Future IMO and ILO Legislation

March 2018

An overview of upcoming changes to mandatory statutory regulations and instruments

- Adopted amendments that are in a transitional period towards full implementation
- Adopted amendments entering into force on or after 1 March 2018
- Significant topics which are currently under discussion and development, including meetings up to Assembly 30 in November 2017
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 not yet 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.
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 (first entry into force date 1 Jan 2020), unless adopted under conditions of exceptional circumstance (see IMO Circular MSC.1/Circ.1481).
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 apply only 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 barges (302); and fishing vessels (238).

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 out of CCC 4, III 4 and A30. The number in brackets is the LR reference used in this document for the detailed entry.

Significant approvals or adoptions:
- A new resolution on escape route signs and equipment location markings was adopted to harmonise various SOLAS regulations and take account of a related ISO standard (340).

Significant new items being considered or milestones in ongoing developments:
- CCC 4 made progress on the work to revise the IGF Code (306 & 350)
- A circular was issued by III 4 on action for port state control to take in relation to ECDIS updates (159)

Significant entries into force in the near future:
- Training requirements to support passenger ship safety and ships operating in polar waters are being introduced through STCW on 1 July 2018 (315 & 297)
- The next set of routine amendments to the IMSBC Code (04-17), and changes concerning substances which are hazardous to the marine environment, will enter into force on 1 January 2019 (307 & 311).
- To comply with the data collection system requirements, SEEMP approval is needed by 31 December 2018, with monitoring from 1 January 2019 (317).
### Table I – NEW SHIPS – Adopted amendments coming into effect

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<th>From 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>
<th>Bulk Carriers</th>
<th>Container Ships</th>
<th>General Cargo Ships</th>
<th>Ro-Ro Cargo Ships</th>
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**Notes:**
- * indicates the date the amendment is adopted.
- The table shows the new dates for the implementation of amendments for different ship types.

Future IMO and ILO Legislation Copyright © Lloyd’s Register, March 2018
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* - entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case.
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* - entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case.
### Table III - EXISTING SHIPS – Adopted amendments coming into effect

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<th>All ship types</th>
<th>Passenger Ships</th>
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Future IMO and ILO Legislation Copyright © Lloyd’s Register, March 2018
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* - entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case.
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<td>345</td>
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<td>342</td>
<td>234</td>
</tr>
<tr>
<td>Oil Tankers</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>Chemical Tankers</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>Gas Carriers</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>Bulk Carriers</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>Container Ships</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>General Cargo Ships</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>Ro-Ro Cargo Ships</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>High Speed Craft</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>FSUs and FPSOs</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
<tr>
<td>MODUs</td>
<td>ILO03</td>
<td>322</td>
<td>345</td>
<td>326</td>
<td>342</td>
<td>234</td>
</tr>
</tbody>
</table>

* - entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case.
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.
The Revised MARPOL Annex VI for the Prevention of Air Pollution from Ships (Chapters 1 - 3)

MARPOL Annex VI was comprehensively revised by resolution MEPC.176(58) which was adopted in 10 October 2008 and entered into force on 1 July 2010. The following elements of the amendments introduced by resolution MEPC.176(58) are still in transition toward their full implementation. Subsequent amendments to this part of MARPOL are also introduced here.

Other related amendments are introduced in this document – see item 328 in Part 1B.

The new chapter adopted on a later date for introducing EEDI requirements is given as item 188 & 264 in part 1A of this report.

SOx control: the global sulphur limit will reduce to 0.50% on 1 January 2020.

The requirements were further revised by MEPC.251(66) as follows:

- Yachts (ships used solely for recreational purposes) of less than 500 GT constructed before 1 January 2021 do not need to comply with the Tier III requirement, and recreational yachts of less than 24 metres will not need to comply with Tier III even after that date.

Annex VI also addresses installation of equipment containing ozone-depleting substances: Regulation 12 prohibits new installations which contain hydro-chlorofluorocarbons:

- On ships constructed on or after 1 January 2020; or
- For ships constructed before 1 January 2020, which have a contractual delivery date of the equipment to the ship on or after 1 January 2020 or, in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after 1 January 2020.

**Implication:**
**Shipowners and Ship Managers:** All new and existing ships will need to comply with the new global sulphur limit from 1 January 2020 using the most appropriate method for that ship.

**Application:**
- **Ships certification:** All ships to which MARPOL Annex VI applies – generally speaking, ships of 400 GT and above (new and existing ships).
- **Engine certification:** Each marine diesel engine with a power output of more than 130 kW installed on a ship.

**Related Instruments**

MEPC.1/Circ.795/Rev.2 on Unified Interpretations to MARPOL Annex VI clarifies the applicability of the requirements for bunker delivery notes.
<table>
<thead>
<tr>
<th>Resolution MEPC.280(70)</th>
<th>Effective implementation of the 0.50% m/m sulphur limit under regulation 14.1.3 of MARPOL Annex VI.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution MEPC.291(71)</td>
<td>2017 Guidelines Addressing Additional Aspects to the NOx Technical Code 2008 with Regard to Particular Requirements Related to Marine Diesel Engines Fitted with Selective Catalytic Reduction (SCR) Systems</td>
</tr>
</tbody>
</table>

### SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS

#### Background:
ECDIS (Electronic Chart Display and Information System) is shipborne navigational equipment, which is regarded as an equivalent to paper charts as per SOLAS regulation V/27 and regulation V/19.2.1.4. This amendment, adopted at MSC 86, made ECDIS a mandatory carriage requirement for new ships in 2012 (passenger ships and oil tankers) and for other ships in 2013/2014. Existing ships are required to comply through retrofitting.

#### Summary:
In paragraph 2.1, the existing subparagraph .4 is replaced by the following:

“.4 nautical charts and nautical publications to plan and display the ship’s route for the intended voyage and to plot and monitor positions throughout the voyage. An electronic chart display and information system (ECDIS) is also accepted as meeting the chart carriage requirements of this subparagraph. Ships to which paragraph 2.10 applies shall comply with the carriage requirements for ECDIS detailed therein;”

After the existing paragraph 2.9, the new paragraphs 2.10 and 2.11 are added. Paragraph 2.10 provides application details and paragraph 2.11 states that “administrations may exempt ships from the application of the requirements of paragraph 2.10 when such ships will be taken permanently out of service within two years after the implementation date specified in subparagraphs .5 to .9 of paragraph 2.10.”

#### Implication:

**Shipbuilders and Manufacturers:** Shipbuilders will be required to take these requirements into consideration when designing a ship the keel of which is laid on or after 1 July 2012/2013/2014 dependent on ship type and size. Manufacturers are to note that ECDIS is required to meet the IMO’s performance standard (A.817(19), as amended by the Resolutions MSC.64(67), MSC.86(70) and MSC.232(82)).

**Shipowners and Ship Managers:** As ECDIS will be required on existing ships (at the first survey after the date specified in the table given below): Shipowners will be required to make retrofitting arrangements. They are encouraged to take the opportunity to make such arrangements at dry-docking. Shipowners are to ensure that ships will be provided with the Electronic Navigational Charts (ENCs) issued by a Hydrographic Authority or its agents that cover the intended voyages. Ship Managers should ensure that appropriate training and familiarisation will be incorporated into the company’s SMS for the use of ECDIS in accordance with the paragraph 6.5 of the ISM Code. Deck officers must be fully familiar with the operation of ECDIS prior to the first voyage after the installation of ECDIS in accordance with paragraph 6.3 of the ISM Code. Due reference is to be made to SN.1/Circ. 276 on Transitioning from paper chart to electronic chart display and information systems (ECDIS) navigation.

**Flag Administrations and their ROs:** Relevant survey guidelines should be prepared, which should include appropriate back up arrangements and the location of ECDIS in the case of retrofitting. ISM auditors are to be made aware of the new requirements and the need for companies to introduce the corresponding training and familiarisation.
Application: To ships engaged on international voyages only as per the below table:

<table>
<thead>
<tr>
<th>Type of ships</th>
<th>Gross tonnage</th>
<th>New ships (Construction – keel laying date)</th>
<th>Existing ships (Ships not new ships)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger ships</td>
<td>500 and above</td>
<td>1 July 2012</td>
<td>Not later than the first survey* on or after 1 July 2014</td>
</tr>
<tr>
<td>Tankers</td>
<td>3,000 and above</td>
<td>1 July 2012</td>
<td>Not later than the first survey* on or after 1 July 2015</td>
</tr>
<tr>
<td>Others</td>
<td>50,000 and above</td>
<td>1 July 2013</td>
<td>Not later than the first survey* on or after 1 July 2016</td>
</tr>
<tr>
<td></td>
<td>20,000 and above but less than 50,000</td>
<td>1 July 2013</td>
<td>Not later than the first survey* on or after 1 July 2017</td>
</tr>
<tr>
<td></td>
<td>10,000 and above but less than 20,000</td>
<td>1 July 2013</td>
<td>Not later than the first survey* on or after 1 July 2018</td>
</tr>
<tr>
<td></td>
<td>3,000 and above but less than 10,000</td>
<td>1 July 2014</td>
<td>No retrofitting requirements to existing ships less than 10,000 GT</td>
</tr>
</tbody>
</table>

*The first survey means the first annual survey, the first periodical survey or the first renewal survey, whichever is due first after the date specified. For a passenger ship, this is the first renewal survey for Passenger Ship Safety Certificate; for a cargo ship (non-passenger ship), this is either the Cargo Ship Safety Equipment Survey or, for ships with a Cargo Ship Safety Certificate, the Cargo Ship Safety Survey. For both passenger ships and cargo ships which are under construction, if the keel is laid before, but the ship is delivered after, the date specified in the relevant regulation, the first survey is the initial survey.

