Future IMO and ILO Legislation

Spring 2020

Upcoming changes to mandatory statutory regulations and instruments, including:

- Adopted amendments that are in a transitional period towards full application
- Adopted amendments entering into force on or after 1 April 2020
- Significant topics which are currently under discussion and development at IMO meetings up to and including Ship Design and Construction in January 2020
How to use this document

Part 1 – Adopted future IMO and ILO legislation

1A – Adopted requirements in a transitional period for full application

This part includes requirements that have already entered into force but are still in a transition period for their full effect due to their application formulation. For example, some parts of a requirement may apply on different dates depending on the type and size of ship.

1B – Adopted requirements entering into force in future

This part includes requirements that have been adopted and have an entry into force date which has been established by the IMO or ILO, but which has not yet been reached.

Part 2 – IMO and ILO requirements currently under development

This part covers legislation that is currently under discussion and has not been adopted; therefore, no fixed entry into force date has been agreed. It also covers legislation that has been adopted but has no certain entry into force date because the conditions have not yet been met. This section is subject to change as discussions progress.

Tables – quick references for application

The tables in the following pages provide a quick reference guide to which items in this document are relevant for different ships. This is for general information only and it is advised to study the application for each entry in this document as it can be complex. Each item is assigned an LR reference number, which is shown in the relevant entry as follows:

- Table I – New ships – Adopted amendments coming into effect
- Table II – New ships – Likely amendments under discussion and development
- Table III – Existing ships – Adopted amendments coming into effect
- Table IV – Existing ships – Likely amendments under discussion and development

The numbers in the index tables are a reference number for each item, given in the left-hand column of the full entry on the corresponding page.

- SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS
  
  **Background:** ECDIS (Electronic Chart Display and Information System) is shipborne navigational charts as per SOLAS regulation V/27 and regulation V/19.2.1.4. This amendment, adopted at 9 new ships in 2012 (passenger ships and oil tankers) and for other ships in 2013/2014. Existing
  
  **Summary:** In paragraph 2.1, the existing subparagraph 4 is replaced by the following:

The numbers in the index tables are a reference number for each item, given in the left-hand column of the full entry on the corresponding page.
Notes

1. Non-mandatory legislation is not included.
2. Unless otherwise specified, the term ‘cargo ship’ is used to describe any vessel that is not a passenger ship.
3. In the Application section for each entry, references to “all ships” should be taken to mean all ships to which that convention, annex or chapter applies.
4. Applicability of regulations varies for floating storage units (FSU) and floating production storage and offloading units (FPSO) depending on whether they are detached and undergoing voyage or fixed. The application tables in this report reflect only the minimum requirements which are permanently applicable. Requirements for offshore supply vessels (OSVs) are the same as those listed for general cargo ships.
5. Entries marked with * in below tables have staggered application dates and multiple entries. Application details should be carefully checked.
6. SOLAS amendments now follow a four year cycle (next entry into force date 1 Jan 2024), unless adopted under conditions of exceptional circumstance (see IMO Circular MSC.1/Circ.1481) in which case implementation may be earlier.
7. If there is a shipbuilding delay after contract signing, it is important to note that most IMO requirements apply based on the keel laying date and some also have a delivery date requirement, so a delay may necessitate different equipment or design.
8. Some requirements only apply according to certain operational choices, such as geographical trading area or activities which may or may not be carried out. In these cases, the widest possible applicability is shown in the tables, and it is necessary to assess whether or not that requirement applies to an individual ship.
9. There are occasional entries which only concern one specialised ship type and are therefore not included in the reference tables. In this edition, this includes: yachts used for recreational purposes only (263); unmanned non-self-propelled (UNSP) barges (302); and fishing vessels (238). An entry related to lifesaving appliance testing is also excluded (359).
10. IMO has postponed MEPC 75 due to the COVID-19 outbreak. Items due to be approved or adopted at this session are now delayed. The estimated entry into force dates for such items has been extended by 6 months but it should be noted that this remains an estimated date only. IMO has also postponed MSC 102 but this will not affect the entry into force date of 1 January 2024 for SOLAS amendments and the associated Codes.

Further information from Lloyd’s Register

As well as this document, we publish agenda previews and reports of IMO meetings which are relevant to Lloyd’s Register. To register to receive these by email, and to download previous documents, please visit www.lr.org/imo.
Summary of major developments since the last edition:

This version covers updates from III 6, CCC 6, A 31, NCSR 7 and SDC 7. The number in brackets is the LR reference used in this document for the detailed entry.

Significant approvals or adoptions:

- There have been no IMO committee meetings since the last edition, so no changes have been approved or adopted.

Significant new items being considered or milestones in ongoing developments:

- A draft amendment to the Antifouling Convention to include controls on cybutryne was agreed (368).
- The comprehensive review of the GMDSS is nearing conclusion with amendments to SOLAS Chapters III and IV and consequential amendments to some 40 other IMO instruments (234).

Significant entries into force in the near future:

- Amendments to MARPOL Annexes I, II, V and VI and the NOx Technical code 2008 on the use of electronic record books will enter into force 1 October 2020 (342).
- Amendments to the Ballast Water Management Convention for the approval of ballast water management systems entered into force October 2019. Approval requirements have changed for BWM systems installed on or after October 2020 and for BWM systems installed prior to this (345).
Table I - NEW SHIPS – Adopted amendments coming into effect

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<th>Page</th>
<th>Ship Type</th>
<th>All Ship types</th>
<th>Passenger Ships</th>
<th>Ro-Ro Passenger Ships</th>
<th>Oil Tankers</th>
<th>Chemical Tankers</th>
<th>Gas Carriers</th>
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### Table III - EXISTING SHIPS – Adopted amendments coming into effect

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Table IV - EXISTING SHIPS – Likely amendments under discussion and development

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Lloyd's Register
Part 1 - Adopted future IMO and ILO legislation
Part 1A - Adopted Requirements in a transitional period for full application

This part includes requirements that have already entered into force but are still in a transitional period for their full effect due to their application formulation. For example, some parts of a requirement may apply on different dates depending on the type and size of ship.
New Chapter 4 of MARPOL Annex VI – Energy Efficiency Design Index (EEDI)

**Background:** EEDI is a design index for a ship’s energy efficiency. It was originally developed as a non-mandatory instrument to help control CO2 emissions from shipping but now the EEDI is mandatory under Annex VI of the MARPOL Convention which was concluded at MEPC 62 (July 2011). Further amendments were introduced by resolution MEPC.251(66).

**Summary:** EEDI reflects the amount of CO2 generated per tonne-mile (cargo carrying capacity). It constitutes a uniform approach to calculating a ship’s energy efficiency during design and building of new ships and will be used to control CO2 levels emitted for future ships by encouraging improvements in ship design.

**Table** - Reduction rate in percentage for the Required EEDI compared to the EEDI Reference line. Note that amendments to Phase 3 for selected ship types/sizes have been proposed, subject to adoption at MEPC 75. See item 373

See note 10 regarding postponed IMO meetings.

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<td>3,000 – 5,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-15*</td>
</tr>
<tr>
<td>Combination carrier</td>
<td></td>
<td>20,000 and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,000 – 20,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-20*</td>
</tr>
<tr>
<td>LNG carrier***</td>
<td></td>
<td>10,000 DWT and above</td>
<td>n/a</td>
<td>10**</td>
<td>20</td>
</tr>
<tr>
<td>Ro-ro cargo ship</td>
<td></td>
<td>10,000 DWT and above</td>
<td>n/a</td>
<td>5*</td>
<td>15*</td>
</tr>
<tr>
<td>(vehicle carrier)***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ship Type</td>
<td>EEDI Requirement</td>
<td></td>
<td>Reduction Factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------</td>
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<td>------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Ro-ro cargo ship***</td>
<td>2,000 DWT and above</td>
<td>n/a</td>
<td>5**</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>1,000 – 2,000 DWT</td>
<td>n/a</td>
<td>0-5* **</td>
<td>0-20*</td>
<td>0-30*</td>
<td></td>
</tr>
<tr>
<td>Ro-ro passenger ship***</td>
<td>1000 DWT and above</td>
<td>n/a</td>
<td>5**</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>250 – 1,000 DWT</td>
<td>n/a</td>
<td>0-5* **</td>
<td>0-20*</td>
<td>0-30*</td>
<td></td>
</tr>
<tr>
<td>Cruise passenger ship***</td>
<td>85,000 GT and above</td>
<td>n/a</td>
<td>5**</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>25,000 – 85,000 GT</td>
<td>n/a</td>
<td>0-5* **</td>
<td>0-20*</td>
<td>0-30*</td>
<td></td>
</tr>
</tbody>
</table>

* Reduces factor to be linearly interpolated between the two values dependent upon ship size. The lower value of the reduction factor is to be applied to the smaller ship size.
** Phase 1 commenced for those ships on 1 September 2015.
*** Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.

Note: n/a means that no required EEDI applies.

**Implication:**

**Shipbuilders and Designers:** Potential change to ship/machinery design to reduce GHG emissions. There are several ways to achieve this, such as:
- Increase ship size: engine power ratio
- Reduce lightship weight
- Innovative solutions (air bubble – friction reduction)
- Optimise propeller efficiency
- Hydrodynamics improvement
- Speed reduction
- Use of renewal power source (wind, solar power)
- Low carbon fuels (e.g., LNG)
- Energy Saving Devices (e.g., WHR, shaft generators)

**Shipowners and Ship Managers:** There are a number of technical and operational measures that can be considered to reduce GHG emissions.

**Application:** The EEDI needs to be calculated for new ships of the types listed above which are greater than 400 GT.

**The following instruments were also developed in relation to this amendment**

Resolution MEPC.262(68) & MEPC.1/Circ.850/Rev.2 on Revision to the 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions

Resolution MEPC.231(65) – 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI)

Resolution MEPC.233(65) – 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion

Resolution MEPC.261(68) & MEPC.1/Circ.855/Rev.1 on Amendments to 2014 Guidelines on survey and certification of the EEDI
<table>
<thead>
<tr>
<th>Resolution MEPC.263(68)</th>
<th>2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships</th>
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<td>Resolution MEPC.254(67)</td>
<td>2014 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)</td>
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<td>Resolution MEPC.281(70)</td>
<td>Amendments to the 2014 Guidelines on the method of calculation of the attained EEDI for new ships concerning the calculation method for the EEDI</td>
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<td>Resolution MEPC.308(73)</td>
<td>2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships</td>
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<tr>
<td>Resolution MEPC.309(73) &amp; MEPC.1/Circ.855/Rev.2</td>
<td>Amendments to the 2014 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)</td>
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1 July 2016

**SOLAS 1974 Regulations II-1/2 and II-1/3-10 – Goal-based ship construction standards for bulk carriers and oil tankers**

**Background:** The notion of “goal-based ship construction standards” (GBS) was introduced at the IMO in 2002. There was a desire for the IMO to play a larger role in determining the fundamental standards to which new ships are built. It was suggested that the IMO should develop initial standards that would permit innovation in design but ensure that ships are constructed in such a manner that, if properly operated and maintained under specified conditions, they could remain safe for their entire economic life. The standards would also have to ensure that all parts of a ship can be easily accessed to permit proper inspection and ease of maintenance. GBS can therefore be thought of as rules for classification rules, rather than direct rules for ship design.

