreditation body shall inform the other national accreditation bodies of the conformity assessment activities in respect of which it operates accreditation and of any changes thereto.
- 2. Each Member State shall inform the Commission and the body recognised under Article 14 of the identity of its national accreditation body and of all conformity assessment activities in respect of which that body operates accreditation in support of Community harmonisation legislation, and of any changes thereto.
- 3. Each national accreditation body shall regularly make publicly available information concerning the results of its peer

evaluation, the conformity assessment activities in respect of which it operates accreditation and any changes thereto.

#### Article 13

#### Requests to the body recognised under Article 14

- 1. The Commission may, after consulting the Committee set up by Article 5 of Directive 98/34/EC, request the body recognised under Article 14 to contribute to the development, maintenance and implementation of accreditation in the Community.
- 2. The Commission may also, following the procedure laid down in paragraph 1:
- request the body recognised under Article 14 to lay down evaluation criteria and procedures for peer evaluation and to develop sectoral accreditation schemes;
- (b) accept any existing scheme that already lays down evaluation criteria and procedures for peer evaluation.
- 3. The Commission shall ensure that sectoral schemes identify the technical specifications necessary to meet the level of competence required by Community harmonisation legislation in fields with specific requirements relating to technology, health and safety or environment related requirements or any other aspect of public interest protection.

#### Article 14

#### European accreditation infrastructure

- 1. The Commission shall, after consulting the Member States, recognise a body which satisfies the requirements set out in Annex I to this Regulation.
- 2. A body which is to be recognised pursuant to paragraph 1 shall conclude an agreement with the Commission. That agreement shall specify, *inter alia*, the detailed tasks of the body, funding provisions and provisions for its supervision. Both the Commission and the body shall be able to terminate the agreement without cause at the expiry of a reasonable period of notice to be defined therein.
- 3. The Commission and the body shall make the agreement public.
- 4. The Commission shall communicate the recognition of a body pursuant to paragraph 1 to the Member States and to national accreditation bodies.
- 5. The Commission may not recognise more than one body at a time.
- 6. The first body recognised under this Regulation shall be the European cooperation for accreditation, provided that it has concluded an agreement as specified in paragraph 2.

#### CHAPTER III

# COMMUNITY MARKET SURVEILLANCE FRAMEWORK AND CONTROLS OF PRODUCTS ENTERING THE COMMUNITY MARKET

#### SECTION 1

#### General provisions

#### Article 15

#### Scope

- 1. Articles 16 to 26 shall apply to products covered by Community harmonisation legislation.
- 2. Each of the provisions of Articles 16 to 26 shall apply in so far as there are no specific provisions with the same objective in Community harmonisation legislation.
- 3. The application of this Regulation shall not prevent market surveillance authorities from taking more specific measures as provided for in Directive 2001/95/EC.
- 4. For the purposes of Articles 16 to 26, a 'product' shall mean a substance, preparation or good produced through a manufacturing process other than food, feed, living plants and animals, products of human origin and products of plants and animals relating directly to their future reproduction.
- 5. Articles 27, 28 and 29 shall apply to all products covered by Community legislation in so far as other Community legislation does not contain specific provisions relating to the organisation of border controls.

#### Article 16

#### General requirements

- 1. Member States shall organise and carry out market surveillance as provided for in this Chapter.
- 2. Market surveillance shall ensure that products covered by Community harmonisation legislation which, when used in accordance with their intended purpose or under conditions which can be reasonably foreseen and when properly installed and maintained, are liable to compromise the health or safety of users, or which otherwise do not conform to applicable requirements set out in Community harmonisation legislation are withdrawn or their being made available on the market is prohibited or restricted and that the public, the Commission and the other Member States are informed accordingly.
- 3. National market surveillance infrastructures and programmes shall ensure that effective measures can be taken in relation to any product category subject to Community harmonisation legislation.
- 4. Market surveillance shall cover products assembled or manufactured for the manufacturer's own use where Community

harmonisation legislation provides that its provisions shall apply to such products.