Related Instruments:
III.2/Circ.2 Action to be taken by Port States on the required updates of electronic chart display and information systems (ECDIS)

Amendments to SOLAS Regulation III/1 – on-load release mechanisms, and to the LSA Code paragraph 4.4.7.6 – on-load release hooks

Background: In order to minimise accidents associated with on-load release mechanisms the IMO developed amendments to SOLAS regulation III/1.5, the LSA Code chapter IV, and “Recommendations on the testing procedures for Life Saving Appliances (MSC.81 (70) as amended) with a view to applying the requirements to both new and existing ships on-load release and retrieval systems. The circular MSC.1/Circ.1392 was also developed to evaluate the compliance of existing on-load release and retrieval systems.

Summary: The Guidelines for the evaluation and replacement of lifeboat release and retrieval systems (MSC.1/Circ.1392) include a multi stage evaluation: initial design assessment of each release mechanism type by the manufacturer; a design review by the Flag Administration and/or Recognised Organisation against relevant parts of the LSA Code, followed by a performance test; and reporting of the results of the evaluation to the IMO. Additionally, an onboard verification will be carried out (one-time follow up overhaul examination) for every operating mechanism on every ship.
The Guidelines were amended at MSC 98 (MSC.1/Circ.1584) to include a method of assessment for backing plates and bolts to confirm that they are in "good condition".

**Implication:**

**Shipowners and Ship Managers:**

*Existing ships:* Identify whether installed lifeboats’ on-load release mechanisms have been evaluated and identified as being in compliance with the LSA Code Chapter IV, as amended by MSC.320(89). If not, replacement of release mechanisms will be required. If the manufacturer of the hooks installed on board is no longer in existence, it may be necessary to replace the hooks if the required design appraisal is not possible.

*New ships:* On-load release mechanisms on lifeboats installed on/after 1 January 2013 will be required to comply with the new requirements in full. The application scheme is crucial in this regard – see the “Application” section below.

**Manufacturers:** Ensure that past and existing lifeboats’ on-load release mechanism designs have been evaluated as being a “safe design/have a good safety record”. If not, then clients will be required to replace mechanisms. New mechanisms will be required to comply with the new requirements of the LSA Code in full and be suitably type approved. Manufactures will be required to undergo a re-approval process for hooks that have previously been approved. There may be additional costs for this process.

**Flag Administrations and their ROs:** Ensure that existing lifeboats’ on-load release mechanism are evaluated to verify compliance with the LSA Code as amended by MSC.320(89) and share this information with other Administrations.

**Application:** To lifeboat on-load release hooks as required by SOLAS chapter III (on passenger ships regardless of tonnage engaged on international voyages and cargo ships (non-passenger ships) of 500 GT or over engaged on international voyages). Implementation will be 1 July 2014 for new ships, and first scheduled dry docking for existing ships, but not later than 1 July 2019. However, it should be noted that design appraisal of the on-load release mechanism and other necessary verification work should be completed well before that date. Please refer to MSC.1/Circ.1393 on Early application of new SOLAS regulation III/1.5

**Related instruments:**

- Resolution MSC.320(89) – Adoption of amendments to the international life-saving appliances (LSA) code
- MSC.1/Circ.1392 (and MSC.1/Circ.1392/Corr.1) on Guidelines for evaluation and replacement of lifeboat release and retrieval systems
- MSC.1/Circ.1393 on Early application of new SOLAS regulation III/1.5
- Resolution MSC.321(89) – Adoption of amendments to the revised recommendation on testing of life-saving appliances (Resolution MSC.81(70)), as amended
- MSC.1/Circ.1584 on Amendments to MSC.1/Circ.1392 on Replacement of non-corrosion resistant components fitted outside a lifeboat

**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 amendment was 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

<table>
<thead>
<tr>
<th>Ship type</th>
<th>Size (DWT)</th>
<th>Phase 0 1-Jan-13 – 31-Dec-14</th>
<th>Phase 1 1-Jan-15 – 31-Dec-19</th>
<th>Phase 2 1-Jan-20 – 31-Dec-24</th>
<th>Phase 3 1-Jan-25 onwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk carrier</td>
<td>20,000 and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>10,000 – 20,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-20*</td>
<td>0-30*</td>
</tr>
<tr>
<td>Gas tanker</td>
<td>10,000 and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>2,000 – 10,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-20*</td>
<td>0-30*</td>
</tr>
<tr>
<td>Tanker</td>
<td>20,000 and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>4,000 – 20,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-20*</td>
<td>0-30*</td>
</tr>
<tr>
<td>Container ship</td>
<td>15,000 and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>10,000 – 15,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-20*</td>
<td>0-30*</td>
</tr>
<tr>
<td>General Cargo ship</td>
<td>15,000 and above</td>
<td>0</td>
<td>10</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>3,000 – 15,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-15*</td>
<td>0-30*</td>
</tr>
<tr>
<td>Refrigerated cargo ship</td>
<td>5,000 and above</td>
<td>0</td>
<td>10</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>3,000 – 5,000</td>
<td>n/a</td>
<td>0-10*</td>
<td>0-15*</td>
<td>0-30*</td>
</tr>
<tr>
<td>Combination carrier</td>
<td>20,000 and above</td>
<td>n/a</td>
<td>10**</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>4,000 – 20,000</td>
<td>0-10*</td>
<td>0-20*</td>
<td>0-30*</td>
<td></td>
</tr>
<tr>
<td>LNG carrier***</td>
<td>10,000 DWT and above</td>
<td>n/a</td>
<td>10**</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Ro-ro cargo ship***</td>
<td>10,000 DWT and above</td>
<td>n/a</td>
<td>5**</td>
<td>15</td>
<td>30</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></td>
<td>1,000 – 2,000 DWT</td>
<td>n/a</td>
<td>0-5**</td>
<td>0-20*</td>
<td>0-30*</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>Cruise passenger ship*** having non-conventional propulsion</td>
<td>250 – 1,000 DWT</td>
<td>85,000 GT and above</td>
<td>25,000 – 85,000 GT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-----------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-5*,**</td>
<td>5**</td>
<td>0-5*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-20*</td>
<td>20</td>
<td>0-20*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-30*</td>
<td>30</td>
<td>0-30*</td>
<td></td>
<td></td>
</tr>
</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.

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 on Amendments to 2014 Guidelines on survey and certification of the EEDI
Resolution MEPC.263(68) - 2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships
Resolution MEPC.254(67) - 2014 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)
Resolution MEPC.281(70) – Amendments to the 2014 Guidelines on the method of calculation of the attained EEDI for new ships concerning the calculation method for the EEDI
**New SOLAS Regulation II-1/3-12 - Protection against noise and amendment to SOLAS Regulation II-1/36 (to delete the regulation in view of the new regulation II-1/3-12)**

**Background:** In order to make the Code on Noise Levels on board Ships mandatory, an amendment to SOLAS was required.

**Summary:** A new SOLAS regulation II-1/3-12 was adopted which requires applicable ships to be constructed in accordance with the new Code on Noise Levels on board Ships.

**Application:** Regulation II-1/3-12 and the Code on Noise Levels on board Ships will be applicable to new ships of 1,600 GT or above, based upon the following criteria:
- for which the building contract is placed on or after 1 July 2014; 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 January 2015; or
- the delivery of which is on or after 1 July 2018

Ships satisfying the following criteria should comply with the requirements of existing regulation II-1/36; the text of which has been included in the new regulation II-1/3-12; consequentially II-1/36 expired on 1 July 2014, when II-1/3-12 will enter into force.
- ships delivered before 1 July 2018; and
- contracted for construction before 1 July 2014 and constructed on or after 1 January 2009 but before 1 January 2015; or
- in the absence of a building contract, the keels which were laid or at a similar stage of construction on or after 1 January 2009 but before 1 January 2015.

The Code is not applicable to ship types mentioned in paragraph 1.3.4 of the Code, as shown below.
- dynamically supported craft;
- high-speed craft;
- fishing vessels;
- pipe-laying barges;
- crane barges;
- mobile offshore drilling units;
- pleasure yachts not engaged in trade;
- ships of war and troopships;
- ships not propelled by mechanical means;
- pile driving vessels; and
- dredgers.

**Related Instruments**
Resolution MSC.337(91) - Code on Noise Levels on board Ships
MSC.1/Circ.1509 – Unified Interpretations of the Code on Noise Levels on board Ships (resolution MSC.337(91))
### New SOLAS Regulation II-2/10.4 - Communication equipment for fire-fighting teams

**Background:** This proposal came in the aftermath of an incident caused by fire in the engine room on board the Swedish tanker “Ek-River” while in dry-dock. Based on this, upgrades of radio-communication equipment for fire fighters including additional equipment such as smoke diver emergency alarm, PASS alarm and location lights were proposed.