**Summary:**
- Regulation 2 – Definition (new paragraph 28 is added) to define ‘Goal-based ship construction standards for bulk carriers and oil tankers’.
- New regulation 3-10 - ‘Goal-based ship construction standards for bulk carriers and oil tankers’ was adopted, which requires that classification rules shall comply with GBS. The regulation also requires ships to carry a Ship Construction File, provided upon delivery and kept updated throughout the ship’s life.

**Implication:**
- **Shipowners and Shipbuilders:** New bulk carriers and oil tankers will be required to be designed and built in accordance with GBS, by using a set of classification rules which have been verified by IMO as conforming to the GBS functional requirements. The IACS Common Structural Rules for oil tankers and bulk carriers have been audited by the IMO and found to comply with the GBS standard. Shipowners and shipbuilders should make the necessary arrangements for the Ship Construction File to be produced and maintained. Owners should note that changes to GBS compliant ships will need to be recorded on the plans and documents in the Ship Construction File.
- **Flag Administrations and their ROs:** Classification rules applicable to these types of ships will be subject to the verification process given in resolution MSC.296(87). This means that a classification society wishing to act as a recognised organisation for a flag Administration as far as safety construction is concerned will have to undergo a verification of its rules as well as a continuous verification of subsequent amendments.
to these rules in order to establish conformity with the GBS functional requirements.

**Application:** Oil tankers of 150 metres in length and above and bulk carriers of 150 metres in length and above, constructed with single deck, top-side tanks and hopper side tanks in cargo spaces, excluding ore carriers and combination carriers:
- for which the building contract is placed on or after 1 July 2016; or
- in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2017; or
- the delivery of which is on or after 1 July 2020.

**Related Instruments**
- Resolution MSC.287(87) - Adoption of the international goal-based ship construction standards for bulk carriers and oil tankers
- Resolution MSC.296(87) - Adoption of the guidelines for verification of conformity with goal based ship construction standards for bulk carriers and oil tankers
- MSC.1/Circ.1343 - Guidelines for the information to be included in a Ship Construction File

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#### 1 January 2016 (Oil and chemical tankers*)

#### 1 July 2016 (Gas tankers*)

* see Application for details

**Demonstration of compliance with damage stability requirements for tankers**
- **Amendments to MARPOL Annex I - Regulation 3 and 28 and Appendix II**
- **Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) - Part A, Section 2.2.1 & Certificate of fitness**
- **Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) - Section 2.2 & Certificate of fitness**
- **Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - Section 2.2.6, 2.2.7 & Certificate of fitness**

**Background:** The IMO agreed that it was necessary for tankers to be able to demonstrate compliance with the relevant damage stability requirements. The easiest way to do this is to fit a stability instrument which is capable of carrying out these calculations. MARPOL Annex I, the IBC Code and the IGC Code are amended to mandate the provision of such a stability instrument.

**Summary:** Tankers will have to be fitted with a stability instrument capable of verifying compliance with the relevant intact and damage stability requirements. It will need to be approved by the flag Administration. The requirement may be waived where the trading pattern of the ship means that only a limited number of loading conditions are necessary. These will all have to be present in the approved stability manual.

Provision is also made for accepting a remote system providing the data (for example an approved shore-based calculation), for ships which are loaded within an approved range of loading conditions and for existing ships which have an approved set of limiting KG curves.
Additionally, where an existing ship already has an approved stability instrument on board which is capable of carrying out all the stability calculations, and has been approved for these functions, this does not have to be replaced.

Appropriate amendments are being made to the relevant Certificate of Fitness, also to the Form of the IOPP certificate and supplements, Form B.

**Implication:**

**Shipowners and Ship Managers** should prepare ahead for the implementation of these requirements. Approval of stability instruments requires time and cannot be done at the last minute. All proposals permit the continued use of previously installed stability instruments which can do the calculations. Crew members will need to be trained in the use of the programs and be confident that they can demonstrate compliance to port state officers when requested.

**Ship Designers and Builders** will need to be aware of the requirements and be prepared to supply an approved stability instrument to tankers being built.

**Manufacturers** will need to ensure that their damage stability programs are approved for use. This approval process can take some time and it is strongly recommended that early application to the relevant authorities is made.

**Flag Administrations and their ROs** will need to have sufficient staff trained in the approval of stability instruments to enable them to approve the stability computers. Flag Administrations will need to train port state control inspectors in the different possibilities for compliance.

**Application:** These amendments are applicable to new and existing tankers (oil, chemical and gas). Existing oil and chemical tankers will have to fit a stability instrument by the first scheduled renewal survey of the ship on or after 1 January 2016 but not later than 1 January 2021. Existing gas tankers, certified under the IGC Code, will have to comply by the first renewal survey on or after 1 July 2016 but no later than 1 July 2021. Existing pre-IGC Code gas tankers will have to comply by the first renewal survey on or after 1 January 2016 but no later than 1 January 2021.

**Related Instruments**
The following non-mandatory instruments have also been amended:
- Amendments to the Code for Existing Ships Carrying Liquefied Gases in Bulk (EGC Code) - Section 2.3 & Certificate of fitness.
- Amendments to the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (GC Code) - Section 2.2 & Certificate of fitness (Resolution MSC.377(93))
- MSC.1/Circ.1461 - Guidelines for verification of damage stability requirements for tankers
Amendments to MARPOL Annex I Regulation 12 - Tanks for oil residues (sludge)

**Background:** The requirements of regulation 12 of Annex I were deemed to require clarification.

The following are relevant to this amendment:
- MEPC.187(59) – Amendment to MARPOL Annex I - Regulation 1 and 12 were revised to introduce clarity of the requirement – entry into force 1 Jan 2011.
- MEPC.1/Circ.753 – the amendment introduced by resolution MEPC.187(59) raised the question on the application to existing ships. An Interpretation was developed.
- IACS UI - MPC99 (Dec 2011) – addressing common piping arrangements.
- MEPC.1/Circ.753/Rev.1 – this is a reflection of IACS UI MPC99.

**Summary:** The amendment addresses all the issues previously addressed by the above interpretations. It further addresses clarification on other means of disposal such as via approved methods (incinerator, auxiliary boiler suitable for burning oil residue etc.). The amendment also addresses common piping arrangements (further clarification of UI MPC99).

**Implication:**
*Shipowners / Ship Managers:* Owing to the resolution MEPC.187(59), some ships were considering retroactive re-arrangement of bilge pipelines which is now clarified as not necessary. Shipowners and Ship Managers need to examine the position of their flag Administration as some flag Administrations indicated retroactive re-arrangements prior to the above developments.

**Application:** To every ship of 400 GT and above. It is to be noted that regulation 12.3.5 need only be applied as far as is reasonable and practicable for ships delivered on or before 31 December 1979, as defined in regulation 1.28.1. Ships constructed before 1 January 2017 shall be arranged to comply with regulation 12.3.3 not later than the first renewal survey carried out on or after 1 January 2017.

**Related Instruments**
MEPC.1/Circ.867 - Revised Unified Interpretation of regulation 12 of MARPOL Annex I

New mandatory International Code for Ships Operating in Polar Waters (Polar Code)

**Background:** There has been a notable increase in shipping activities in the polar regions, particularly now that ice free waters are expanding in the Arctic. The IMO has previously issued some guidelines for ships operating in polar areas (Resolution A.1024(26) - Guidelines for ships operating in polar waters) but it was agreed that some mandatory requirements are needed.

The IMO agreed on mandatory requirements for both safety and environmental aspects (SOLAS and MARPOL).
Summary: The new chapter XIV of SOLAS makes compliance with the related Polar Code mandatory. The Polar Code covers all aspects of ship safety and is additional to SOLAS. Ships to which this new chapter applies will have to meet SOLAS as well as the Polar Code. The Polar Code Part I includes requirements for the following areas:

- Polar water operational manual
- Ship structure
- Subdivision and stability
- Watertight and weathertight integrity
- Machinery
- Fire safety and protection
- Life-saving appliances and arrangements
- Navigation
- Communication
- Voyage planning
- Manning and training.

Ice class notation may not be required depending on the intended area of operation, but operational limitations will be imposed to mitigate operation in waters where ice is likely to be present.

Amendments to MARPOL Annexes I, II, IV and V to make the Polar Code mandatory were also adopted. The Polar Code Part II has requirements covering the following MARPOL related matters:

- Prevention of oil pollution (MARPOL Annex I)
- Prevention of pollution from noxious liquid substances (MARPOL Annex II)
- Prevention of pollution by sewage from ships (MARPOL Annex IV)
- Prevention of pollution by garbage (MARPOL Annex V)

The Polar Code is goal based to allow the use of innovation to meet the requirements. Mandatory regulation is contained in section A with supporting non-mandatory guidance in section B.

Implication: All ships (new and existing) which intend to operate in the polar areas (as defined) will have to be assessed for compliance with the Polar Code and a SOLAS polar certificate issued. MARPOL certificates will need to be reissued using the new format. Depending on the dates and areas of operation additional equipment suitable for use in low temperatures will be required. Ships intending to operate in waters with ice cover will be expected to have some ice strengthening. Those undertaking regular trips to the polar regions should start making an assessment as soon as possible and should ensure that all equipment is suitable for low temperature use. It will be possible for ships which only undertake a single one-off voyage in summer in ice-free waters to be issued with a polar certificate without survey, but an assessment will still have to be undertaken.
**Application:** The new requirements will be applicable to all ships which have SOLAS certificates, including high-speed craft, or MARPOL certification, and which operate in polar waters. Ships constructed on or after 1 January 2017 will have to comply with the full Polar Code requirements from build. Ships constructed before 1 January 2017 will have to comply with the relevant requirements of the Polar Code by the first intermediate or renewal survey after 1 January 2018. Ships which do not operate in polar waters will not have to comply with the requirements of the Code.

**Correction of substantive error** - During the application of the Polar Code to affected ships, it was noted that the clause in Part I-A relating to “every ship to which this Code applies” could be read to mean the whole of the Polar Code rather than just Part I. IMO is issuing a correction amending paragraph 1.3.1 of part I-A of the Polar Code so that it reads “Every ship to which this part applies shall have on board a valid Polar Ship Certificate.” This will be a retroactive amendment, but there will be no impact for LR class ships as LR has only required a Polar Ship Certificate to be issued to ships which have to comply with part I-A of the Polar Code.

**Related Instruments**
- Resolution A.1024(26) - Guidelines for ships operating in polar waters
- MSC.1/Circ.1612 - Interim guidelines for navigation and communication equipment
- MSC.1/Circ.1614 - Interim guidelines on life-saving appliances and arrangements for ships operating in polar waters.
- A.1137(31) - Interim safety measures for ships not certified under the SOLAS Convention operating in polar waters

**Further Information**
Lloyd’s Register’s [Polar Code webpage](#) has further information including a list of Arctic specialists and an interactive toolkit.
reception facilities, further amendment was proposed. MEPC 69 adopted the amendments with a slight change on the implementation scheme, as given in “Application”.