#### SECTION 2

#### Community market surveillance framework

#### Article 17

#### Information obligations

- 1. Member States shall inform the Commission of their market surveillance authorities and their areas of competence. The Commission shall transmit that information to the other Member States.
- 2. Member States shall ensure that the public is aware of the existence, responsibilities and identity of national market surveillance authorities, and of how those authorities may be contacted.

#### Article 18

#### Obligations of the Member States as regards organisation

- 1. Member States shall establish appropriate communication and coordination mechanisms between their market surveillance authorities.
- 2. Member States shall establish adequate procedures in order to:
- (a) follow up complaints or reports on issues relating to risks arising in connection with products subject to Community harmonisation legislation;
- (b) monitor accidents and harm to health which are suspected to have been caused by those products;
- (c) verify that corrective action has been taken; and
- (d) follow up scientific and technical knowledge concerning safety issues.
- 3. Member States shall entrust market surveillance authorities with the powers, resources and knowledge necessary for the proper performance of their tasks.
- 4. Member States shall ensure that market surveillance authorities exercise their powers in accordance with the principle of proportionality.
- 5. Member States shall establish, implement and periodically update their market surveillance programmes. Member States shall draw up either a general market surveillance programme or sector specific programmes, covering the sectors in which they conduct market surveillance, communicate those programmes to the other Member States and the Commission and make them

available to the public, by way of electronic communication and, where appropriate, by other means. The first such communication shall be effected by 1 January 2010. Subsequent updates of the programmes shall be made public in the same manner. Member States may cooperate with all relevant stakeholders to those ends.

6. Member States shall periodically review and assess the functioning of their surveillance activities. Such reviews and assessments shall be carried out at least every fourth year and the results thereof shall be communicated to the other Member States and the Commission and be made available to the public, by way of electronic communication and, where appropriate, by other means.

#### Article 19

#### Market surveillance measures

1. Market surveillance authorities shall perform appropriate checks on the characteristics of products on an adequate scale, by means of documentary checks and, where appropriate, physical and laboratory checks on the basis of adequate samples. When doing so they shall take account of established principles of risk assessment, complaints and other information.

Market surveillance authorities may require economic operators to make such documentation and information available as appear to them to be necessary for the purpose of carrying out their activities, and, where it is necessary and justified, enter the premises of economic operators and take the necessary samples of products. They may destroy or otherwise render inoperable products presenting a serious risk where they deem it necessary.

Where economic operators present test reports or certificates attesting conformity issued by an accredited conformity assessment body, market surveillance authorities shall take due account of such reports or certificates.

2. Market surveillance authorities shall take appropriate measures to alert users within their territories within an adequate timeframe of hazards they have identified relating to any product so as to reduce the risk of injury or other damage.

They shall cooperate with economic operators regarding actions which could prevent or reduce risks caused by products made available by those operators.

- 3. Where the market surveillance authorities of one Member State decide to withdraw a product manufactured in another Member State, they shall inform the economic operator concerned at the address indicated on the product in question or in the documentation accompanying that product.
- 4. Market surveillance authorities shall carry out their duties independently, impartially and without bias.

5. Market surveillance authorities shall observe confidentiality where necessary in order to protect commercial secrets or to preserve personal data pursuant to national legislation, subject to the requirement that information be made public under this Regulation to the fullest extent necessary in order to protect the interests of users in the Community.

#### Article 20

#### Products presenting a serious risk

- 1. Member States shall ensure that products which present a serious risk requiring rapid intervention, including a serious risk the effects of which are not immediate, are recalled, withdrawn or that their being made available on their market is prohibited, and that the Commission is informed without delay thereof, in accordance with Article 22.
- 2. The decision whether or not a product represents a serious risk shall be based on an appropriate risk assessment which takes account of the nature of the hazard and the likelihood of its occurrence. The feasibility of obtaining higher levels of safety or the availability of other products presenting a lesser degree of risk shall not constitute grounds for considering that a product presents a serious risk.