**Summary:** Amendments to SOLAS Regulation II-2/10 were made to add a new paragraph 10.4, to clarify that a minimum of two two-way portable radiotelephone apparatus for each fire party for fire-fighter's communication shall be carried on board. These radio devices shall be of an explosion proof type or intrinsically safe.

**Implication:** The new SOLAS Regulation II-2/10.4 does not specify a performance standard or criteria to verify whether portable radio apparatus are fit for purpose, but only states that regardless of the ship type, these devices shall be of an explosion proof type or intrinsically safe. This could cause some problems as the specification requirements/acceptance criteria for individual Flag states/approval authorities can be different and therefore clients are advised to consult with the relevant authorities, in advance to find out their requirements.

**Application:** Applicable to all new SOLAS ships constructed on or after 1 July 2014. Existing ships should comply with this requirement not later than the first safety equipment survey after 1 July 2018.

### Amendments to SOLAS Regulation II-2/10.10.1 - Audible alarm device to notify low air pressure in self-contained breathing apparatus cylinders

**Background:** When discussing safety matters related to entering enclosed spaces it was found that there is no requirement for breathing apparatus described in chapter 3, paragraph 2.1.2 of the International Code for Fire Safety Systems (FSS Code), to be fitted with an alarm warning the user of low pressure within the cylinder. It was agreed that a visual or low pressure alerting device would be required in order to provide full protection to seafarers and to harmonise with international standards.

**Summary:** Amendments to SOLAS regulation II-2/10.10.1 and associated amendments to Chapter 3.2.1.2 of the FSS Code (please see related instruments below), were adopted to clarify that self-contained compressed air breathing apparatuses of fire-fighters’ outfits shall be fitted with an audible alarm and a visual or other device which will alert the user before the volume of the air in the cylinder has been reduced to no less than 200 litres. It was also noted that ships built prior to 1 July 2002 were only required to be equipped with smoke helmets/smoke masks (without portable tanks) as part of fireman’s outfits and therefore a five year period of grace was allowed for such ships to be provided with the new equipment, to comply with the new requirements.

**Implication:** The new requirement will pose stricter approval arrangements for the breathing apparatus equipment. This may result in a small cost increase. Training and operational procedures should be updated. In addition, training may be required for crews who have not used this type of breathing apparatus equipment before.

**Application:** The new requirement will apply to new ships constructed on or after 1 July 2014. Existing ships will be required to comply accordingly by 1 July 2019.
Background: The notion of "goal-based ship construction standards" (GBS) was introduced in 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, topside 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.
| 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 on 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 |

## Class News No. 17/2015

### 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 on 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 though 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.868 on the Revised Unified Interpretation of regulation 12 of MARPOL Annex I

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**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:
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.

**Related Instruments**
Resolution A.1024(26) - Guidelines for ships 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.

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

**Background:** Because of the area’s geography, the water volume exchange rate in the Baltic Sea is very low – around 3% a year. As a result, there are concerns about the rising concentration of nutrients caused by discharges from large passenger ships in concentrated areas during concentrated periods.

**Summary:** Amendments to Regulations 1, 9, 11, 12bis, and form of certificate – for the establishment of a Special Area - were adopted. More stringent requirements will apply within the Special Area for discharging sewage from passenger ships that are contracted for construction or in the absence of a building contract, the construction (keel laying) commences on or after 1 January 2016. In order to meet the requirement, a passenger ship must have holding tanks or a sewage treatment system meeting the new standard. The requirements will be applicable to existing ships as well. However, such enforcement is subject to the availability of sufficient reception facilities in the area. Taking this opportunity, MEPC 62 also revised the certification form that was given in the appendix to the MARPOL Convention to rectify existing inconsistencies.
The original entry into force date established by resolution MEPC.200(62) was 1 January 2016 but owing to the delay of the availability of 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 (except for the 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 2 for amendment to regulations B-3 & D-4 and item 346 on the draft amendment to part E.

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 documentation 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 proposed 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 minimize 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 Lloyd’s Register Senior Specialist on this subject is Yildiz Williams; she can be contacted directly by email: yildiz.williams@lr.org

The original compliance schedule for when ships will be required to install and use a treatment system is given below but please see item 322 for the latest schedule:

New ships – Compliance on delivery for ships constructed on or after entry into force.
Existing ships – Compliance by first IOPP renewal survey on or after entry into force.
A treatment system is required to be fitted to vessels that carry out an IOPP renewal survey on or after 8 September 2017. The IOPP renewal survey refers to the renewal survey associated with the IOPP Certificate required under MARPOL Annex I.

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))
- 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
1B – Adopted IMO and ILO 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 not yet reached.
Amendment to MARPOL Annex I - Revision to Form B of the Supplement to the IOPP Certificate

Background: The current IOPP certificate supplement B contains design/arrangements that no longer exist, such as Clean Ballast Tank (CBT). It was agreed to remove obsolete entries and simplify the entries.

Summary: Amendments to the form B of the supplement to the IOPP Certificate (sections 5.1, 5.2, 5.3 and 5.5), given in the Appendix to MARPOL Annex I, were adopted which simplify the current entry.

Implication: Not a substantial technical issue but Shipowners and Recognised Organisations should make sure that all certificates will be replaced. It is understood that the replacing timing will follow MSC-MEPC.5/Circ.7.

Application: To all oil tankers of 150 GT or above at the first opportunity for replacing the certificate (e.g. at annual survey) after the date of entry into force.

Amendments to MARPOL Annex V, Regulation 10.3 and Appendix - Recording garbage discharges

Background: A comprehensive revision to MARPOL Annex V entered into force on 1 January 2013. There were still some clarifications required out of the new requirements which entered into force.

Summary: Amendments to MARPOL Annex V are adopted and include the following:
- Clarification of the term “Estimated amount of Discharged or Incinerated”, whether into the sea or to reception facilities in the Garbage Record Book (GRB)
- A new garbage category for E-waste (such as gadgets, computers, printer cartridges, etc. (for a definition of E-waste please see the amended 2017 Guidelines for the implementation of MARPOL Annex V (Resolution MEPC.295(71))
- Splitting the GRB into two parts (one part for all operations related to garbage other than cargo residues and a second part for all operations related to cargo residues)
- Additional space in the GRB to record exceptional discharge or loss of garbage under regulation V/7
- Alignment of the regulation V/10.3 with the above amendments.

Implication: The amendments aim to clarify the required entries for garbage in the GRB and prevent any conflicts during port State control inspections. Shipowners and Ship Managers will need to supply their ships with updated GRBs in due time for compliance.

Application: To ships required to have a GRB (ships of 400 GT or above, ships certified to carry 15 or more persons engaged in international voyages, and fixed or floating platforms).
Amendments to MARPOL Annex V - Harmful to the marine environment (HME) substances

**Background:** The revised MARPOL Annex V which entered into force on 1 January 2013 introduced a general prohibition on garbage disposal which also affected the disposal of cargo residues, including cargo hold washing water. The IMO developed guidelines (resolution MEPC.219(63)) providing a classification scheme for solid bulk cargoes to determine whether or not they are harmful to the marine environment (HME) but in order to facilitate the implementation of the requirement it was considered to mandate these classification criteria.

**Summary:** Amendments to MARPOL Annex V are adopted and include the following:

- The requirement for shippers to classify solid bulk cargoes in accordance with the criteria set in a new Appendix as HME or not (regulations 4 and 6)
- The requirement for shippers to declare such cargoes as HME (regulations 4 and 6)
- Addition of a new Appendix (Appendix I; the existing Appendix ‘Form of Garbage Record Book’ is renumbered as Appendix II) to list the criteria for the classification of solid bulk cargoes as harmful to the marine environment. (These criteria are copied from paragraph 3.2 of the 2012 Guidelines for the implementation of MARPOL Annex V (Resolution MEPC.219(63)))
- Relevant amendments to the Garbage Record Book to create a new Part (Part II) to report handling of solid bulk cargo residues – see item 265.

The format of the cargo declaration to be used by ships engaged in international voyages should be found in section 4.2.3 of the IMSBC Code. For ships not engaged in international voyages, each Flag Administration may determine the means of declaration to be used.

**Implication:**

**Shipowners and Ship Managers:** The HME classification and declaration requirement might have a significant impact on Shipowners, Ship Managers and Masters mainly associated with the discharge requirements that accompany the regulation. Finding a suitable reception facility may also be a challenge. Masters are encouraged by the IMO Marine Environment Protection Committee to report alleged inadequacies of port reception facilities to their Flag Administrations using the format given in MEPC.1/Circ.834.

**Application:** To all ships carrying solid bulk cargoes, other than grain, involved in national and international voyages.

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Amendments to MARPOL Annex VI, Chapter 4 – Data collection system for fuel oil consumption of ships

**Background:** The IMO has been long considering further technical and operational measures for enhancing the energy efficiency of ships. A three-step process is intended to be used to determine whether and what additional measures need to be taken to further address greenhouse gas emissions...
### 2018

**Adopted by Resolution** MEPC.278(70)

**Class News**

**No. 01/2017**

**No. 33/2017**

From shipping. At MEPC 70 a roadmap was approved which sets out IMO’s intended steps up to 2023.