Performance standards for new treatment systems to meet these new requirements were adopted through resolution MEPC.227(64) - 2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants. The type approval certificate was revised during the revision of the resolution MEPC.227(64) by new resolution MEPC.284(70).

Implication:

Shipbuilders and Manufacturers: There will be a major impact for passenger shipbuilders as they will have to consider how to optimise their black and grey water discharge arrangements inside and outside the Special Areas. Manufacturers will need to review the proposed performance standard and ensure that equipment is developed which can meet it.

Shipowners and Ship Managers: Major impact for passenger ship owners as they will have to consider how to optimise their black and grey water discharge arrangements inside and outside the Special Areas, plus the constraints of dry dockings and space available on board for fitting sewage treatment plants. The system needs to be adaptable as there could be other regional standards which are different.

Flag Administrations and their Recognised Organisations: As a consequence of the decision, it may be required to further consider more sewage type approval work for large capacity sewage treatment plants. In addition, approval of structure as well as arrangements of holding tanks would require careful attention.

Application: All passenger ships visiting the Special Area will be required to comply with the above requirements as follows:

- New passenger ships from 1 June 2019; and
- Existing passenger ships from 1 June 2021 (with the exception of those affected by resolution MEPC.275(69) below).

Related Instruments

MEPC.275(69) – Establishment of the date on which Regulation 11.3 of MARPOL Annex IV in respect of the Baltic Sea Special Area shall take effect MEPC 69 also adopted a separate resolution on the entry into force of the special area, which allows that existing passenger ships en route directly to or from a port located outside the special area and to or from a port located east of longitude 28˚10’ E within the special area that do not make any other port calls within the special area will be allowed to comply with the requirement from 1 June 2023

MEPC.284(70) - Amendments to the 2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants (resolution MEPC.227(64))

Following the adoption of the amendments to the MARPOL Annex IV in relation to the Special Area for sewage discharge in Special Areas (resolution MEPC.274(69)) consequential changes are introduced in the guidelines on implementation addressing new dates for imposing requirements, interpretation of “installation” etc.
Ballast Water Management Convention

Adopted by the 2004 Ballast Water Management Conference

Note - see also items 322 and 345 in part 1A for amendment to regulations B-3 & D-4.

Background: The problem of the transfer of harmful aquatic organisms via ships’ ballast water was first raised at IMO in 1988 and since then the Marine Environment Protection Committee (MEPC) has been dealing with the issue, focusing initially on the development of guidelines and then on developing a new Convention. The International Convention for the Control and Management of Ships’ Ballast Water and Sediments (BWM Convention) was adopted on 13 February 2004. The BWM Convention entered into force 12 months after ratification by 30 States, representing 35% of world merchant shipping tonnage. The condition was met on 8 September 2016.

Summary: On entry into force, the BWM Convention will require ships to manage their ballast water and sediment. Initially this may be by either exchanging ballast on every voyage or by treating ballast using an approved ballast water treatment system. Subsequently, only ballast water treatment will be accepted.

The IMO has published a list of relevant guidelines and guidance documents related to the implementation of the BWM Convention.

Implication: By 8 September 2017, all ships (i.e. vessels of any type operating in the aquatic environment, including submersibles, floating craft, floating platforms, floating storage units (FSUs) and floating production, storage and offloading (FPSO) units) will be required to:
- Have an approved ballast water management plan on board,
- Maintain a ballast water record book,
- Manage their ballast water on every voyage by performing ballast water exchange (or by treating it using an approved ballast water treatment system),
- Undertake an initial survey and be issued with an International Ballast Water Management Certificate (for ships of 400 GT and above to which the Convention applies, excluding floating platforms, FSUs and FPSOs). Ships that are registered with Flag Administrations that are not yet a party to the Convention will need to demonstrate compliance and may wish to undergo surveys and be issued with a document of compliance, and
- By the application date which applies to each ship based on its survey schedule, as explained in item 322, install a ballast water treatment system on board and put it into operation.

Application: The Convention applies to all ships and offshore structures that load and discharge ballast as follows:
All ships will be required to manage ballast water and sediment, have an onboard approved ballast water management plan, maintain a ballast water record book and hold a valid ballast water management certificate. Initially, existing ships (and those under construction at the time that the Convention enters into force) may comply by either exchanging ballast on every voyage or by treating ballast to comply with the D-2 discharge standard. IMO Assembly 28 adopted a resolution (A.1088(28)) recommending a revised schedule for when existing ships (and ships...
under construction at the time the Convention enters into force) will have to treat ballast water (i.e. when exchange will no longer be permitted). This is based on the ship’s ballast water capacity, date of construction and IOPP renewal survey (not the renewal survey associated with the International Ballast Water Management Certificate). Please see item 322 for the latest application schedule. Ships constructed after the entry into force of the Convention will have to treat ballast water from delivery.

All ships over 400 GT will be required to be surveyed and issued with a ballast water management certificate valid for 5 years, subject to annual and intermediate surveys. Flag Administrations are responsible for specifying the certification regime for ships less than 400 GT.

Exemptions:
1. Exemptions may be granted to ships on voyages between specified ports or locations; or to ships which operate exclusively between specified ports or locations;
2. Such exemptions will be
   2.1. Effective for a period of no more than five years, subject to intermediate review;
   2.2. Granted to ships that do not mix ballast water or sediments, other than between the ports or locations specified in 1 above; and
   2.3. Granted based on the Guidelines on risk assessment in accordance with MEPC.162(56).
   2.4. However it should be noted that the exemptions can be withdrawn at any time by the issuing Flag Administrations.

Exceptions:
The requirements of the Convention do not apply to vessels which uptake or discharge ballast water and sediments in exceptional circumstances such as:
1. A ship in emergency situations or saving life at sea.
2. A damaged ship or a ship with damaged equipment.
3. A ship which is trying to avoid or minimise pollution.
4. A ship which uptakes and subsequent discharge on the high seas of the same ballast water or sediments.
5. A ship at the same location where no mixing has occurred.

Equivalent compliance:
Flag Administrations are responsible for determining whether the requirements of the Convention apply to pleasure craft used solely for recreation or competition or craft used primarily for search and rescue, less than 50 metres in length overall, and with a maximum ballast water capacity of 8 cubic metres.

The final compliance schedule for when ships are required to install and use a treatment system is given in item 322.

Related Information:
Readers are to note that relevant information is provided on the IMO website. A set of guidelines is also listed on the BWM Conventions and Guidelines part of the IMO website. Guidance on Ballast Water Management is available on the Lloyd’s Register website.
Please note recent updates to the guidelines and relevant information:

- 2016 Guidelines for Approval of Ballast Water Management Systems (G8) (MEPC.279(70))
- 2017 Guidelines for ballast water exchange (G6) (MEPC.288(71))
- 2017 Guidelines for risk assessment under regulation A-4 of the BWM Convention (G7) (MEPC.289(71))
- The experience-building phase associated with the BWM Convention (MEPC.290(71))
- Amendments to the Guidelines for ballast water management and development of ballast water management plans (G4) (MEPC.306(73))
- BWM.2/Circ.33/Rev.1 - Guidance on scaling of ballast water management systems
- BWM.2/Circ.52/Rev.1 on Guidance on entry or re-entry of ships into exclusive operation within waters under the jurisdiction of a single Party
- BWM.2/Circ.61 on Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems
- BWM.2/Circ.62 on Guidance on contingency measures under the BWM Convention
- BWM.2/Circ.63 on Application of the BWM Convention to ships operating solely in sea areas where ballast water exchange in accordance with regulation B-4.1 is not possible
- BWM.2/Circ.69 on System Design Limitations of ballast water management systems and their monitoring
- BWM.2/Circ.70 on Guidance for the commissioning testing of ballast water management systems

Amendments to MARPOL Annex VI, Regulation 13 - Emission Control Area (ECA) (NOx) (including Baltic Sea and North Sea)

**Background:** Littoral States proposed that further to the existing SOx emission control in the Baltic and North Seas (under MARPOL Annex VI Regulation 14), NOx emission control is also established under Regulation 13.

**Summary:** New ships (see Application) will be required to have Tier III engines if they visit these sea areas. There are exemption provisions to allow ships fitted with dual fuel engines to navigate without compliant fuel (e.g. LNG), or ships with only Tier II engines, to navigate in a NOx Tier III ECA if the ship is departing from a shipyard where the ship is newly built, or visiting a shipyard for conversion, repair or maintenance. It should be noted that these exemption provisions apply to all NOx ECAs not just the Baltic and North Sea.

**Implication:** New ships which visit this area will be required to have Tier III engines. This requires the future trading areas of a ship to be assessed at the contract stage.

**Application:** Ships constructed on or after 1 January 2021 if they are to visit the Baltic or the North Sea (including English Channel).
Amendments to the Ballast Water Management Convention, Regulation B-3 - Ballast Water Management for Ships

Background: As the Ballast Water Management (BWM) Convention was written based upon the assumption that the Convention would enter into force by 2007, the provision for a retrofitting schedule had to be revised. An update was done by resolution A.1088(28) but that was subject to a formal amendment to the Convention.

Summary: At MEPC 72, IMO adopted an amendment to regulation B-3, which will enter into force date on 13 October 2019. The amendment is summarised as follows:

The deadline for installing Ballast Water Treatment Systems (BWTS) for existing ships is either:

- No later than the first IOPP renewal survey on or after 8 September 2017 (providing that this survey takes place on or after 8 September 2019; or that the vessel has undertaken an IOPP renewal survey on or after 8 September 2014 but prior to 8 September 2017); or
- No later than the second IOPP renewal survey on or after 8 September 2017 (providing that the first IOPP renewal survey on or after 8 September 2017 takes place before 8 September 2019, and the vessel has not undertaken an IOPP renewal survey on or after 8 September 2014 but prior to 8 September 2017).

For new ships (keel laid on or after 8 September 2017) installation of a BWMS is required by the delivery of the ship.

For ships of less than 150 GT for oil tankers, and 400 GT for others, and/or those which do not hold IOPP certificates, the installation deadline is the date determined by the Flag Administration but not later than 8 September 2024

Implication: The new retrofitting schedule has significant impact on the industry, including the manufacturers of BWMS. However it should be noted that this BWMC amendment formalises the change which has already been announced by IMO.

Application: All ships subject to the BWM Convention (survey and certification - 400 GT or above that have ballast capacity). This includes offshore structures (MODU etc.)