#### Article 21

#### Restrictive measures

- 1. Member States shall ensure that any measure taken, pursuant to the relevant Community harmonisation legislation, to prohibit or restrict the product's being made available on the market, to withdraw it from the market or to recall it, is proportionate and states the exact grounds on which it is based.
- 2. Such measures shall be communicated without delay to the relevant economic operator, which shall at the same time be informed of the remedies available under the law of the Member State concerned and of the time limits to which such remedies are subject.
- 3. Prior to the adoption of a measure referred to in paragraph 1, the economic operator concerned shall be given the opportunity to be heard within an appropriate period of not less than 10 days, unless such consultation is not possible because of the urgency of the measure to be taken, as justified by health or safety requirements or other grounds relating to the public interests covered by the relevant Community harmonisation legislation. If action has been taken without the operator's being heard, the operator shall be given the opportunity to be heard as soon as possible and the action taken shall be reviewed promptly thereafter.
- 4. Any measure referred to in paragraph 1 shall be promptly withdrawn or amended upon the economic operator's demonstrating that he has taken effective action.

#### Article 22

## Exchange of information — Community Rapid Information System

- 1. Where a Member State takes or intends to take a measure in accordance with Article 20 and considers that the reasons which prompted the measure or the effects of the measure go beyond its territory, it shall immediately notify the Commission of that measure, in accordance with paragraph 4 of this Article. It shall also inform the Commission without delay of the modification or withdrawal of any such measure.
- 2. If a product presenting a serious risk has been made available on the market, Member States shall notify the Commission of any voluntary measures taken and communicated by an economic operator.
- 3. The information provided in accordance with paragraphs 1 and 2 shall include all available details, in particular the data necessary for the identification of the product, the origin and the supply chain of the product, the related risk, the nature and the duration of the national measure taken and any voluntary measures taken by economic operators.
- 4. For the purposes of paragraphs 1, 2 and 3, the market surveillance and information exchange system provided for in Article 12 of Directive 2001/95/EC shall be used. Paragraphs 2, 3 and 4 of Article 12 of that Directive shall apply *mutatis mutandis*.

#### Article 23

#### General information support system

- 1. The Commission shall develop and maintain a general archiving and exchange of information system, using electronic means, on issues relating to market surveillance activities, programmes and related information on non-compliance with Community harmonisation legislation. The system shall appropriately reflect notifications and information provided under Article 22.
- 2. For the purposes of paragraph 1, Member States shall provide the Commission with information at their disposal and not already provided under Article 22 on products presenting a risk regarding, in particular, identification of risks, results of testing carried out, provisional restrictive measures taken, contacts with the economic operators concerned and justification for action or inaction.
- 3. Without prejudice to Article 19(5) or to national legislation in the area of confidentiality, the safeguarding of confidentiality with regard to the information content shall be ensured. The protection of confidentiality shall not prevent the dissemination to market surveillance authorities of information relevant to ensuring the effectiveness of market surveillance activities.

#### Article 24

## Principles of cooperation between the Member States and the Commission

1. Member States shall ensure efficient cooperation and exchange of information between their market surveillance

- authorities and those of the other Member States and between their own authorities and the Commission and the relevant Community agencies regarding their market surveillance programmes and all issues relating to products presenting risks.
- 2. For the purposes of paragraph 1, the market surveillance authorities of one Member State shall give the market surveillance authorities of other Member States assistance on an adequate scale by supplying information or documentation, by carrying out appropriate investigations or any other appropriate measure and by participating in investigations initiated in other Member States.
- 3. The Commission shall collect and organise such data on national market surveillance measures as will enable it to fulfil its obligations.
- 4. Any information provided by an economic operator under Article 21(3) or otherwise shall be included when the reporting Member State notifies other Member States and the Commission of its findings and actions. Any subsequent information shall be clearly identified as relating to the information already provided.