**Summary:** The first phase of this process is a mandatory data collection system. MEPC 70 adopted amendments to MARPOL Annex VI that require ships to collect and report annual data on their fuel oil consumption to their Flag Administrations.

The Ship Energy Efficiency Management Plan (SEEMP) will need to be updated with a new Part II that will provide the ship-specific methodology and processes to be followed for the data collection (please see Related Instruments for guidance). Upon examination of the SEEMP’s Part II, a confirmation of compliance will be provided by the ship’s Flag Administration.

Reporting will take place at the end of each calendar year. Upon verification by the Flag Administration, or a Recognised Organisation (RO) nominated by the Flag, that the data has been reported according to the Annex VI requirements the ship will be issued a Statement of Compliance and the data will be transferred to the IMO Ship Fuel Oil Consumption Database where it will be kept anonymised. This will help the IMO to produce annual reports and evaluate the need for further technical and operational measures for enhancing the energy efficiency of international shipping.

**Implication:** The data collection requirements place additional administrative requirements on Shipowners and Ship Managers, sometimes requiring adaptation of existing processes and sometimes the introduction of new processes and activities, depending on what is appropriate for each ship and each company in line with the requirements.

**Application:** To all new and existing ships of 5,000 GT and above, engaged on international voyages. The requirements will enter into force on 1 March 2018 and the first reporting period will be for the 2019 calendar year. Updated SEEMPs are to be approved by 31 December 2018.

**Related Instruments**

- Resolution MEPC.282(70) - 2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP) – revokes MEPC.213(63)
- Resolution MEPC.292(71) - 2017 Guidelines for Administration verification of ship fuel oil consumption data
- Resolution MEPC.293(71) - 2017 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database
- MEPC.1/Circ.871 on Submission of data to the IMO data collection system of fuel oil consumption of ships from a state not party to MARPOL Annex VI

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**Adopted by Resolutions**

**1 July 2018**

**Amendments to the STCW Convention and the STCW Code - Passenger ship safety training**

**Background:** Significant industry changes and recent accidents have highlighted the need to enhance the safety related training requirements for passenger ships.

**Summary:** Amendments to the STCW Convention and the STCW Code set a new requirement for training and emergency familiarisation of crew members on passenger ships and require that all personnel have undergone relevant training before being assigned to shipboard duties. Specification of the minimum standards of competence for the passenger ship crowd management training is also developed.
Following these amendments, the required passenger ship safety training is as follows:

- Passenger ship emergency familiarisation (new requirement - all personnel)
- Safety training for personnel providing direct service to passengers in passenger spaces (relevant personnel)
- Passenger ship crowd management (Masters, Officers and relevant personnel)
- Crisis management and human behaviour (Masters, Officers and relevant personnel)
- Passenger safety, cargo safety and hull integrity training (Masters, Officers and relevant personnel).

It should be remembered that the STCW 2010 Manila Amendments entered into force on 1 January 2017 and require that the Crisis management and human behaviour and the Passenger safety, cargo safety and hull integrity training courses are approved.

**Implication:**
*Shipowners and Ship Managers* will need to be aware of the new requirements and allow for more time, if needed, before personnel assume duties on board in order to complete the passenger ship emergency familiarisation requirement.

**Application:** To seafarers and other personnel serving on board passenger ships engaged on international voyages. Flag Administrations shall determine the applicability of these requirements to personnel serving on passenger ships engaged on domestic voyages.

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**Amendments to the STCW Convention and the STCW Code - Training requirements for ships operating in polar waters**

**Background:** The International Code for Ships Operating in Polar Waters (Polar Code) entered into force on 1 January 2017. Changes to the STCW Convention and STCW Code are required to align these instruments with the new Polar Code.

**Summary:** These are a package of amendments relating to revised training requirements for Masters and Deck Officers on board ships operating in polar waters.

The STCW Convention
- Chapter I – General Provisions
- Chapter V – Special Training Requirements for Personnel on Certain Types of Ships

The STCW Code
- Chapter I – General Provisions
- Chapter V – Special Training Requirements for Personnel on Certain Types of Ships
- Table A-V/4-1 - Specification of minimum standard of competence in basic training for ships operating in polar waters
- Table A-V/4-2 - Specification of minimum standard of competence in advanced training for ships operating in polar waters

STCW.6 Circular - Amendments to part B of the STCW Code
- Table B-I/2 - List of certificates or documentary evidence required under the STCW Convention
### Implication:
**Shipowners and Ship Managers:** Although the entry into force of the amendments to the STCW Convention is one year after the entry into force of the Polar Code, all training requirements will have to be met by 1 July 2018.

**Application:** Training/certification of seafarers working on board a ship subject to the Polar Code.

### Amendments to the 2011 ESP Code

**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 Code has been regularly updated to maintain compatibility with the IACS requirements (UR Z10.1 and Z10.2)

Further updates to the ESP Code have been agreed based upon a submission from IACS which reflect amendments made to Z10.1(Rev.22), Z10.2(Rev.20), Z10.4 (Rev.11), Z10.5 (Rev.13).

**Summary:** The amendments address the following elements:
- The requirements to execute the Thickness Measurements of the area subject to Close Up Surveys are inserted into the table relevant to “MINIMUM REQUIREMENTS FOR THICKNESS MEASUREMENTS AT SPECIAL SURVEY …….”
- Exclusion of an internal check of box type hatch cover - as surveyors have no access to the internal structure and the structure is not considered to be subject to corrosion.
- To specify the minimum content of the tank testing procedure when this is to be carried out by the vessel’s crew.

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

**Application:** Applicable to bulk carriers and oil tankers.

### New SOLAS Regulation II-2/10.4 - Communication equipment for fire-fighting teams

See item 226 in Part 1A for existing ships which are required to comply not later than the first safety equipment survey after 1 July 2018.

### SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS

See item 159 in Part 1A - Retrofitting requirements for ships other than passenger ships or tankers (of 10,000 and above but less than 20,000 GT).
Amendments to MARPOL Annex VI, Chapter 4 – Data collection system for fuel oil consumption of ships

See item 317 above (part 1B) – An updated SEEMP Part II is to be approved by 31 December 2018, and the first monitoring period starts from 1 January 2019.

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

**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.

**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).
### Assembly Resolution A.1116(30) on Escape route signs and equipment location markings

**Background:** As part of the recommendations following the Costa Concordia incident, IMO has reviewed the adequacy of shipboard safety signs and markings.

**Summary:** IMO Assembly 30 adopted resolution A.1116(30) Escape route signs and equipment location markings, which harmonises the requirements of SOLAS regulations II-2/13, III/9, III/11 and III/20 taking into account the ISO standard 24409 series on ‘Design, location and use of shipboard safety signs, safety-related signs, safety notices and safety markings’. The resolution incorporates the ISO graphical symbols without any changes.

**Implication:** Ship designers, shipbuilders, shipowners, ship operators and ship masters should note that when drawing up fire control plans the new resolution should be used in conjunction with resolution A.952(23) Graphical symbols for shipboard fire control plans.

**Application:** Applicable to all ships constructed on or after 1 January 2019 and existing ships which undergo repairs, alterations, modifications and outfitting within the scope of SOLAS Chapters II-2 and/or III, as applicable, on or after 1 January 2019.

**Related Instruments:**
A.952(23) Graphical symbols for shipboard fire control plans.

### Amendments to MARPOL Annex VI, Appendix V - Bunker Delivery Note

**Background:** The existing Appendix V to MARPOL Annex VI does not provide for the provision of fuel oils which do not meet the sulphur limits of either regulation 14.1 (outside ECAs) or regulation 14.4 (within ECAs). This is not a significant issue for users of exhaust gas cleaning systems (EGCS) as an approved equivalent means while the applicable 14.1 limit is 3.50% max sulphur, however when this is reduced to 0.50% in 2020 (see item 150-1) then problems arise.

**Summary:** The revised bunker delivery note includes a new entry (selection box) for the “purchaser's specified limit value” of the sulphur content. This means that even fuels with higher sulphur content than required by regulation 14 of Annex VI can be delivered to a ship where the ship uses equivalent measures, such as an EGCS.

**Implication:** This is intended to avoid any ambiguities and problems during inspections and surveys including PSC and IAPP survey.
**Amendments 04-17 to the IMSBC Code**

**Background:** The International Maritime Solid Bulk Cargoes (IMSBC) Code is in a constant 2-year update cycle. Currently, amendments 03-15 are in force, since 1 January 2017. Amendments 03-15 included a new individual schedule for Iron Ore fines Group A (cargo that may liquefy), a new test procedure for determining the Transportable Moisture Limit (TML) of iron ore fines and a new, recommendatory section on Prevention of pollution by cargo residues from ships.

**Summary:** The next set of amendments to the IMSBC Code (04-17) includes:
- New individual cargo schedules and revisions to existing ones.
- A new testing method to determine the TML for coal up to 50mm in size and amendments to the individual schedule of coal.
- Clear reference to shippers’ responsibility and time requirements for the TML and the moisture content tests of Group A cargoes.

Amendments 04-17 will also include new requirements for shippers with regards to classifying and declaring solid bulk cargoes as substances that are harmful to the marine environment (HME) - see item 311.