Related instruments:
MEPC.287(71) – Implementation of the BWM Convention
MEPC.298(72) – Determination of the survey referred to in Regulation B-3, as amended, of the BWM Convention
### Amendments to the Ballast Water Management Convention, Regulation D-3 - Approval requirements for Ballast Water Management systems & Code for approval of ballast water management systems

**Background:** IMO has previously adopted guidelines for approving ballast water management systems as non-mandatory MEPC resolutions. The most recent is resolution MEPC.279(70) on 2016 Guidelines for approval of ballast water management systems (G8) (the 2016 Guidelines (G8)), which superseded the Guidelines for approval of ballast water management systems (G8) adopted by resolution MEPC.174(58). It was then decided that the 2016 Guidelines (G8) should be made mandatory and renamed as the Code for approval of Ballast Water Management Systems.

**Summary:** Relevant amendments were made to the BWM Convention and the G8 guidelines (now Code). It is understood that there is no change in the technical content, therefore, any BWMS meeting the 2016 guidelines should be deemed to be approved under the Code. Consequential changes were also made to the BWM.2 circulars affected, at MEPC 72.

**Implication:** There is no change in the technical content, therefore no practical impact but the approval requirements change as follows:
- Ballast water management systems installed on or after 28 October 2020 shall be approved in accordance with the BWMS Code, as may be amended; and
- Ballast water management systems installed before 28 October 2020 shall be approved taking into account the guidelines developed by the Organization or the BWMS Code, as may be amended.

**Application:** To be applied on a mandatory basis from 13 October 2019 for approval of BWMS with the effective date of the change being 28 October 2020

**Related instruments:**
- MEPC.300(72) - Code for approval of ballast water management systems (BWMS Code)
- BWM.2/Circ.43/Rev.1 - Guidance for Administrations on the type approval process for ballast water management systems

### Amendments to SOLAS II-1/1 and II-1/8-1.3 requiring the provision of computerised stability support for the master in case of flooding

**Background:** Amendments to SOLAS chapter II-1 to require the provision on existing passenger ships of a computer able to carry out damage stability calculations are considered to be necessary.

**Summary:** The application regulations of SOLAS chapter II-1/1 make it clear which regulations are applicable to “new” and “existing” ships. Regulation II-1/8-1 has been amended to include a requirement for existing passenger ships to have either onboard or onshore the capability to assess stability after damage. New passenger ships (keels laid on or after 1 January 2014) are already required to provide this.
## Implication
Existing passenger ships will have to provide suitable stability support. Obtaining the data needed for developing the hull model could be challenging and owners are recommended to start considering what is needed at the earliest opportunity. Loading instruments which comply with IACS UR L5 Type 4 will meet these requirements.

### Application
Passenger ships constructed before 1 January 2014 of 120m or more in length or with three or more main fire zones from the first renewal survey after 1 January 2025.

### Related Document
- MSC.1/Circ.1532/Rev.1 - Amendments to the revised guidelines on operational information for masters of passenger ships for safe return to port
- MSC.1/Circ.1589 - Guidelines on operational information for masters in case of flooding for passenger ships

## Amendments to SOLAS Chapter II-1 on damage stability

### Background
Amendments to SOLAS Chapter II-1 to harmonise cargo ship and passenger ship damage stability have been in force since 1 January 2009. These amendments made probabilistic damage stability the main method for calculating damage stability for passenger ships and general cargo ships. Since the amendments have entered into force the need for a number of revisions has become apparent. A major review of the subdivision and damage stability requirements contained in Chapter II-1 of SOLAS has been undertaken.

### Summary
Significant changes have been made to the following regulations in parts A, B, B-1, B-2, B-4 and C:

- Regulation 4, making the alternative compliance part of the text rather than a footnote.
- Regulation 5-1, requiring limiting stability information to include trim.
- Regulation 6, modifying the required subdivision index, R, for passenger ships.
- Regulation 7-2, amending the calculation for s.
- Regulation 9, providing limits on the distance from the keel line that small wells should be located unless a damage stability check is made and introducing a minimum limit for the vertical damage extent.
- Regulation 12, permitting a butterfly valve at the collision bulkhead on cargo ships.
- Regulation 16, to require testing of watertight hatches.
- Regulation 17, requiring air pipes which terminate in a superstructure to be considered unprotected openings unless fitted with a watertight means of closure.
- Regulation 22, removing the possibility of leaving watertight doors open.

Other minor changes have been made to a number of other regulations.
Implication: These are significant changes to the damage stability regulations that should be taken into consideration at an early stage.

Application: The amendments will be applicable for ships where the contract for construction is signed on or after 1 January 2020, or the keel is laid on or after 1 July 2020 or delivered on or after 1 January 2024.

Related instrument:
Resolution MSC.429(98) - Revised Explanatory Notes to SOLAS chapter II-1 subdivision and damage stability regulations
MSC.1/Circ.1567 – Notification of amendments to SOLAS regulation II-1/12.5.1

Amendments to SOLAS II-1/19, III/30 and III/37 concerning damage control drills on passenger ships

Background: The IMO agreed that damage control drills would help improve the safety of passenger ships and that appropriate amendments to SOLAS should be developed together with associated guidance.

Summary: Amendments to SOLAS chapter II-1 regulation 19 and chapter III regulations 30 and 37 to mandate damage control drills were adopted. The requirements are operational in nature with drills required at regular intervals for all passenger ships. The drills will have to involve crew members who have damage control responsibilities. Additionally, drills will have to be recorded and should cover different damage scenarios.

Implication: Additional drills will need to be included in the ships’ normal operations.

Application: Applicable to all passenger ships.

The Revised MARPOL Annex VI for the Prevention of Air Pollution from Ships (Chapters 1 - 3)

Background: The requirements of MARPOL Annex VI for the Prevention of Air Pollution from Ships (Chapters 1 - 3) as amended by MEPC.176(58) were further revised by MEPC.251(66) to delay the application to yachts (ships used solely for recreational purposes) until 1 January 2021. From this date, yachts are required to comply with the Tier III requirements.

However, it should be noted that yachts of less than 500 GT constructed before 1 January 2021 and recreational yachts of less than 24 metres will not need to comply with Tier III even after this date.

Implication: Yacht owners and Managers will need to note the new requirements for yachts which are applicable from 1 January 2021.
### Application
All yachts will need to comply with Tier III requirements from 1 January 2021 apart from yachts of less than 500GT constructed before 1 January 2021 and recreational yachts of less than 24 metres.

### Related Instruments
- **MEPC.1/Circ.795/Rev.4** - Unified Interpretations to MARPOL Annex VI clarifies the applicability of the requirements for bunker delivery notes.
- **Resolution MEPC.280(70)** - Effective implementation of the 0.50% m/m sulphur limit under regulation 14.1.3 of MARPOL Annex VI.
- **MEPC.1/Circ.878** - Guidance on the development of a ship implementation plan for the consistent implementation of the 0.50% sulphur limit under MARPOL annex VI.
- **Resolution MEPC.320(74)** – 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI.
- **MEPC.1/Circ.864/Rev.1** – 2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships.
- **MEPC.1/Circ.881** – Guidance for port State control on contingency measures for addressing non-compliant fuel oil.
- **MEPC.1/Circ.882** – Early application of the verification procedures for a MARPOL Annex VI fuel oil sample (Regulation 18.8.2 or Regulation 14.8).
- **MEPC.1/Circ.883** – Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the Exhaust Gas Cleaning System (EGCS) fails to meet the provisions of the 2015 EGCS Guidelines (resolution MEPC.259(68)).
- **MEPC.1/Circ.884** – Guidance for best practice for member state/coastal state.
- **MEPC.1/Circ.887** – Reporting of data related to fuel oil availability and quality in GiSIS to promote greater understanding of the consistent implementation of the 0.50% M/M sulphur limit under MARPOL annex VI.
Part 1B

Adopted IMO and ILO requirements entering into force in the future

This part includes requirements that have been adopted and have an entry into force date which has been established by the IMO or ILO but not yet reached.
1 October 2020

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Amendments to MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008 - Use of electronic record books

**Background:** IMO periodically reviews the administrative provisions of mandatory requirements and considers ways to make these more efficient.

**Summary:** Amendments to MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008 have been adopted which allow the use of electronic record books as an alternative to hard copy record books when complying with the record keeping requirements of MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008.

To be used as an alternative, the electronic recording system is required to be approved by the Administration and electronic records generated and retained by the system should be presented so that the records match the format defined in the relevant MARPOL Annexes.

Any electronic system considered to conform to the criteria for approval should be provided with a written declaration from the Administration. The declaration should be carried on board the ship for the purpose of statutory surveys or inspections.

Existing electronic recording systems for rechargeable systems containing ozone depleting substances shall only be considered an electronic record book if the system is approved by the Administration on or before the first IAPP renewal survey carried out on or after 1 October 2020, but not later than 1 October 2025.

**Implication:** Companies have the option to use electronic recording systems approved by the Administration to comply with the record keeping requirements of MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008. Whilst the electronic records generated and retained by the system are currently required to be presented in the form of records required by the MARPOL Annexes, this may be reviewed in the future.

**Application:** All ships using electronic record books to comply with the record-keeping requirements of MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008.

**Related Instruments**

- MEPC.312(74) - Guidelines for the use of electronic record books under MARPOL
- MEPC.321(74) - 2019 Guidelines for port State control under MARPOL Annex VI Chapter 3
### Amendments to MARPOL Annex VI regulations 2.42 and 19.3 concerning EEDI regulations for ice-strengthened ships

**Background:** This amendment to Annex VI clarifies which ships are not required to meet the attained EEDI due to their disadvantageous hull shape and construction for ice-breaking purposes.

**Summary:** Regulation 19.3 of MARPOL Annex VI has been amended to refer to ships with ice-breaking capabilities as "category A ships as defined in the Polar Code", instead of "cargo ships having ice breaking capability". The definition of "Polar Code" has also been included in Regulation 2 for reference.

**Implication:** This clarifies the exclusion clause.

**Application:** This applies to:
1. Each new ship;
2. Each new ship which has undergone a major conversion; and
3. Each new or existing ship which has undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly constructed ship.

The requirement is for category A ships designed for operation as polar ships.

### Amendments to the NOx Technical Code 2008 (Certification Requirements for SCR Systems)

**MEPC Resolution on Amendments to the 2017 Guidelines Addressing Additional Aspects of the NOx Technical Code 2008 with regard to Particular Requirements Related to Marine Diesel Engines Fitted with Selective Catalytic Reduction (SCR) Systems**

**Background:** The NOx Technical Code provides two certification schemes: scheme A, where an engine and SCR system are tested together; and scheme B, where it is certified separately before installation onboard and then a final (simplified) testing is undertaken. Currently, the NOx Technical Code stipulates scheme B can be used only when the alternate scheme cannot be undertaken due to “practical and technical” reasons.

**Summary:** This amendment removes such restrictions and indicates scheme A and scheme B of the 2017 Guidelines Addressing Additional Aspects of the NOx Technical Code 2008 with regard to Particular Requirements Related to Marine Diesel Engines Fitted with Selective Catalytic Reduction (SCR) Systems (Resolution MEPC.291(71)), as amended, apply equally. The amendments addressed by the resolution MEPC.313(74)
also require the NOx-reducing device to be included within the EIAPP certification and its presence recorded in the engine’s "Technical File".