#### Article 25

#### Sharing of resources

- 1. Market surveillance initiatives designed to share resources and expertise between the competent authorities of the Member States may be set up by the Commission or the Member States concerned. Such initiatives shall be coordinated by the Commission.
- 2. For the purposes of paragraph 1, the Commission shall, in cooperation with the Member States:
- develop and organise training programmes and exchanges of national officials;
- (b) develop, organise and set up programmes for the exchange of experience, information and best practice, programmes and actions for common projects, information campaigns, joint visit programmes and the consequent sharing of resources.
- 3. Member States shall ensure that their competent authorities participate fully in the activities referred to in paragraph 2, where appropriate.

#### Article 26

### Cooperation with the competent authorities of third countries

1. Market surveillance authorities may cooperate with the competent authorities of third countries with a view to exchanging information and technical support, promoting and facilitating access to European systems and promoting activities relating to conformity assessment, market surveillance and accreditation.

The Commission shall, in cooperation with Member States, develop appropriate programmes for that purpose.

2. Cooperation with the competent authorities of third countries shall take the form of, *inter alia*, the activities referred to in Article 25(2). Member States shall ensure that their competent authorities participate fully in those activities.

#### SECTION 3

#### Controls of products entering the Community market

#### Article 27

#### Controls of products entering the Community market

- 1. The authorities of the Member States in charge of the control of products entering the Community market shall have the powers and resources necessary for the proper performance of their tasks. They shall carry out appropriate checks on the characteristics of products on an adequate scale, in accordance with the principles set out in Article 19(1), before those products are released for free circulation.
- 2. Where in a Member State more than one authority is responsible for market surveillance or external border controls, those authorities shall cooperate with each other, by sharing information relevant to their functions and otherwise as appropriate.
- 3. The authorities in charge of external border controls shall suspend release of a product for free circulation on the Community market when any of the following findings are made in the course of the checks referred to in paragraph 1:
- (a) the product displays characteristics which give cause to believe that the product, when properly installed, maintained and used, presents a serious risk to health, safety, the environment or any other public interest referred to in Article 1;
- (b) the product is not accompanied by the written or electronic documentation required by the relevant Community harmonisation legislation or is not marked in accordance with that legislation;
- (c) the CE marking has been affixed to the product in a false or misleading manner.

The authorities in charge of external border controls shall immediately notify the market surveillance authorities of any such suspension.

4. In the case of perishable products, the authorities in charge of external border controls shall, as far as possible, seek to ensure that any requirements they may impose with regard to the storage of products or the parking of vehicles used for transport are not incompatible with the preservation of those products.

5. For the purposes of this Section, Article 24 shall apply in respect of authorities in charge of external border controls, without prejudice to the application of Community law providing for more specific systems of cooperation between those authorities.

#### Article 28

#### Release of products

- 1. A product the release of which has been suspended by the authorities in charge of external border controls pursuant to Article 27 shall be released if, within three working days of the suspension of release, those authorities have not been notified of any action taken by the market surveillance authorities, and provided that all the other requirements and formalities pertaining to such release have been fulfilled.
- 2. Where the market surveillance authorities find that the product in question does not present a serious risk to health and safety or cannot be regarded as being in breach of Community harmonisation legislation, that product shall be released, provided that all the other requirements and formalities pertaining to such release have been fulfilled.

#### Article 29

#### National measures

1. Where the market surveillance authorities find that a product presents a serious risk, they shall take measures to prohibit that product from being placed on the market and shall require the authorities in charge of external border controls to include the following endorsement on the commercial invoice accompanying the product and on any other relevant accompanying document or, where data processing is carried out electronically, in the data-processing system itself:

'Dangerous product — release for free circulation not authorised — Regulation (EC) No 765/2008'.

2. Where the market surveillance authorities find that a product does not comply with Community harmonisation legislation, they shall take appropriate action, which may, if necessary, include prohibiting the product's being placed on the market.

Where placing on the market is prohibited pursuant to the first subparagraph, the market surveillance authorities shall require the authorities in charge of external border controls not to release the product for free circulation and to include the following endorsement on the commercial invoice accompanying the product and on any other relevant accompanying document or, where data processing is carried out electronically, in the data-processing system itself:

'Product not in conformity — release for free circulation not authorised — Regulation (EC) No 765/2008'.