As discussions on the liquefaction properties of certain bauxite cargoes are still ongoing and any conclusion will be included in future amendments to the Code, it should be remembered that the IMO, recognising the urgent need to raise awareness issued CCC.1/Circ.2 on Carriage of bauxite that may liquefy and urges all stakeholders involved in the transport of such cargoes to take notice and action.

**Implication:**
*Shipowners and Ship Managers* should be aware of the new 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 2019. Voluntarily, governments may apply the requirements from 1 January 2018.

**Related Instruments**
- [CCC.1/Circ.2/Rev.1 on Carriage of bauxite that may liquefy](#)
- [CCC.1/Circ.4 on Carriage of ammonium nitrate based fertiliser (non-hazardous)](#)

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**Amendments to the IMSBC Code - Harmful to the marine environment (HME) substances**

**Background:** Following the introduction of a ‘general prohibition’ of garbage disposal by an amendment to MARPOL Annex V (resolution MEPC.201(62)) which entered into force on 1 January 2013, disposal of cargo residue, including cargo hold washing water became an issue. IMO developed a classification scheme for solid bulk cargoes to determine whether or not they are harmful to the marine environment (HME) as part of the International Maritime Solid Bulk Cargoes (IMSBC) Code. However, the IMSBC Code is mandatory only under the SOLAS Convention, thus cannot impose environmental requirements as a mandatory instrument.
A recommendatory new section 14 ‘Prevention of pollution by cargo residues from ships’ was included in the amendments 03-15 to the IMSBC Code. This section addressed the classification of solid bulk cargoes as HME and prohibited the discharge of such residues at sea. Furthermore, it assigned responsibility to the shipper for classifying and declaring whether a solid bulk cargo is HME or non-HME.

Summary: Following the amendments to MARPOL Annex V (see item 310), consequential changes to the IMSBC Code were required. In the IMSBC Code amendments, the previously recommendatory Section 14 Prevention of pollution by cargo residues from ships is now deleted in order to avoid duplication of mandatory requirements. Instead, a clear requirement for the cargo to be declared as HME prior to loading has been added to Section 4 of the Code and reference is being made to the relevant MARPOL Annex V requirements.

Implication: Shipowners and Ship Managers: Making the HME classification and declaration requirement mandatory might have a significant impact on Shipowners, Ship Managers and Masters mainly associated with the discharge requirements that accompany the regulation. Finding a suitable reception facility may also be a challenge. Masters are encouraged by the IMO to report alleged inadequacies of port reception facilities using the format given in MEPC.1/Circ.834.

Application: All ships carrying solid bulk cargoes, other than grain, will be required to apply the amendments from 1 January 2019. Voluntarily, governments may apply the requirements from 1 January 2018.

Amendments to MARPOL Annex IV - Establishment of Special Area under MARPOL Annex IV (Sewage) in the Baltic Sea
See Item 305 in Part 1A. Application date for new passenger ships. For existing passenger ships application will be from 1 June 2021 (except for the resolution MEPC.275(69) as explained in 305).

Amendments to SOLAS regulation II-1/3-12 - Application of the Code on Noise Levels on Board Ships
Background: It was noticed that there was a discrepancy in the application of the Code on Noise Levels on Board Ships. i.e. ships for which the
<table>
<thead>
<tr>
<th>Date</th>
<th>Resolution/Note</th>
<th>Summary</th>
<th>Implication</th>
<th>Application</th>
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<tbody>
<tr>
<td>1 January  2020</td>
<td>Adopted by Resolution MSC.409(97)</td>
<td>A building contract is placed before 1 July 2014, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2015 and the delivery of which is before 1 July 2018, do not fall either under paragraph 1 or under paragraph 2 of SOLAS regulation II-1/3-12.</td>
<td><strong>Summary:</strong> The necessary amendment has been made through a minor modification, deleting the words “but before 1 January 2015” in paragraph 2.1 of regulation II-1/3-12.</td>
<td><strong>Application:</strong> The SOLAS amendments will enter into force on 1 January 2020. As an interim measure MSC.1/Circ.1547 applies. This circular will be revoked once the amendments enter into force.</td>
</tr>
</tbody>
</table>
| 1 January 2020 | Adopted by Resolution MSC.421(98) | **Amendments to SOLAS Chapter II-1 on damage stability** | **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 which small wells should be 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, requiring 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. | **Implication:** Ship Designers: These are significant changes to the damage stability regulations that should be taken into consideration at an early stage. |
<table>
<thead>
<tr>
<th>Application</th>
<th>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 January 2022 or delivered on or after 1 January 2024.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related instrument</td>
<td>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</td>
</tr>
</tbody>
</table>

### 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.

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### Amendments to SOLAS regulation II-2/3.56 – Definition of a vehicle carrier

**Background:** It had been highlighted that the definition of vehicle carrier in SOLAS regulation II-2/3.56, as amended by resolution MSC.365(93), was unclear when considering the application of SOLAS regulation II-2/20-1.

**Summary:** It was agreed that only “pure car and truck carriers” should comply with SOLAS regulation II-2/20-1 and, therefore, the definition provided in SOLAS regulation II-2/3.56 was amended accordingly.

**Implication:** Revision of the definition in SOLAS regulation II-2/3.56 clarifies that the requirements in SOLAS regulation II-2/20-1, are intended for cargo ships which only carry cargo in ro-ro spaces or vehicle spaces, and which are designed for the carriage of unoccupied motor vehicles without cargo, as cargo.

**Application:** The amendment will enter into force on 1 January 2020 and will apply to vehicle carriers as per the revised definition for SOLAS regulation II-2/3.56.

**Related Instrument**
**Amendments to SOLAS regulation II-2/9.4.1.3 - Clarifying the requirements for the fire integrity of windows on passenger ships**

**Background**: A possible error in SOLAS regulation II-2/9.4.1.3.3 was identified. The regulation applied to all passenger ships, but referred to table 9.1 of SOLAS regulation II-2/9 which was only applicable to passenger ships carrying more than 36 passengers.

**Summary**: Amendments to SOLAS regulation II-2/9.4.1.3.3 were drafted to clarify the requirements in chapter II-2 for the fire integrity of windows on passenger ships carrying not more than 36 passengers and special purpose ships with more than 60 (but no more than 240) persons on board.

**Implication**: The amendments explicitly require that for ships carrying not more than 36 passengers, windows facing survival craft and escape slides, embarkation areas and windows situated below such areas shall have a fire integrity at least equal to “A-0” class.

**Application**: The amendments will enter into force on 1 January 2020 and will be applicable to new passenger ships, or when existing windows are replaced on existing ships.

**Amendments to SOLAS Chapter II-2/10.5 for the fire protection of domestic boilers**

**Background**: A proposal was considered to amend the existing SOLAS regulation II-2/10.5.1.2.2 regarding the arrangement of 135 litre foam-type extinguishers in boiler rooms.

**Summary**: The text of regulation II-2/10.5.1.2.2 has been amended. Prior to the amendment domestic boilers of less than 175kW were not required to carry an approved 135l foam-type fire extinguisher. The 135l foam extinguishers are now not required for boilers that are protected by a fixed local water-based firefighting system.

**Implication**: Ships fitted with boilers that are protected by a water-based local application fire-extinguishing system, are no longer required to provide the approved foam-type extinguisher of 135l capacity.

**Application**: The amendments will enter into force on 1 January 2020 and will apply to new ships from the entry into force date as well as existing ships constructed before 1 January 2020. It should be noted that the Application requirements for existing ships in Chapter II-2 applies to ships constructed on or after 1 July 2012, however these amendments also require ships constructed before 1 July 2012 to comply with the requirements.

**Related Instruments**
MSC.1/Circ.1566 on Voluntary early implementation of the amendments to SOLAS Regulations II-2/1 And II-2/10, adopted by Resolution MSC.409(97)
Amendments to SOLAS II-2/13 to make evacuation analysis mandatory

**Background:** As technology has advanced it is now relatively simple to analyse the way a passenger ship can be evacuated. These amendments to SOLAS will make evacuation analysis early in the design process mandatory.

**Summary:** Existing paragraph II-2/13.7.4 is deleted. New paragraphs II-2/13.2.7.1 and II-2/13.2.7.2 have been introduced which require escape routes to be evaluated to demonstrate that the ship can be evacuated in the required time. The evacuation simulation will be used to identify and eliminate congestion which may develop during abandonment and demonstrate that escape arrangements are sufficiently flexible to provide for the possibility that certain routes/areas may not be available as a result of a casualty.

**Implication:** An evacuation analysis will be required for applicable ships. It should be noted that ro-ro passenger ships already have to undertake such an analysis under the requirements of SOLAS II-2/13.7.4.

**Application:** All passenger ships constructed on or after 1 January 2020 which carry more than 36 passengers. The existing mandatory requirement for conducting evacuation analysis on ro-ro passenger ships will continue to be applicable.

**Related Instruments**
MSC.1/Circ.1533 on Revised Guidelines on evacuation analyses for new and existing passenger ships. It is recommended that this revised guidance is used early in the design process, for conducting evacuation analyses, on new passenger ships.