**Implication:** This will help if a main engine and SCR are manufactured in different locations and pre-certified separately, to be later installed together on board.

**Application:** Applicable for marine diesel engines to be installed onboard a ship constructed on or after 1 October 2020, as confirmed by Resolution MEPC.317(74).

### 1 January 2021

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**Amendments to the 2011 Enhanced Survey Programme Code for bulk carriers and oil tankers**

**Background:** The Enhanced Survey Programme (ESP) Code is a mandatory survey requirement for oil tankers and bulk carriers as required by SOLAS Regulation XI-1/2. The Code was adopted as A.1049(27) which superseded the previous ESP programme (A.744(18)). The ESP Code is amended to reflect changes in the IACS UR Z10 series.

**Summary:** Extensive changes have been made to the text:

- To ensure the text used is mandatory,
- To update the figures,
- To introduce consistency between the different parts of the Code, in particular including definitions and figures for edge corrosion, grooving corrosion and pitting corrosion intensity
- To clarify requirements concerning updates to the Ship Construction File
- To include new sections on the number and locations of thickness measurements for ships constructed to IACS CSR
- To include new sections on the acceptance criteria for corrosion

In light of the extent of the changes made a new consolidated text has been issued incorporating all amendments made since the 2011 ESP Code was issued.

**Implication:** These amendments will help ensure harmonisation between the IMO and IACS requirements. There is no significant impact on LR classed vessels.

**Application:** Survey requirements for bulk carriers and oil tankers.
### Amendments to the IMSBC Code (Amendment 05-19)

**Background:** The IMSBC Code is regularly reviewed to take into account new requirements for existing substances or new substances. Amendment 05-19 has been issued as a consolidated version of the IMSBC Code which is a full replacement of the existing Code.

**Summary:** Amendment 05-19 includes new and amended schedules which will provide specific requirements for solid bulk cargoes intended to be carried under the IMSBC Code and specifically:
- Flue dust containing lead and zinc
- Matte containing copper and lead
- Draft new test procedure for determining the transportable moisture limit (TML) for bauxite cargoes (Modified Proctor/Fagerberg test procedure for bauxite) included in Appendix 2
- Draft individual schedule for bauxite as a group A cargo (liable to liquefy)
- Draft amendments to the existing individual schedule of bauxite as Group C cargo

**On bauxite cargoes:**
- Draft amendments to the individual schedules for seed cake UN 1386 (a), seed cake UN 1386 (b) and seed cake UN 2217
- Draft amendments to the individual schedules for seed cake UN 1386 (a), seed cake UN 1386 (b) and seed cake UN 2217

**On metal sulphide concentrates:**
- New draft individual schedule for metal sulphide concentrates, self-heating UN 3190 as a group A and B cargo.
- Ammonium nitrate-based fertiliser (non-hazardous) remains classified as Group C with a footnote reference to the information contained in CCC.1/Circ.4 on Carriage of Ammonium Nitrate Based Fertilizer (non-hazardous). Discussions on the hazards of ammonium nitrate-based fertiliser are continuing.

**Implication:** Shipowners and operators should be aware of the changes and advise their masters accordingly.

**Application:** All ships carrying solid bulk cargoes, other than grain, will be required to apply the amendments from 1 January 2021; administrations may apply the requirements voluntarily from 1 January 2020.

**Related Instruments**
- MSC.1/Circ.1395/Rev.4 - Lists of solid bulk cargoes for which a fixed gas fire-extinguishing system may be exempted or for which a fixed gas fire-extinguishing system is ineffective

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### Revision of the IBC Code Chapters 17, 18 and 21 - Assigning carriage requirements for products

**Background:** In 2004, updated criteria on pollution aspects were inserted in the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code) for the assessment of products. An update with regards to safety aspects did not take place at
1 January 2021

Adopted by
Resolution
MEPC.318(74)
MEPC.319(74)
MSC.460(101)
MSC.463(101)

the time due to time constraints. Before undertaking an update to the safety assessment of the existing products it was decided to review the criteria set in Chapter 21 of the Code.

**Summary:** The criteria for assigning carriage requirements to chemicals (Chapter 21) with regards to safety hazards were reviewed and reassessed. The implication of these amendments may result in a change of ship type, tank type and changes to carriage requirements, for certain products. Some products which are currently categorised as non-toxic cargoes, become categorised as toxic cargoes due to this revision. As a result, new certificates and cargo lists complying with these amendments are to be produced on board from entry into force of these amendments. The lists of requirements for specific cargoes (Chapters 17 and 18) were amended accordingly. Consequential changes to the BCH Code were made as well.

**Implication:**

Shipowners and Ship Managers need to be aware of any required changes to operational requirements or minor modifications on board. Especially, attention must be paid to a high number of products that were not previously classified as toxic but have been classified as such after the revision. A new Certificate of Fitness including a new List of Products will be issued to applicable ships, based on the revised requirements. For existing ships, the new certificate will have the same expiry date as the existing certificate and must be kept together with the existing certificate until 1 January 2021. The new certificate will state on the front page that it is effective from and supersedes the existing certificate on 1 January 2021.

**Application:** New and existing ships to which the IBC Code applies, i.e. all chemical tankers regardless of tonnage and nature of voyage (international and non-international voyages).

354

1 January 2021

Adopted by
Resolution
MEPC.315(74)
MEPC.318(74)
MEPC.319(74)
MSC.460(101)

Amendments to MARPOL Annex II and the associated draft amendments to Chapter 16 of the IBC Code and Chapter V of the BCH Code related to the discharge of cargo residues and tank washings of high-viscosity, solidifying and persistent floating products

**Background:** This is the follow up to a recent amendment which covered tank washings of high viscosity (but not harmful) oils which were washed ashore in the English Channel.

**Summary:** The new amendment to MARPOL Annex II requires a pre-wash for cargoes of persistent floating substances with high viscosity and includes cargoes such as vegetable oils and paraffins when the vessel is in one of the defined special areas. Amendments to the standard form of the Procedures and Arrangements (P&A) Manual in Appendix IV are also contained in IMO Resolution MEPC.315(74). In this regard a new special area “North Western European Water” has been included.

Consequential amendments to the IBC Code and the BCH Code are as follows:

**IBC Code:**
- New paragraph 16.2.7, referring to the new prewash requirements in MARPOL Annex II;
• The addition of 16.2.7 in column “o” of the entries in the revised chapter 17 corresponding to priority substances to which the new MARPOL Annex II prewash requirements should be applied as a first step; and
• New paragraph 21.6.5, specifying the criteria that trigger the inclusion of 16.2.7 in column “o” of chapter 17.

**BCH Code:**
• Corresponding to a new paragraph 16.2.7 of the IBC Code.

**Implication:** The impact is limited as the pre-wash requirements apply only to the North Sea (new special area). However, it should be noted that short sea trade vessels solely operating in this area could be significantly impacted. The P&A Manual amendments shall be required to be actioned by all ships subject to MARPOL Annex II surveys, by the date of entry into force.

**Application:** Being an operational requirement, this applies to all new and existing ships upon entry into force. The amendment will enter into force on 1 January 2021.

### Amendments to MARPOL Annex VI, Regulation 13 - Baltic Sea and North Sea Emission Control Area (ECA) (NOx)

**328** (Repeated)

**1 January 2021**

See item 328 in Part -1A - Ships constructed on or after 1 January 2021 will have to comply if they are to visit the Baltic or the North Sea (including English Channel).

**1 June 2021**

### Amendments to MARPOL Annex IV - Establishment of Special Area under MARPOL Annex IV (Sewage) in the Baltic Sea

**305** (Repeated)

**1 June 2021**

See Item 305 in Part 1A - For existing passenger ships application will be from 1 June 2021 (except for the resolution MEPC.275(69) as explained in 305).

**1 January 2024**

### Amendments to the FSS Code – Chapter 15, paragraphs 2.2.3.21, 2.2.3.2.6 and 2.2.4.2.1 concerning inert gas flow and revision of the term ‘forward of’ to ‘downstream of’.

**361**

**1 January 2024**

**Background:** The term ‘forward of’ is used in paragraphs 2.2.3.2.1, 2.2.3.2.6 and 2.2.4.2.1 of chapter 15 of the FSS Code which is in contradiction with MSC.1/Circ.1582 (Unified interpretations of chapter 15 of the FSS Code).
Summary: In these amendments to the FSS Code the term ‘forward of’ is amended to read ‘downstream of’ considering that normally the inert gas generator is located in the aft part of the ship, the cargo tanks are located in the forward part of the ship, and the inert gas flows from the inert gas generator to the cargo tanks.

Implication: This amendment stems from the unified interpretation (MSC.1/Circ.1582/Rev.1) and has not changed the regulation but instead clarifies the text.

Application: This amendment will enter into force 1 January 2024 and is applicable to all ships which have inert gas systems. This clarification was originally published in MSC.1/Circ.1582/Rev.1 Unified Interpretations of Chapter 15 of the FSS Code effective from December 2018.

Related Instruments
MSC.1/Circ.1582/Rev.1 - Amendments to MSC.1/Circ.1582 Unified interpretations of chapter 15 of the FSS Code

Amendments to LSA Code Paragraph 4.4.8.1 concerning the exemption of the requirement for buoyant oars in lifeboats with two independent propulsion systems

Background: Paragraph 4.4.8.1 of the LSA Code provides that, except for free-fall lifeboats, sufficient buoyant oars to make headway in calm seas should be provided. These requirements were originally intended for standard lifeboats with a single engine rather than lifeboats with two independent propulsion systems.

Summary: The amended text allows that for lifeboats equipped with two independent propulsion systems no such buoyant oars are necessary.

Implication: This amendment incorporates MSC.1/Circ.1597 into the LSA Code. It is unlikely that both propulsion systems will fail at the same time so for lifeboats with two independent propulsion systems there is now no requirement for buoyant oars.

Application: This amendment is only applicable to lifeboats with two independent propulsion systems and revokes MSC.1/Circ.1597. It will enter into force 1 January 2024.

Related Instruments
MSC.1/Circ.1597 - Unified interpretation of paragraph 4.4.8.1 of the LSA Code

Amendments to the LSA Code paragraph 6.1.1.3 - to allow the use of hand-operated mechanisms for the launching of rescue boats

Background: Paragraph 6.1.1.3 of the LSA Code requires that a launching appliance ‘shall not depend on any means other than gravity or stored
1 January 2024
Adopted by
MSC.459(101)

mechanical power which is independent of the ship's power supplies to launch the survival craft or rescue boat’.

IMO has considered amendments to this paragraph to allow hand-operated mechanisms for launching rescue boats. It has been suggested that the use of hand-operated mechanisms simplifies davit construction and improves the reliability substantially but concerns over potential safety hazards have also been expressed.

**Summary:** The amendments allow hand-operated mechanisms for launching rescue boats and includes the means of embarkation for the crew and an additional requirement for means to bring the rescue boat against the ship’s side and holding it alongside so that persons can be safely embarked.