- 3. Where that product is subsequently declared for a customs procedure other than release for free circulation and provided that the market surveillance authorities do not object, the endorsements set out in paragraphs 1 and 2 shall also be included, under the same conditions, on the documents used in connection with that procedure.
- 4. Member States' authorities may destroy or otherwise render inoperable products presenting a serious risk where they deem it necessary and proportionate.
- 5. Market surveillance authorities shall provide authorities in charge of external border controls with information on product categories in which a serious risk or non-compliance within the meaning of paragraphs 1 and 2 has been identified.

#### CHAPTER IV

#### **CE MARKING**

#### Article 30

#### General principles of the CE marking

- 1. The CE marking shall be affixed only by the manufacturer or his authorised representative.
- 2. The CE marking as presented in Annex II shall be affixed only to products to which its affixing is provided for by specific Community harmonisation legislation, and shall not be affixed to any other product.
- 3. By affixing or having affixed the CE marking, the manufacturer indicates that he takes responsibility for the conformity of the product with all applicable requirements set out in the relevant Community harmonisation legislation providing for its affixing.
- 4. The CE marking shall be the only marking which attests the conformity of the product with the applicable requirements of the relevant Community harmonisation legislation providing for its affixing.
- 5. The affixing to a product of markings, signs or inscriptions which are likely to mislead third parties regarding the meaning or form of the CE marking shall be prohibited. Any other marking may be affixed to the product provided that the visibility, legibility and meaning of the CE marking is not thereby impaired.
- 6. Without prejudice to Article 41, Member States shall ensure the correct implementation of the regime governing the CE marking and take appropriate action in the event of improper use of the marking. Member States shall also provide for penalties for infringements, which may include criminal sanctions for serious infringements. Those penalties shall be proportionate to the seriousness of the offence and constitute an effective deterrent against improper use.

#### CHAPTER V

#### **COMMUNITY FINANCING**

#### Article 31

#### Body pursuing an aim of general European interest

The body recognised under Article 14 shall be considered a body pursuing an aim of general European interest within the meaning of Article 162 of Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of Regulation (EC, Euratom) No 1605/2002 (<sup>1</sup>).

#### Article 32

#### Activities eligible for Community financing

- 1. The Community may finance the following activities in connection with the application of this Regulation:
- the production and revision of sectoral accreditation schemes referred to in Article 13(3);
- (b) the activities of the secretariat of the body recognised under Article 14, such as the coordination of accreditation activities, the processing of technical work linked to the operation of the peer evaluation system, the provision of interested parties with information and the participation of the body in the activities of international organisations in the field of accreditation;
- (c) the drawing up and updating of contributions to guidelines in the fields of accreditation, notification to the Commission of conformity assessment bodies, conformity assessment and market surveillance;
- inter-comparison activities linked to the operation of safeguard clauses;
- (e) the making available to the Commission of technical expertise for the purpose of assisting the Commission in its implementation of market surveillance administrative cooperation, including the financing of administrative cooperation groups, market surveillance decisions and safeguard clause cases;
- (f) the performance of preliminary or ancillary work in connection with the implementation of the conformity assessment, metrology, accreditation and market surveillance activities linked to the implementation of Community legislation, such as studies, programmes, evaluations, guidelines, comparative analyses, mutual joint visits, research work, the development and maintenance of databases, training activities, laboratory work, proficiency testing, inter-laboratory tests and conformity assessment work, as well as European market surveillance campaigns and similar activities;

<sup>(</sup>¹) OJ L 357, 31.12.2002, p. 1. Regulation as last amended by Regulation (EC, Euratom) No 478/2007 (OJ L 111, 28.4.2007, p. 13).