Amendments to SOLAS Regulation II-2/18.5 concerning helicopter landing areas on new ships and the FSS Code Chapter 17 - Helicopter Facility Foam Firefighting Appliances

**Background:** It was proposed that the relevant IMO instruments for helicopters be brought into line with the provisions of other UN agencies. As a result of this proposal, new requirements for the provision of foam application systems for helicopter landing areas were agreed. It was also agreed that the guidelines in the annex to MSC.1/Circ.1431 should be redrafted as a new chapter to the International Code for Fire Safety Systems (FSS Code).

**Summary:** Amendments to SOLAS II-2/18 add a new paragraph 2.3 to require a foam application system that complies with the new chapter 17 of the FSS Code. The new Chapter 17 of the FSS Code details the specifications for foam firefighting appliances for the protection of helidecks and helicopter landing areas as required by chapter II-2 of SOLAS.

**Implication:**
Manufacturers / Designers / Shipbuilders / Shipowners should be aware of the new FSS Code specifications for foam firefighting appliances for the protection of helicopter facilities, as required by Chapter II-2 of SOLAS.
| Resolution MSC.403(96) | **Application:** The new chapter 17 and consequential SOLAS amendments enter into force 1 January 2020. It should however be noted that MSC.1/Circ.1523 allows Flag Administrations to implement the requirements earlier at their discretion. The requirements are applicable to new ships having a helicopter landing area, i.e. an area on a ship designated for occasional or emergency landing and not designed for routine helicopter operations.  

**Related Instruments**  
MSC.1/Circ.1523 on Early implementation of the amendments to the FSS Code |
|---|---|
| **329** | **Amendments to SOLAS II-2/20 and II-2/20-1 concerning fire protection for spaces in which vehicles are carried**  

**Background:** There is confusion in the industry regarding the fire protection requirements which are applicable to cargo spaces which contain vehicles. There are occasions when “ordinary” cargo spaces, i.e. those which are not special category, ro-ro or vehicle spaces as defined by SOLAS II-2/3, will carry vehicles as cargo. Ordinary cargo spaces have fire protection which meets the requirements of SOLAS II-2/19, and when vehicles are carried in them they should also comply with the Dangerous Goods Code and the associated Special Provisions.  

**Summary:** SOLAS II-2/20 will be amended to include a statement to clarify that when vehicles are carried in spaces which do not need to meet the requirement of the regulation, then they can be carried in spaces which meet the requirements of SOLAS II-2/19 as long as they are carried in accordance with the IMDG Code.  

**Implication:** This amendment will clarify the existing situation to make clear the relationship between SOLAS and the IMDG Code.  

**Application:** Applicable to all ships (new and existing) with an entry into force date of 1 January 2020. |
| **258** | **Amendments to SOLAS Regulations III/3 and III/20 on Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear**  

**Background:** Lifeboats and their fittings require maintaining and servicing to ensure their fitness to function in an emergency. This is done by service providers who can either be associated with a specific manufacturer or can be independent. Previously the requirements for the recognition of such service suppliers were given in non-mandatory instruments, (i.e., MSC.1/Circ.1206/Rev.1 (and MSC.1/Circ.1277)  

**Summary:** The SOLAS amendments and associated MSC Resolution (MSC.402(96)) include explicit mandatory text clarifying the requirements for the qualification, authorisation and certification of service suppliers, procedures for maintenance and testing, and what should be carried out at each stage of testing (weekly, monthly, annually, and 5-yearly).  

**Implication:** |
### Shipowners and Ship Managers

This should have little effect for Lloyd’s Register shipowners/ship managers as we already apply these requirements.

It was agreed that the ship’s crew could not carry out 5 year overhaul and tests and that a service provider could be an entity owned by the company owning the ship.

**Manufacturers** will need to find out how their flag Administration intends to authorise them as service suppliers and make appropriate arrangements for authorisation as necessary although they will not need any accreditation or certification when performing servicing, maintenance or testing on their own manufactured equipment. LR already imposes this standard through the LR ‘Procedures for the Approval of Service Suppliers’, so this should not have a significant impact to LR’s clients.

**Flag Administrations and their ROs** will need to authorise their lifeboat service suppliers. A list of approved service suppliers will have to be provided to the IMO.

**Application:** Applicable to SOLAS ships and service suppliers maintaining their lifeboats, rescue boats, launching appliances and release gear. Entry into force is 1 January 2020.

**Related Instruments**

- MSC.402(96) - Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear
- MSC.1/Circ.1578 on Guidelines on safety during abandon ship drills using lifeboats

### Amendments to SOLAS forms E, C and P to include multi-system shipborne radionavigation receivers

**Background:** MSC 95 adopted resolution MSC.401(95) as amended ‘Performance standards for multi-system shipborne radionavigation receivers’. As a consequence the SOLAS forms E, C and P also need to be amended to include the option of multi-system shipborne radionavigation receivers.

**Summary:** The current version of SOLAS form E, part 3, item 3.1, and forms C and P, part 5, item 3.1, allows for the selection of a “receiver for a global navigation satellite system” or a “receiver for a terrestrial radionavigation system”, but not a multi-system receiver. This amendment adds “multi-system shipborne radionavigation receiver” to the options.

**Implication:** The multi-system shipborne navigation receiver performance standards will allow the combined use of current and future radionavigation systems as well as the augmentation of systems for the provision of position, velocity and time (PNT) data within the maritime navigation system. This amendment to the forms takes account of this equipment.

**Application:** MSC.401(95) as amended applies to multi-system shipborne radionavigation receivers installed on or after 31 December 2017. The amendments to Forms E, C and P were adopted at MSC 98 (MSC.421 (98)) and enter into force 1 Jan 2020.

**Related Instruments**

- MSC.401(95) - Performance standards for multi-system shipborne radionavigation receivers
- MSC.432(98) - Amendments to Performance standards for multi-system shipborne radionavigation receivers (resolution MSC.401(95))
<table>
<thead>
<tr>
<th>MSC.1/Circ.1575 on Guidelines for Shipborne Position, Navigation and Timing (PNT) Data processing</th>
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<tbody>
<tr>
<td><strong>Revised MARPOL Annex VI for the Prevention of Air Pollution from Ships (Chapters 1 - 3)</strong></td>
</tr>
<tr>
<td><strong>150-1</strong></td>
</tr>
<tr>
<td>See item 150-1 in Part 1A – SOx control: the global sulphur limit will reduce to 0.50% on 1 January 2020.</td>
</tr>
<tr>
<td>Also see 150-1 in Part 1A for details of the prohibition of installations containing hydro-chlorofluorocarbons from 1 January 2020.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Amendments to the FSS Code, Chapter 8 - Automatic Sprinkler, Fire Detection and Fire Alarm Systems</th>
</tr>
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<tbody>
<tr>
<td><strong>Background:</strong> Following a report to the IMO that detailed several automatic sprinkler system failures on passenger ships it was agreed that MSC.1/Circ.1432 would be amended and a related amendment to Chapter 8 of the International Code for Fire Safety Systems (FSS Code) was also necessary.</td>
</tr>
<tr>
<td><strong>Summary:</strong> The amended MSC.1/Circ.1432 (MSC.1/Circ.1516) includes a new provision for water quality testing for automatic sprinkler systems and new flow charts for the testing and replacement of sprinkler heads and water mist nozzles. The related amendment to Chapter 8 of the FSS Code adds a new requirement for special attention to be paid to the specification of water quality provided by the system manufacturer, to prevent internal corrosion and clogging of sprinklers.</td>
</tr>
<tr>
<td><strong>Implication:</strong> Manufacturers / Shipbuilders / Shipowners to note the new requirements for paying special attention to the water quality of the system and the inspection and maintenance regime of automatic sprinkler and water mist systems.</td>
</tr>
<tr>
<td><strong>Application:</strong> All ships but especially passenger ships fitted with such systems.</td>
</tr>
<tr>
<td><strong>Related Instruments</strong></td>
</tr>
<tr>
<td>MSC.1/Circ.1432 on Revised guidelines for the maintenance and inspection of fire protection systems and appliances, as amended by MSC.1/Circ.1516 on Amendments to the Revised guidelines for the maintenance and inspection of fire protection systems and appliances (MSC.1/Circ.1432)</td>
</tr>
</tbody>
</table>
Amendments to the IGC Code - Applicable fire integrity of wheelhouse windows.

**Background:** Inconsistencies were noted between SOLAS regulation II-2/4.5.2.3 and the International Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk (IGC Code) paragraph 3.2.5 (resolution MSC.370(93)) with respect to the applicable fire integrity of wheelhouse windows.

**Summary:** The IGC code has been revised to align with the requirements given in the above mentioned SOLAS regulation. The amendments remove the requirement for A-0 fire-rated wheelhouse windows.

Because discussions on this matter had been extended beyond the 1 July 2016 entry into force date of the IGC Code, as amended by MSC.370(93), it was considered urgent that an associated circular (MSC.1/Circ.1549) should be issued. The circular notifies Administrations of the corrections to the text pending formal entry into force on 1 January 2020.

**Implication:** In essence, this is a relaxation of the requirements without which compliance with the current requirements to provide A-0 wheelhouse windows included in MSC.370(93) might be difficult. For ships constructed on or after 1 July 2016 but before the entry into force date, it is recommended to retain a copy of MSC.1/Circ.1549 on board to avoid any potential issues that may arise at a Port State control inspection.