**Implication:** This amendment will only be applicable to rescue boats that are not one of the ship's survival craft. It should be noted that SOLAS Chapter III has different requirements for cargo and passenger ships in this respect.

**Application:** The amendment enters into force 1 January 2024 and will apply to rescue boats installed on board cargo ships on or after 1 January 2024.

350

1 January 2024
Adopted by
MSC. 458(101)

**Amendments to the IGF Code (Various - Definitions, probability index fv, loading limit, fuel distribution, internal combustion engines, fuel containment system, type C tanks etc.)**

**Background:** While the original intention of revising the IGF Code was to consider the use of low-flashpoint fuels other than LNG, matters related to LNG where there are opportunities to reflect lessons learned and make necessary improvements and additions have also considered.

**Summary:** The amendments to parts A and A-1 of the IGF Code amend:

- the definition of the probability index fv in order to align it with SOLAS;
- the conditions for allowing fuel tank loading limits higher than calculated based on the tank insulation and the probability of an external fire heating the tank contents up;
- requirements for fuel distribution outside of machinery spaces including secondary enclosures for gas fuel pipes;
- explosion relief systems and designed accommodation of overpressure for internal combustion engines; and
- fire protection requirements for the separation of fuel containment systems from other spaces, and for type C fuel storage hold spaces;

**Implication:** These amendments improve the application of the IGF Code by taking account of lessons learned so far. Design requirements will not be applied retrospectively to existing ships.

**Application:** Applicable to ships constructed or converted to use gas as fuel on or after 1 January 2024.

**Further Information**
Lloyd’s Register’s [Marine Gas webpage](#) provides further information on alternative fuels and the IGF Code.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>1 January 2025</td>
<td><strong>188 &amp; 264 (Repeated)</strong> New Chapter 4 of MARPOL Annex VI – Energy Efficiency Design Index (EEDI)**</td>
</tr>
<tr>
<td></td>
<td>See item 188 &amp; 264 in Part 1A – Phase 3 of EEDI will apply from 1 Jan 2025 onwards. Note that this is subject to amendment for selected ship types/sizes, see 373</td>
</tr>
</tbody>
</table>
Part 2

IMO and ILO requirements currently under development

This part currently covers legislation that is currently under discussion and has not been adopted; therefore, no fixed entry into force date has been agreed. It also covers legislation that has been adopted but has no certain entry into force date because the conditions have not been met. This section is subject to change as discussions progress.
<table>
<thead>
<tr>
<th>ILO004</th>
<th>ILO Maritime Labour Convention (MLC 2006) - 2018 Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected entry into force</td>
<td><strong>Background and Summary:</strong> These amendments to the Maritime Labour Convention introduce a change that means a Seafarer’s Employment Agreement (SEA), including payment of wages, continues to have effect while a seafarer is held captive on or off the ship as a result of piracy or armed robbery against the ship, until they are repatriated or die in captivity. This is the case regardless of whether the expiry date of the SEA has passed or if notice has been given to suspend or terminate it.</td>
</tr>
<tr>
<td>26 December 2020</td>
<td><strong>Implication:</strong> Shipowners and ship managers will need to comply from the entry into force date.</td>
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<tr>
<td>Application: All ships to which the Maritime Labour Convention applies.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>370</th>
<th>Draft amendments to regulation 2 and 14 and appendix VI of MARPOL Annex VI with regard to the onboard sampling points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated entry into force</td>
<td><strong>Background:</strong> MEPC had previously concluded sampling guidelines for fuel in use (MEPC.1/Circ.864), but without specifying the actual requirements for a ship to have such a sampling point in MARPOL. The new work programme on the new additional sampling point (in addition to the sampling point for fuel that the ship is receiving) for fuel in use was agreed at MEPC 71.</td>
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<tr>
<td>1 April 2022</td>
<td><strong>Summary:</strong> The draft amendments consist of the following parts:</td>
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<tr>
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<td>• MARPOL Annex VI regulation 2; a new definition in regulation 2 on low flashpoint fuel, for which sampling points will be exempted.</td>
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<td></td>
<td>• MARPOL Annex VI regulation 14; Requirements on sampling points. This applies to both new ships (constructed after entry into force) and existing ships (first renewal survey 12 months or later, after entry into force). Reference is made to the Guidelines for onboard sampling for the verification of the sulphur content of the fuel oil used on board ships (Circular MEPC.1/Circ.864)</td>
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<tr>
<td></td>
<td>• IAPP certificate supplement; New check boxes for indicating the presence of sampling points are to be added.</td>
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<td><strong>Implication:</strong> These amendments introduce requirements for “in-use” sampling points and “onboard” sampling. Whilst the former is the original work introduced in the above, the latter is for fuels delivered but not used yet. The supporting guidelines for the “onboard” sampling were expected to be approved at MEPC 75. <strong>See note 10 regarding postponed IMO meetings.</strong></td>
</tr>
<tr>
<td>Application: All new and existing ships.</td>
<td></td>
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<tr>
<td>Existing ships shall be required to comply at the first renewal survey of the IAPP certificate that will take place on or after 12 months or more from EIF date.</td>
<td></td>
</tr>
<tr>
<td>Estimated entry into force</td>
<td>Draft amendments to the MARPOL Convention in relation to analysis of sulphur content</td>
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<td>----------------------------</td>
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</tbody>
</table>
| 1 April 2022               | **Background:** In order to accommodate “fuel-in use”, a sampling analysis procedure was reviewed, and a package of amendments were made to MARPOL.  

**Summary:** Draft new paragraphs 8 and 9 are added for ‘In-use and on board fuel oil sampling and testing’. The verification procedure part 2 is to be followed in the new Verification procedures of Appendix VI of MARPOL Annex VI. For the test results, 95% confidence will be allowed (limit $X +0.59R$) and the acceptable sulphur limits are extended to 0.11% and 0.53% for 0.10% and 0.50% respectively. The laboratory is to be accredited to ISO17025:2017.  

**Implication:** Introduction of 95% confidence level is understood as a possible chance of nominal exceedance. This should be clearly understood by the authority.  

**Application:** Sampling of fuel used on board all ships from the date of entry into force of the amendment. See note 10 regarding postponed IMO meetings.

<table>
<thead>
<tr>
<th>Expected</th>
<th>1 September 2022</th>
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<tbody>
<tr>
<td>Estimated entry into force</td>
<td>Draft amendments to MARPOL Annexes I, IV and VI concerning the exemption of UNSP barges from survey and certification requirements</td>
</tr>
</tbody>
</table>
| 1 September 2022 | **Background:** The draft amendments to MARPOL Annexes I, IV, and VI regarding the exemption of UNSP barges from the survey and certification requirements together with an associated draft MEPC.1 Circular ‘Guidelines for the exemption of unmanned non-self-propelled (UNSP) barges from the survey and certification requirements under the MARPOL Convention’ have been finalised although not yet adopted.  

**Summary:** The draft amendments to MARPOL Annexes I, IV and VI include individual definitions of a UNSP barge under each Annex together with the draft exemption certificates.  

The exemption will be granted after an initial survey to ensure there is no source of pollution on board the barge and the exemption certificates issued for a period not exceeding 5 years.  

**Implication:** It should be noted that a condition of the exemption certificate will be an obligation on the shipowner or operator to notify the flag Administration and port State if the UNSP barge becomes non-compliant. Any such exemption certificate will cease to be valid whenever the UNSP barge does not continue to meet the definition of a UNSP barge as contained in the three annexes regardless of whether the owner or operator informs the Administration and the port State.
Application: A UNSP barge is defined as a barge that:
- Is not propelled by mechanical means;
- Has neither persons or living animals on board during navigation;
- Carries no oil; has no fuel oil tank, lubricating oil and bilge oil residues tank and has no machinery fitted that may use oil or generate oil residues (Annex 1)
- Is not used for holding sewage during transport or have any arrangements that could produce sewage (Annex IV)
- Has no system, equipment and/or machinery fitted that may generate emissions (Annex VI)

See note 10 regarding postponed IMO meetings.

Draft amendments to Regulation 21 of MARPOL Annex VI – amendments to EEDI Phase 3

Background: MEPC 74 approved changes to the time period and the reduction rates for EEDI phase 3 requirements for certain ship types as shown in the table below.

Summary: Table 1 of Regulation 21 will be amended to reflect these changes. In relation to an identified problem facing larger bulk carriers in implementing the future EEDI requirements, Table 2 of Regulation 21 is also amended for bulk carriers to show that the parameter \( b \) is the same for ships with DWT less than, equal to or more than 279,000.

Implication:

Shipbuilders and Designers: Potential change to ship/machinery design to reduce GHG emissions, now shall happen at a different date than indicated previously in the Table 1 of Regulation 21 MARPOL Annex VI for some vessel types. This requires planning within the design process as some reduction dates are moving earlier to 1 Jan 2022, as indicated in the red highlighted sections of the copy of Table 1 below for easy reference. There are several ways to achieve this, such as:
- Increase ship size: engine power ratio
- Reduce lightship weight
- Innovative solutions (air bubble – friction reduction)
- Optimise propeller efficiency
- Hydrodynamics improvement
- Speed reduction
- Use of renewable power source (wind, solar power)
- Low carbon fuels (e.g., LNG)
- Energy saving devices (e.g., WHR, shaft generators)

Shipowners and Ship Managers: There are a number of technical and operational measures that can be considered to reduce GHG emissions.
**Application:** Applies to all new ships of the types or sizes shown in the table below with a change from the previous requirements. *See note 10 regarding postponed IMO meetings.*