- (g) activities carried out under programmes of technical assistance, cooperation with third countries and the promotion and enhancement of European conformity assessment, market surveillance and accreditation policies and systems among interested parties in the Community and at international level.
- 2. The activities referred to in paragraph 1(a) shall be eligible for Community financing only if the Committee set up by Article 5 of Directive 98/34/EC has been consulted on the requests to be submitted to the body recognised under Article 14 of this Regulation.

#### Article 33

#### Bodies eligible for Community financing

Community financing may be granted to the body recognised under Article 14 for the implementation of the activities set out in Article 32.

However, Community financing may also be granted to other bodies for the carrying out of the activities set out in Article 32, except those set out in paragraph 1(a) and (b) of that Article.

#### Article 34

#### **Financing**

The appropriations allocated to the activities referred to in this Regulation shall be determined each year by the budgetary authority within the limits of the financial framework in force.

#### Article 35

#### Financing arrangements

- 1. Community financing shall be provided:
- (a) without a call for proposals, to the body recognised under Article 14 to carry out those activities referred to in Article 32(1)(a) to (g) for which grants can be awarded in accordance with the Financial Regulation;
- (b) in the form of grants after a call for proposals, or by public procurement procedures, to other bodies to carry out the activities referred to in Article 32(1)(c) to (g).
- 2. The activities of the secretariat of the body recognised under Article 14 referred to in Article 32(1)(b) may be financed on the basis of operating grants. In the event of renewal, the operating grants shall not be decreased automatically.
- 3. Grant agreements may authorise flat-rate cover of the beneficiary's overheads up to a maximum of 10 % of total eligible direct costs for actions, except where the beneficiary's indirect costs are covered through an operating grant financed from the Community budget.

4. The common cooperation objectives and the administrative and financial conditions relating to the grants awarded to the body recognised under Article 14 may be defined in a framework partnership agreement signed by the Commission and that body, in accordance with the Financial Regulation and Regulation (EC, Euratom) No 2342/2002. The European Parliament and the Council shall be informed of the conclusion of any such agreement.

#### Article 36

#### Management and monitoring

- 1. The appropriations determined by the budgetary authority for the financing of conformity assessment, accreditation and market surveillance activities may also cover administrative expenses relating to preparation, monitoring, inspection, auditing and evaluation which are directly necessary for the achievement of the objectives of this Regulation, and in particular studies, meetings, information and publication activities, expenses relating to informatics networks for the exchange of information and any other expenditure on administrative and technical assistance which the Commission may use for conformity assessment and accreditation activities.
- 2. The Commission shall evaluate the relevance of the conformity assessment, accreditation and market surveillance activities that receive Community financing in the light of the requirements of Community policies and legislation, and inform the European Parliament and the Council of the outcome of that evaluation by 1 January 2013 and every five years thereafter.

#### Article 37

#### Protection of the Community's financial interests

- 1. The Commission shall ensure that, when the activities financed under this Regulation are implemented, the Community's financial interests are protected by the application of preventive measures against fraud, corruption and other illegal activities, by effective checks and by the recovery of amounts unduly paid and, if irregularities are detected, by effective, proportionate and dissuasive penalties, in accordance with Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (1), Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (2) and Regulation (EC) No 1073/1999 of the European Parliament and of the Council of 25 May 1999 concerning investigations conducted by the European Anti-Fraud Office (OLAF) (3).
- 2. For the purposes of the Community activities financed under this Regulation, the notion of irregularity referred to in

<sup>(1)</sup> OJ L 312, 23.12.1995, p. 1.

<sup>(2)</sup> OJ L 292, 15.11.1996, p. 2.

<sup>(3)</sup> OJ L 136, 31.5.1999, p. 1.

Article 1(2) of Regulation (EC, Euratom) No 2988/95 shall mean any infringement of a provision of Community law or any breach of a contractual obligation resulting from an act or omission by an economic operator which has, or would have, the effect of prejudicing the general budget of the European Union or budgets managed by it by an unjustified item of expenditure.

3. Any agreements and contracts resulting from this Regulation shall provide for monitoring and financial control by the Commission or any representative which it authorises and for audits by the Court of Auditors, which may be conducted on the spot if necessary.