**Related Instruments**
MSC.1/Circ.1549 on Notification of an amendment to paragraph 3.2.5 of the IGC Code, as amended

**Further Information**
Lloyd’s Register’s Marine Gas webpage provides further information on alternative fuels and the IGC Code

Amendments to the IGF Code - Applicable fire integrity of wheelhouse windows

**Background:** As a consequence of amendments to paragraph 3.2.5 of the International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) (resolution. MSC.411(97) – see item 304) inconsistencies were noted with respect to the applicable fire integrity of wheelhouse windows, within the International Code for the Safety of Ships using Gases or other Low-flashpoint Fuels (IGF Code). It was agreed to align the fire integrity requirements for navigation bridge windows specified in paragraph 11.3.2 of the IGF Code with the amendment to paragraph 3.2.5 of the IGC Code, as adopted by resolution MSC.411(97) and those in SOLAS Chapter II-2.

**Summary:** The amendments remove the requirement for A-0 fire-rated wheelhouse windows.

**Implication:** In essence this is a relaxation of the requirements without which compliance with the current requirements included in MSC.391(95) might be difficult.
### Application
Ships using low-flashpoint fuels. Formal entry into force is 1 January 2020, however noting that it will be difficult to comply with the current requirements to provide A-0 wheelhouse windows included in MSC.391(95), the Flag Administrations concerned should be consulted early in the design/construction process, noting that MSC.1/Circ.1568 has been published to allow for potential early implementation.

**Related Instruments**
MSC.1/Circ.1568 on Notification of amendments to paragraph 11.3.2 of the IGF Code. This circular allows the voluntary early implementation of the amendment to the IGF Code which will enter into force on 1 January 2020.

**Further Information**
Lloyd’s Register’s [Marine Gas webpage](#) provides further information on alternative fuels and the IGF Code.

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<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>188 &amp; 264</strong></td>
<td>(Repeted) 1 January 2020</td>
</tr>
<tr>
<td><strong>320</strong></td>
<td>1 January 2020 Adopted by Resolution MSC.425(98)</td>
</tr>
</tbody>
</table>

**New Chapter 4 of MARPOL Annex VI – Energy Efficiency Design Index (EEDI)**

See item 188 & 264 in Part A – Phase 2 of EEDI will apply from 1 Jan 2020 to 31 Dec 2024.

**Amendment to the LSA Code and Amendments to the Revised Recommendations on testing of life-saving appliances Resolution MSC.81(70) on winches and winch brakes**

**Background:** A discrepancy has been identified between Chapter 6 of the Life-Saving Appliances (LSA) Code and the testing requirements for winches and winch brakes in resolution MSC.81(70).

**Summary:** It was agreed to modify the texts of paragraph 6.1.1.5 of the LSA Code and paragraph 8.1.1 of part 1 of the annex to MSC.81(70) and to delete the word ‘brakes’ and to add ‘including winch structural components’ to paragraph 6.1.1.6 of the LSA Code.

**Implication:** Since only winch brakes are designed to have sufficient strength and be prototype tested to withstand a static proof load of not less than 1.5 times the maximum working load, the text “except the winch” in paragraph 6.1.1 of part 2 of the annex to resolution MSC.81(70) should be read as excluding the winch brakes from the test with a static load of 2.2 times the maximum working load.

**Application:** MSC 98 adopted the amendment (MSC.425(98)) which will enter into force 1 January 2020.
Amendments to the 2008 Intact Stability Code related to anchor handling, towing or lifting operations

**Background:** New intact stability criteria to cover anchor handling, towing and lifting operations have been developed following the loss of the “Bourbon Dolphin”. As not all ships undertake these duties the criteria have been included in the non-mandatory part of the 2008 Intact Stability (IS) Code (Part B). The Introduction and Part A of the 2008 IS Code have been amended to include new definitions and clarification about the new criteria.

**Summary:** The new criteria require an assessment of the ship’s intact stability when undertaking anchor handling, towing or lifting duties.

For anchor handling it will be necessary to know the following to carry out the assessment; displacement of a loading condition, vertical and horizontal angle of the tow wire and the location of the anchor point with respect to the centre of the propulsive force, the stern of the vessel and the ship centreline. It will also be necessary to know some limiting information such as the bollard pull of the vessel, the design maximum wire tension and the permissible tension (the wire tension which can be applied to the vessel as loaded whilst working through a specified tow pin set). An additional heeling moment will then be added to the intact stability GZ curve. There are limits on the area between the heeling moment curve and the GZ curve, the residual righting lever between the heeling moment curve and the GZ curve, the angle of first intercept between the two curves and a minimum freeboard.

The new criteria in Part B also require an assessment of the ship’s intact stability when undertaking towing and lifting operations. It will be necessary to know the following to carry out the assessment;

For towing: displacement of a loading condition, the bollard pull, horizontal transverse force, the distances between the towing point and the vertical centreline of the propulsion unit and between the centre of the propeller to the point at which the tow force is applied, angle of heel in the loading condition, lateral projected area of the underwater hull.

For lifting: the magnitude of the maximum load which can be lifted, the distance between the point the load is applied to the ship and the centreline of the ship, the vertical height of the load.

Additional constructional matters are included in the amendments to part B of the 2008 IS Code covering the provision of a loading instrument, access to the machinery space, location of freeing ports, winch systems and on deck markings.

The amendments to the introduction and Part A are to include new definitions for “ship engaged in anchor handling operations”, “ship engaged in harbour towing”, “ship engaged in coastal or ocean-going towing”, “ship engaged in lifting operation” and “ship engaged in escort operation” for which the new criteria will be applicable.

**Implication:** Where a ship is expected to carry out anchor handling, towing or lifting duties the necessary calculations should be carried out and the stability criteria satisfied. This will provide standard additional calculations to be assessed and approved where mandated by the Flag Administration. Approval would be carried out by the relevant Flag Administration or Recognised Organisation where the assessment is delegated. Additionally operational guidance for the crew will be required.

**Application:** Vessels engaged in anchor handling, towing or lifting duties.
### Related amendment to the non-mandatory part of the IS Code:
Amendments to Part B of the 2008 IS Code for towing, lifting and anchor handling operations.

#### Amendments to the 1994 and 2000 HSC Codes

**Background:** Following discussion at various IMO meetings it was agreed that clarification was needed regarding the application of the paragraphs 8.10.1.5 to 8.10.1.6 of the 1994 and 2000 High-Speed Craft (HSC) Codes, which concern the exemption from the requirement to carry a rescue boat for high-speed craft of less than 30m (2000 HSC Code) and 20m (1994 HSC Code).

**Summary:** New text to chapter 8 – Life Saving Appliances and Arrangements has been agreed. High-speed craft of less than 30m (2000 HSC Code) and 20m (1994 HSC Code) in length may be exempted from carrying a rescue boat, provided that the requirements in the sub-paragraphs of 8.10.1.6 are fulfilled, and provided a person can be rescued from the water in a horizontal or near-horizontal body position (MSC.1/Circ.1185/Rev.1).

**Implication:** Revision of the text will mean retroactive application of the requirements for HSC craft under 20m (1994 HSC Code) and under 30m (2000 HSC Code). HSC Code craft dating back to 1996 that have been exempted from the rescue boat requirement would need to be checked to ensure that they have a suitable arrangement or will have to add equipment to demonstrate they can rescue a helpless person from the water in a horizontal or near-horizontal body position.

**Ship Designers, Shipbuilders and Shipowners** should ensure that they have sufficient arrangements/equipment in place to satisfy the requirement of allowing a helpless person to be recovered from the water in a horizontal or near-horizontal body position and if in doubt discuss the matter with their Administration.

**Application:** The requirement will apply to existing ships on international voyages constructed on or after 1 Jan 1996 (1994 HSC Code) and also ships with the keel laid on or after 1 July 2002 (2000 HSC Code).

**Related Instruments**
MSC.1/Circ.1569 on Notification of amendments to the 1994 and 2000 HSC Codes. This circular allows the voluntary early implementation of amendments to the 1994 and 2000 HSC Code which enter into force on 1 January 2020.

#### Amendments to the 2009 MODU Code - Installations in hazardous areas, Fire Safety, LSA and Operational procedures

**Background:** Proposals were considered to amend the Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009 (2009 MODU Code) following the tragic loss of life and lessons learned from the explosion, fire, and sinking of the mobile offshore drilling unit ‘Deepwater Horizon’ in the Gulf of Mexico in 2010. In the following investigation report a number of recommendations were made for improvements to the Code in regard to fire protection, life-saving appliances, design and equipment, training and drills.

**Summary:** Chapters 1, 6, 8, 9, 10, 13 and 14 of the 2009 MODU Code have been amended. Revisions to the text include defining the ‘H’ class fire...
| Resolution MSC.435(98) | Changes include: protection standard, changes to the required drills, provision of a dedicated rescue boat and allowing multiple fixed monitors to be used as an alternative to the drill floor fixed pressure water-spraying system.  

**Implication:** Ship Designers, Shipbuilders and Shipowners and operators of mobile offshore drilling units as defined in section 1.3 of the Code should familiarise themselves with the amendments and apply them from the entry into force date.  