### Table 1

<table>
<thead>
<tr>
<th>Ship Type</th>
<th>Size</th>
<th>Phase 3 1-Jan-22 and onwards</th>
<th>Phase 3 1-Jan-25 onwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk carrier</td>
<td>20,000 <em>DWT</em> and above</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10,000 *and above but less than 20,000 DWT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Carrier</td>
<td>15,000 <em>DWT</em> and above</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10,000 *and above but less than 15,000 DWT</td>
<td></td>
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<tr>
<td></td>
<td>2,000 *and above but less than 10,000 DWT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas tanker</td>
<td>10,000 *and above</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,000 – 10,000</td>
<td></td>
<td></td>
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<tr>
<td>Tanker</td>
<td>20,000 *and above</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>4,000 – 20,000</td>
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<td></td>
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<tr>
<td>Container ship</td>
<td>200,000 <em>DWT</em> and above</td>
<td></td>
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<tr>
<td></td>
<td>120,000 *and above but less than 200,000 DWT</td>
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<td>80,000 *and above but less than 120,000 DWT</td>
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<td>40,000 *and above but less than 80,000 DWT</td>
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<td></td>
<td>15,000 *and above but less than 40,000 DWT</td>
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<td></td>
<td>10,000 *and above but less than 15,000 DWT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Cargo ship</td>
<td>15,000 *and above</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>3,000 – 15,000</td>
<td></td>
<td></td>
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<tr>
<td>Refrigerated cargo carrier</td>
<td>5,000 *and above</td>
<td></td>
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<tr>
<td></td>
<td>3,000 – 5,000</td>
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<tr>
<td>Combination carrier</td>
<td>20,000 *and above</td>
<td></td>
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<td></td>
<td>4,000 – 20,000</td>
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<tr>
<td>LNG carrier***</td>
<td>10,000 <em>DWT</em> and above</td>
<td></td>
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<tr>
<td>Ro-ro cargo ship (vehicle carrier)**</td>
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<tr>
<td></td>
<td>10,000 <em>DWT</em> and above</td>
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<tr>
<td>Ro-ro cargo ship***</td>
<td>2,000 <em>DWT</em> and above</td>
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<tr>
<td></td>
<td>1,000 *and above but less than 2,000 DWT</td>
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<tr>
<td>Ro-ro passenger ship***</td>
<td>1000 <em>DWT</em> and above</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>250 *and above but less than 1,000 DWT</td>
<td></td>
<td></td>
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<tr>
<td>Cruise passenger ship***</td>
<td>85,000 <em>GT</em> and above</td>
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<tr>
<td></td>
<td>25,000 *and above but less than 85,000 GT</td>
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<td>25,000 *and above but less than 15,000 DWT</td>
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<td>2,000 *and above but less than 10,000 DWT</td>
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<td>1,000 *and above but less than 5,000 DWT</td>
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<td>500 *and above but less than 1,000 DWT</td>
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<td>100 *and above but less than 500 DWT</td>
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<td></td>
<td>50 *and above but less than 100 DWT</td>
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<tr>
<td>Ro-ro passenger ship***</td>
<td>1000 DWT and above</td>
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<tr>
<td></td>
<td>250 and above but less than 1000 DWT</td>
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<td></td>
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<tr>
<td>Cruise passenger ship***</td>
<td>85,000 GT and above</td>
<td></td>
<td></td>
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<tr>
<td>having non-conventional propulsion</td>
<td>25,000 *and above but less than 85,000 GT</td>
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<td></td>
<td>25,000 *and above but less than 15,000 DWT</td>
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<td>2,000 *and above but less than 10,000 DWT</td>
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<td>1,000 *and above but less than 500 DWT</td>
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<td>500 *and above but less than 100 DWT</td>
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<td>50 *and above but less than 50 DWT</td>
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<tr>
<td>Golf course***</td>
<td>10,000 <em>DWT</em> and above</td>
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<td></td>
<td>5,000 *and above</td>
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<tr>
<td>Cruise passenger ship***</td>
<td>85,000 GT and above</td>
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<tr>
<td>having non-conventional propulsion</td>
<td>25,000 *and above but less than 85,000 GT</td>
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<td>25,000 *and above but less than 15,000 DWT</td>
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<td>2,000 *and above but less than 10,000 DWT</td>
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<td>1,000 *and above but less than 500 DWT</td>
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<td>500 *and above but less than 100 DWT</td>
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<td>50 *and above but less than 50 DWT</td>
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<tr>
<td>Golf course***</td>
<td>10,000 <em>DWT</em> and above</td>
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<td>5,000 *and above</td>
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<tr>
<td>Cruise passenger ship***</td>
<td>85,000 GT and above</td>
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<tr>
<td>having non-conventional propulsion</td>
<td>25,000 *and above but less than 85,000 GT</td>
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<td>25,000 *and above but less than 15,000 DWT</td>
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<td>2,000 *and above but less than 10,000 DWT</td>
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<td>500 *and above but less than 100 DWT</td>
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<tr>
<td>Golf course***</td>
<td>10,000 <em>DWT</em> and above</td>
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<td>5,000 *and above</td>
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<tr>
<td>Cruise passenger ship***</td>
<td>85,000 GT and above</td>
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<tr>
<td>having non-conventional propulsion</td>
<td>25,000 *and above but less than 85,000 GT</td>
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<td>25,000 *and above but less than 15,000 DWT</td>
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<td>2,000 *and above but less than 10,000 DWT</td>
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<td>1,000 *and above but less than 500 DWT</td>
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<td>500 *and above but less than 100 DWT</td>
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<tr>
<td></td>
<td>50 *and above but less than 50 DWT</td>
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</tbody>
</table>
Reduction factor to be linearly interpolated between the two values dependent upon ship size. The lower value of the reduction factor is to be applied to the smaller ship size.

** Phase 1 commenced for those ships on 1 September 2015.
*** Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.

Note: n/a means that no required EEDI applies.

### Table 2

In table 2 (Parameters for determination of reference values for the different ship types), row 2.25 for bulk carriers is replaced by the following:

<table>
<thead>
<tr>
<th>Ship type defined in regulation 2</th>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.25 Bulk carrier</td>
<td>961.79</td>
<td>DWT of the ship where DWT≤279,000</td>
<td>0.477</td>
</tr>
<tr>
<td></td>
<td></td>
<td>279,000 where DWT &gt; 279,000</td>
<td></td>
</tr>
</tbody>
</table>

** Expected 30 October 2022**

**368**

**Estimated entry into force**

30 October 2022

Information subject to change

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**Draft amendment to the AFS Convention – Control of AFS containing Cybutryne**

**Background:** Evidence of environmental risks from the use of anti-fouling paints that contain cybutryne was submitted to the IMO in February 2019. The evidence was accompanied by a proposal to establish controls on anti-fouling systems (AFS) containing cybutryne.

**Summary:** Amendments to annex 1 of the AFS Convention have been drafted to apply control measures to AFS containing cybutryne, plus associated amendments to the form of the International AFS Certificate. These amendments were due to be approved at MEPC 74 in June 2019. However, following concerns raised regarding the consequential effects of blasting and the availability of sealer coats the amendments were referred to PPR 7 for further consideration.

**Implication:** The draft amendments would mean that AFS containing cybutryne shall not be applied or reapplied to ships on or after 1 January 2023 (assuming entry into force is delayed from 3 April 2022 to 30 October 2022). AFS containing cybutryne shall be removed or covered with a sealer coat no later than either:

- 1 January 2028; or
- At the next scheduled renewal of the anti-fouling system after 1 January 2028, but no later than 60 months following the last application to the ship of an anti-fouling system containing cybutryne.

The final form of the deadline for removal or sealing will be considered at MEPC 75 and clarified prior to adoption. See note 10 regarding postponed IMO meetings.

Shipowners and ship managers should expect to be required by Administrations to apply for a survey for the issuances of an International AFS Certificate no later than 1 January 2025 (assuming entry into force is delayed from 3 April 2022 to 30 October 2022). Such a survey should not affect the time available to shipowners and ship managers to comply with the new control measures in annex 1 to the AFS Convention.
**Application:** All AFS containing cybutryne and all ships except:

- Fixed and floating platforms, FSUs, and FPSOs that have been constructed prior to 1 January 2023 and that have not been in dry-dock on or after 1 January 2023 (assuming entry into force is delayed from 3 April 2022 to 30 October 2022);
- Ships not engaged in international voyages; and
- Ships of less than 400 gross tonnage engaged in international voyages, if accepted by the coastal State(s)).

Further amendments to the exemption of ships not engaged in international voyages and ships of less than 400GT engaged in international voyages may be reviewed before adoption.

**Related Instruments:**
MEPC.195(61) - 2010 Guidelines for Survey and Certification of Anti-fouling Systems on Ships

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**Draft amendments to SOLAS regulation II-1/3-8 to cover mooring arrangements**

**Background:** As a result of a number of incidents on board ships involving the failure of mooring lines causing serious injury or death, the IMO has developed new requirements covering the provision and maintenance of mooring lines.

**Summary:** Four new paragraphs will be added to the current regulation II-1/3-8, to address:

- **Design requirements:** New ships will have to be designed, and their mooring equipment (including ropes/wire) selected to ensure occupational safety and safe mooring of ships. Ship specific information will need to be included in the Towing and Mooring Arrangement Plan described in the new design guidelines given below. Approval of the plan by the flag Administration is not required.
- **Inspection and maintenance:** For all ships, regardless of size and date of construction, mooring equipment including lines will be subject to inspection and maintenance requirements. Three sets of supporting guidance covering design, maintenance and the strength of mooring equipment have also been produced.

**Implication:** The design of mooring arrangements may have to change significantly to demonstrate compliance with the new requirements. Reasons for non-compliance will have to be documented.

**Application:** The new requirements that affect the design of ships apply only to new ships of 3000GT and above with building contract on or after 1 January 2024, keel laid on or after 1 July 2024 or delivered on or after 1 January 2028. New ships less than 3000GT are encouraged to comply. The requirements for inspection and maintenance will affect existing ships.

**Related instruments:**
Draft MSC Circular - Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fitting for safe mooring (Design guidelines)
Draft MSC Circular - Guidelines for inspection and maintenance of mooring equipment including lines (Maintenance guidelines)
<table>
<thead>
<tr>
<th>Estimated entry into force</th>
<th>Draft amendments to SOLAS chapter II-1 concerning doors, hatches and valves which pierce watertight boundaries</th>
</tr>
</thead>
</table>
| 1 January 2024            | **Background:** The amendments to SOLAS chapter II-1 part B and B-1 (MSC.216(82) and MSC.421(98)) introduced inconsistencies with parts B-2 to B-4. These arose from the different philosophies behind the probabilistic damage stability assessment and the assumptions made for the regulations in parts B-2 to B-4. The probabilistic method does not rely on a single deck (the bulkhead deck) to provide the uppermost watertight boundary, instead the upper boundary of the buoyant volume may be used. In theory this does not need to be a single horizontal surface. The watertight integrity requirements contained in parts B-2 to B-4, however, continue to make reference to the bulkhead deck. **Summary:** Amendments to the following regulations are agreed:  
- 7-2.5 to remove the inconsistency with regulation 17 regarding the treatment of doors in watertight bulkheads.  
- 12.6.1 to simplify the requirements for any valve which is installed at the collision bulkhead. The draft amendment does not specify the type of valve (e.g. screw-down or butterfly) but instead provides a number of functional requirements:  
  “The valve shall be a remotely controlled valve capable of being operated from above the bulkhead deck of passenger ships and the freeboard deck of cargo ships. The valve shall be normally closed. If the remote control system should fail during operation of the valve, the valve shall close automatically or be capable of being closed manually from a position above the bulkhead deck of passenger ships and the freeboard deck of cargo ships.”  
- 13 to restructure and clarify the requirements particularly with regard to the safety centre and location of the central operating console on passenger ships.  
- Various regulations regarding doors and hatches above the bulkhead deck that might be allowed to be open during navigation have been changed to standardise requirements. **Implication:** There will be more choice available for valve type at the collision bulkhead and other requirements will be clear. **Application:** It is anticipated that these amendments will be applicable to ships constructed on or after 1 January 2024. |

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<table>
<thead>
<tr>
<th>Estimated entry into force</th>
<th>Amendments to SOLAS chapter II-1, requirements for water level detectors on non-bulk carrier cargo ships with multiple cargo holds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 January 2024</td>
<td><strong>Background:</strong> SOLAS regulation II-1/25 currently requires single hold cargo ships of less than 80 metres (100 metres if constructed before 1 July 1998) to have a water level detection alarm. These ships are not required to undertake a damage stability assessment which means that there is no requirement to assess the effect of flooding of the cargo hold. Should damage occur and water start to enter the hold, there is a need for the crew to be aware of the situation so that appropriate mitigation actions can be taken. The “El Faro” was a multi-hold ship and as such did not</td>
</tr>
</tbody>
</table>