#### CHAPTER VI

#### FINAL PROVISIONS

#### Article 38

#### Technical guidelines

In order to facilitate the implementation of this Regulation, the Commission shall draw up non-binding guidelines in consultation with stakeholders.

#### Article 39

#### Transitional provision

Accreditation certificates issued before 1 January 2010 may remain valid until the date of their expiry, but no later than 31 December 2014. This Regulation shall, however, apply in the case of their extension or renewal.

#### Article 40

#### Review and reporting

By 2 September 2013, the Commission shall submit to the European Parliament and to the Council a report on the application of this Regulation, of Directive 2001/95/EC and of any other relevant Community instrument addressing market surveillance. That report shall, in particular, analyse the consistency of Community rules in the field of market surveillance. If appropriate, it shall be accompanied by proposals to amend and/or consolidate the instruments concerned, in the interests of better regulation and simplification. It shall include an evaluation of the extension of the scope of Chapter III of this Regulation to all products.

By 1 January 2013, and every five years thereafter, the Commission, in cooperation with the Member States, shall

produce and submit to the European Parliament and to the Council a report on the implementation of this Regulation.

#### Article 41

#### **Penalties**

The Member States shall lay down rules on penalties for economic operators, which may include criminal sanctions for serious infringements, applicable to infringements of the provisions of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive and may be increased if the relevant economic operator has previously committed a similar infringement of the provisions of this Regulation. The Member States shall notify the Commission of those provisions by 1 January 2010 and shall notify it without delay of any subsequent amendment affecting them.

#### Article 42

#### Amendment to Directive 2001/95/EC

Article 8(3) of Directive 2001/95/EC shall be replaced by the following:

'3. In the case of products posing a serious risk, the competent authorities shall with due dispatch take the appropriate measures referred to in paragraph 1(b) to (f). The existence of a serious risk shall be determined by the Member States, assessing each individual case on its merits and taking into account the guidelines referred to in point 8 of Annex II.'.

#### Article 43

#### Repeal

Regulation (EEC) No 339/93 is hereby repealed with effect from 1 January 2010.

References to the repealed Regulation shall be construed as references to this Regulation.

#### Article 44

#### **Entry into force**

This Regulation shall enter into force on the 20th day after its publication in the Official Journal of the European Union.

It shall apply from 1 January 2010.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg, 9 July 2008.

For the European Parliament
The President

H.-G. PÖTTERING

For the Council
The President
J.-P. JOUYET

#### ANNEX I

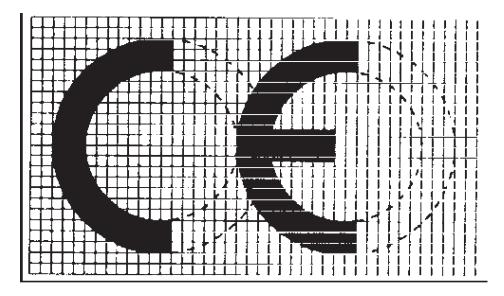
#### Requirements applicable to the body to be recognised under Article 14

- 1. The body recognised under Article 14 of the Regulation (the body), shall be established within the Community.
- 2. Under the body's constitution, national accreditation bodies from within the Community shall be entitled to be members of it, provided that they comply with the rules and objectives of the body and with the other conditions set out herein and as agreed with the Commission in the framework agreement.
- 3. The body shall consult all relevant stakeholders.
- 4. The body shall provide its members with peer evaluation services satisfying the requirements of Articles 10 and 11.
- 5. The body shall cooperate with the Commission in accordance with this Regulation.

#### ANNEX II

#### **CE** marking

1. The CE marking shall consist of the initials 'CE' taking the following form:



- 2. If the CE marking is reduced or enlarged, the proportions given in the graduated drawing in paragraph 1 shall be respected.
- 3. Where specific legislation does not impose specific dimensions, the CE marking shall be at least 5 mm high.



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欧州の舶用品認証制度に関する調査

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