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Lloyd’s Register
| 1 January 2024 | require a water level detection alarm to be fitted. She unfortunately sank following flooding with loss of life. **Summary:** A new regulation II-1/25-1 was drafted with the intent to capture all ships – except for bulk carriers – which are currently not required to have a water level detection alarm. The requirement applies to the ships irrespective of length, presence of wing tanks or applied damage stability standard. **Implication:** Shipowners and Shipbuilders: Bilge alarms, which are commonly installed on cargo ships that do not carry bulk cargoes, will no longer exclusively fulfil the requirements of the proposed new regulation, and additional detectors will be required to do so. As this is not retrospectively applied, this gives owners and builders time to gain awareness and understand the commercial ramifications of this proposal. Proposed SOLAS regulation II-1/25-1 deviates from SOLAS II-1/25, in that, the latter is dependent on the ship’s length which is not the case for the newly proposed regulation. Therefore, a review of SOLAS II-1/25 could be expected in the future to maintain consistency. **Application:** Applies to all cargo ships with more than one cargo hold, excepting tankers and those carrying cargo in bulk, constructed on or after 1 January 2024 |
| 234 | **Comprehensive review of SOLAS Chapter IV (Review of the requirements)** **Background:** The current SOLAS chapter IV (GMDSS) requirements were adopted in 1988 based upon technologies developed in the 1970s. Noting development in technologies and changes in the status of INMARSAT, a comprehensive review of the requirements is under way. **Summary:** As well as amendments to SOLAS Chapters III and IV and related and consequential amendments to other IMO instruments, it should be noted that:  
- The carriage requirements for ships subject to the GMDSS will not change.  
- Although the Iridium satellite system provides coverage in the Polar regions, in order to comply with the requirements of the GMDSS, ships are still required to carry HF communications equipment when transiting the Polar Regions.  
- The scope of application for the text moving from Chapter III to Chapter IV will not change and the text of SOLAS regulation IV/1.1 should remain unaltered.  
- With regard to SOLAS regulation III/6.2 (which will be relocated to SOLAS Chapter IV) the application is currently the same as that of SOLAS Chapter IV, so no changes are needed.  
- The relevant SOLAS related certificates and Records of Equipment will be included as part of the consequential amendments. **Implication:** It should be noted that the carriage requirements are not expected to change. The intention at this time is that most equipment will remain valid in order to reduce necessary additional investment in both ship equipment and shore side services. **Application:** Expected to apply to all ships of 300 GT and above to which the requirements of the GMDSS apply, including new and existing ships. |
<table>
<thead>
<tr>
<th>358</th>
<th><strong>Draft amendments to IGC code Paragraph 6.5.3.5 &amp; IGF Code paragraph 16.3.3.5 on the use of materials such as aluminium alloys - Welding procedure tests for cargo tanks and process pressure vessels (consequential change in accepting high manganese austenitic steel)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated entry into force</strong></td>
<td>1 January 2024</td>
</tr>
<tr>
<td><strong>Information subject to change</strong></td>
<td><strong>Background</strong>: Following the development of the interim guidelines on the application of high manganese austenitic steel for cryogenic service, the relevant paragraphs in the IGC and IGF Code needed to be made more general in their application.</td>
</tr>
<tr>
<td></td>
<td><strong>Summary</strong>: Paragraph 6.5.3.5 of the IGC Code and paragraph 16.3.3.5 of the IGF Code are amended to read “…For materials such as aluminium alloys, reference shall be made…”</td>
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<td></td>
<td><strong>Implication</strong>: These relatively minor amendments enable alternative materials to be used and make it clear that the requirements for welding and non-destructive testing are met.</td>
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<td><strong>Application</strong>: The amendments are expected to enter into force on 1 January 2024 and will apply to those ships which use high manganese steel in the construction of tanks carrying low temperature cargo or fuel.</td>
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<tr>
<td></td>
<td><strong>Related Instruments</strong></td>
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<td></td>
<td>MSC.1/Circ.1599 - Interim guidelines on the application of high manganese austenitic steel for cryogenic service. These guidelines give practical information on the design and construction of cargo and fuel tanks when high manganese steel is used.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>359</th>
<th><strong>Draft amendments to the revised recommendation on testing of life-saving appliance (MSC.81(70))</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated entry into force</strong></td>
<td>1 January 2024</td>
</tr>
<tr>
<td><strong>Information subject to change</strong></td>
<td><strong>Background</strong>: These proposed draft amendments to MSC.81(70) as amended are intended to update the references to ISO Standards in Part 1: Prototype tests for life-saving appliances.</td>
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<tr>
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<td><strong>Summary</strong>: Proposed amendments will be made to Part 1 – Prototype tests for life-saving appliances paragraph 5.17.13.2.2.7.1 (Test for porosity); paragraph 5.17.13.2.2.8 (Oil resistance) and paragraph 11.2.5.3 (Test for surface resistance to oil). Questions have arisen over the revised temperature for oil resistance tests from 20° to 70° in ISO 15372:2000. ISO have confirmed that the discrepancy is a typographical error with no intent to change the test. ISO will issue an amendment by the end of the year and in the meantime the oil resistance test in ISO Standard 6065 as referenced in IMO instruments remains valid.</td>
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<td><strong>Implication</strong>: Those carrying out prototype tests will need to note the updated references to the appropriate ISO standards on publication of the amendments.</td>
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<td><strong>Application</strong>: These are considered to be minor amendments correcting some outdated references.</td>
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Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009

Adopted by the 2009 SR Conference – SR/CONF/45

Background & Summary: In 2009, the International Convention for the Safe and Environmentally Sound Recycling of Ships was signed by 67 Member States of the IMO. This internationally binding Convention has been adopted due to concerns about standards of ship recycling. It affects both recycling facilities and shipowners.

The Convention will enter into force 24 months after it has been ratified by 15 States, representing 40% of the world fleet, and with an annual ship recycling capacity of 3% of that fleet. As of 12 February 2020, fifteen States have become party to the Convention, representing 29.62% of world tonnage.

The Convention requires that, within five years of the entry into force date (or before the ship goes for recycling, if that is earlier), ships must have on board an ‘Inventory of Hazardous Materials’ (IHM). This requirement will apply to new ships as soon as the Convention enters into force.

Overall, the Convention can be described as a response to the lack of regulation and standards in the ship breaking industry; especially where safety, environmental and quality standards are concerned. It covers the entire ship life cycle; from design and construction, through in-service operation to dismantling and requires:

- Ships to have an IHM (previously known as ‘the ‘Green Passport’);
- New builds to exclude certain hazardous materials;
- Ship recycling facilities to be authorised by the national authority;
- Ship recycling facilities to provide an approved ‘Ship Recycling Plan’ detailing how the ship will be recycled;
- Ships flying the flag of parties to the Convention to be recycled only in authorised recycling facilities; and
- Ship recycling facilities which are located in parties to the Convention to recycle only ships which they are authorised to recycle.

At the final survey before the ship is taken out of service, the IHM will be completed for items such as operational stores and bunkers. The approved Ship Recycling Plan will then be checked against the IHM to ensure it properly reflects the information it contains.

Various guidelines have been developed for the implementation of the Convention.

Implication:
Shipowners and Ship Managers:
- to provide an Inventory of Hazardous Materials for their ship
- to inform the flag State before a final survey takes place
• to arrange the final survey before the ship is taken out of service for the completion of IHM for items such as operational stores and bunkers

**Recycling facilities:**
• to obtain “Document of Authorization for Ship Recycling” from the competent authority of the recycling State
• to inform their authorities should they wish to recycle a ship
• to prepare a specific ‘Ship Recycling Plan’, based on the IHM which the owner provides
• to report when recycling is finished

**National authority of States with recycling facilities:**
• to authorise ship recycling facilities
• to approve Ship Recycling Plans

**Application:** Once the Convention enters into force it will apply to all ships and MODUs, high-speed craft, FSUs/FPSOs and barges. For new builds it will enter into force 24 months after the ratification criteria are met. Existing ships will have up to five years after the criteria are met.

**Further Information**
Lloyd’s Register’s [Ship recycling webpage](#) provides further information.

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**International Convention for the Safety of Fishing Vessels (Torremolinos Convention) Cape Town Agreement**

**Background:** The Torremolinos Convention and its 1993 Protocol have not yet entered into force as the entry into force requirements (13 flag States with an aggregated fleet of 14,000 fishing vessels of 24 metres in length and over) have not been met. There have also been some problems with the technical requirements. In order to address these issues an agreement has been reached which changes the entry into force requirements to 22 flag states and 3,600 fishing vessels which operate on the high seas and modifies some of the technical provisions.

**Summary:** The diplomatic conference in Cape Town, South Africa, in October 2012 agreed that the entry into force criteria should be 22 flag states which between them have at least 3,600 fishing vessels of 24 metres in length and over operating on the high seas. The survey and certification requirements were amended to the five year cycle. A phased-in application for some parts of the requirements for existing fishing vessels was also agreed.

A procedure for confirming the number of fishing vessels each signatory has was agreed by MSC 92. Signatories will be expected to provide the number of fishing vessels which are registered with them at the same time they advise the IMO of their signing of the Cape Town Agreement. If numbers are not provided then the IMO will follow various routes to obtain accurate information.

**Implication:**
**Shipowners and Ship Managers:** The Protocol has requirements covering the following areas:
• construction, watertight integrity and equipment;
• stability and associated seaworthiness;
• machinery and electrical installations and periodically unattended machinery spaces;
• fire protection, detection, extinction and firefighting;
• protection of crew;
• life-saving appliances and arrangements;
• emergency procedures, musters and drills;
• radiocommunications; and
• shipborne navigational equipment and arrangements.

When it enters into force these safety items will need to be provided on board fishing vessels. Some of the requirements are applicable to existing fishing vessels as well as to new construction.

It should be noted that some flag Administrations have already enacted the Torremolinos Convention and Protocol, so fishing vessels flagged with these Administrations will find that nothing will change following these amendments.

**Shipbuilders / Designers of fishing vessels** will need to ensure that the regulations are complied with. This may require additional or different safety equipment to be provided.

**Flag Administrations and their Recognised Organisations** will have to survey new and existing fishing vessels to the extent required and issue appropriate certification.

**Application:** The Torremolinos Convention and Protocol is, in general, applicable to fishing vessels of 24 metres in length and over.

Although the majority of the requirements are applicable only to new ships, the following are also applicable to existing ships:

- Life-saving appliances and arrangements - only regulation 13 ‘Radio life-saving appliances’ and regulation 14 ‘Radar transponders’;
- Emergency procedures, musters and drills;
- Radiocommunications; and
- Shipborne navigational equipment and arrangements.
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