**Application:** The amendments to the 2009 MODU Code will apply to new units only based on keel laid date on or after 1 January 2020. |

| 1 January 2021 | **Amendments to MARPOL Annex VI, Regulation 13 - Baltic Sea and North Sea Emission Control Area (ECA) (NOx)**  
See item 328 in Part 1B - 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**  
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 2025

New Chapter 4 of MARPOL Annex VI – Energy Efficiency Design Index (EEDI)

See item 188 & 264 in Part A – Phase 3 of EEDI will apply from 1 Jan 2025 onwards.
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.
2016 Amendments to the Maritime Labour Convention, 2006

**Background:** Work carried out by the International Chamber of Shipping and the International Transport Workers’ Federation recognised that harassment and bullying on board ships can have serious consequences to the physical and emotional health of seafarers and negative effects for companies. Also, ILO wishes to align the procedure for the renewal of the Maritime Labour Certificates with that followed by the IMO.

**Summary:** ILO has prepared amendments to the MLC 2006 with regards to:

- **Regulation 4.3 - Health and safety protection and accident prevention**
  The intention is to eliminate shipboard harassment and bullying by including relevant provisions in the Code of the MLC 2006.

- **Regulation 5.1 - Flag State responsibilities**
  The amendment will now allow an extension of not more than five months of the validity of the Maritime Labour Certificate issued for ships. This will apply in cases where the renewal inspection has been successfully completed, but a new certificate cannot immediately be issued to the ship e.g. where the flag Administration issues the full term certificate.

The amendments were approved by the 105th ILO Conference (7 June 2016, Geneva). The final entry into force date is pending.

**Implication:**
Shipowners and Ship Managers are advised to review their management systems to ensure they include procedures for the elimination of harassment and bullying on board ship.

**Application:** All ships except warships and naval auxiliaries, ships engaged in fishing or similar pursuits, ships of traditional build such as dhows and junks and those that navigate exclusively in inland waters or waters within, or closely adjacent to, sheltered waters or areas where port regulations apply.

Draft 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 has to be revised. An update was done by resolution A.1088(28) but that was subject to a formal amendment to the Convention. Taking into account the advices from the Legal Office of IMO, the draft revised regulation will simply refer to ‘renewal survey’ and the definition of the ‘renewal survey’ will be given in a separate resolution which states that the renewal survey is the renewal
1 November 2019

Information subject to change

Survey of the IOPP certificate.

Summary: At MEPC 71, IMO approved a draft amendment to regulation B-3, subject to final adoption by MEPC 72 scheduled for April 2018. The expected entry into force date is 1 November 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 (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.

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.) The date is 24 months after the entry into force - tentatively - 1 November 2019.

Related instruments:
Draft MEPC resolution on Determination of the date referred to in regulation B-3, as amended, of the International Convention for the Control and Management of Ships’ Ballast Water and Sediments, 2004
MEPC.287(71) on Implementation of the BWM Convention

345

Estimated entry into force

1 November 2019

Information

Draft amendments to the Ballast Water Management Convention, Regulation D-3 - Approval requirements for Ballast Water Management systems & Draft 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
Subject to change will also be made to the BWM.2 circulars affected, at MEPC 72.

**Implication:** There is no change in the technical content, therefore no practical impact.

**Application:** To be applied on a mandatory basis from 1 November 2019 for approval of BWMS.

### Draft amendments to the Ballast Water Management Convention, Section E - Survey and certification requirements for ballast water management

**Background:** Inconsistencies have been found between Part E of the BWM Convention and the format of the certificate, with regard to the requirements of the endorsement at an additional survey.

**Summary:** At MEPC 71, IMO agreed that endorsement for “additional survey” on the certificate is not required and approved a consequential draft amendment to regulation E-1 which is expected to be adopted at MEPC 72. It was also noted that the terminology “Intermediate survey” is omitted from regulation E-5.8, so an amendment to address this was included in the draft amendment.

**Implication:** No substantial impact - this follows the current practice established by the MARPOL Convention and others. However, it will be necessary to clarify actions that will be required between the respective entries into force of the Convention and this amendment.

**Application:** From 1 November 2019 for mandatory implementation during approval of ballast water management systems.

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<thead>
<tr>
<th>Number</th>
<th>Estimated entry into force</th>
<th>Information subject to change</th>
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<tbody>
<tr>
<td>346</td>
<td>1 November 2019</td>
<td>Draft amendments to the Ballast Water Management Convention, Section E - Survey and certification requirements for ballast water management</td>
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</tbody>
</table>

### Draft 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 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 is amended to include a requirement for existing passenger ships to have either onboard or onshore 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.

**Application:** Passenger ships of 120 m or more in length or with three or more main fire zones from the first renewal survey after 5 years after 1 January 2020.
<table>
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<tr>
<th>337</th>
<th>Estimated entry into force</th>
<th>January 2020</th>
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</table>
| Information subject to change | **Draft amendments to SOLAS Chapter IV and Appendix to accommodate additional mobile satellite systems providers recognised for use in the GMDSS**  
**Background:** Amendments to SOLAS chapter IV and other related documents are considered to accommodate new mobile satellite systems recognised for use in the GMDSS.  
**Summary:** The amendments are necessary because SOLAS chapter IV currently recognises only Inmarsat as a GMDSS satellite service provider. As the IMO considers recognition of additional GMDSS satellite service providers, it is necessary to replace these references with a generic term.  
**Implication:** It should be noted that MSC 98 also approved consequential amendments to the HSC Code (1994 and 2000) and the SPS Code.  
**Application:** The amendments were approved at MSC 98 for adoption at MSC 99 (May 2018). The changes will not enter into force until 1 January 2020. |

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<tr>
<th>347</th>
<th>Estimated entry into force</th>
<th>January 2020</th>
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| Information subject to change | **Draft amendments to MARPOL Annex VI, Regulation 21 - Required EEDI in relation to ro-ro cargo and ro-ro passenger ships**  
**Background:** In its review of EEDI, the IMO has been made aware of reports of significant problems in meeting EEDI requirements for ro-ro cargo and ro-ro passenger ships.  
**Summary:** At MEPC 71, IMO agreed to increase the reference line by 20% and to introduce a DWT threshold value for larger ro-ro cargo ships of 17,000 DWT and ro-ro passenger ships of 10,000 DWT. Background data will be verified by the IMO Secretariat for confirmation purposes and reported to MEPC 72, when the amendments are expected to be adopted.  
**Implication:** This will assist ro-ro builders and designers in overcoming the reported problems with achieving higher phase EEDI requirements  
**Application:** This is intended to amend the phase 2 EEDI requirements for ro-ro cargo and ro-ro passenger ships, with entry into force aligning with the phase 2 dates. This is subject to the final decision of MEPC. |

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<thead>
<tr>
<th>349</th>
<th>Estimated entry into force</th>
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|  | **Draft amendments to the IMDG Code (Amendment 39-18)**  
**Background:** The IMDG Code is regularly reviewed to take into account new requirements for existing substances or new substances. The previous amendment to the IMDG Code is Amendment 38-16 which entered into force on 1 January 2018. |  |
## Future IMO and ILO Legislation

**Summary:** Further to the regular updates to classification, segregation, packing and marking of dangerous goods, Amendment 39-18 includes:
- Amendments regarding fish meal and in particular the removal of the restriction of 3,000 kg in SP 308
- The addition of the definition in regard to road gas element vehicles (Chapter 1.2)
- A new section (2.0.4.3) on samples of energetic materials for testing purposes
- A new provision (2.06) which includes articles that may include lithium batteries
- Special provisions for vehicles powered by a fuel cell engine which include hybrid electric vehicles powered by both a fuel cell and an internal combustion engine with wet batteries, sodium batteries, lithium metal batteries or lithium ion batteries, transported with the battery(ies) installed.

Amendment 39-18 will be considered at MSC 99 (May 2018) for adoption with an entry into force date of 1 January 2020 with voluntary application from 1 January 2019.

**Implication:** Shipowners and ship managers of ships carrying dangerous goods must be familiar with the developments on the IMDG Code, including amendments 39-18.

**Application:** Applicable to all ships intending to carry IMDG cargoes after the entry into force date.

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<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td></td>
<td><strong>Background:</strong> Concern had been expressed that by including references to stability criteria in Part B of the 2008 IS Code (non-mandatory) in Part A of the 2008 IS Code (mandatory) this would in turn make them mandatory.</td>
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<td></td>
<td><strong>Summary:</strong> The footnote in Part A to the title of chapter 2 is deleted.</td>
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<td></td>
<td><strong>Implication:</strong> The change is principally editorial in nature and will have no impact on ship design and construction.</td>
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<td><strong>Application:</strong> To ships with keel laid on or after 1 January 2020.</td>
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<th>Date</th>
<th>Description</th>
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<tr>
<td>1 January 2020</td>
<td><strong>Draft amendments to the IBC, BCH, IGC, GC and EGC Codes - Certificate of Fitness</strong></td>
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<td><strong>Background:</strong> It was noted that the changes to the Certificate of Fitness introduced to require a means of confirming that any specific loading condition complies with damage stability requirements (see item 255 Demonstration of compliance with damage stability requirements for tankers above) required further modification to make it clear that an approved stability manual is still required.</td>
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<td><strong>Summary:</strong> Amendments to the Certificate of Fitness will include a new paragraph 6 stating that the loading and stability information has been provided and a paragraph which states “that the ship must be loaded in accordance with the loading conditions provided in the approved loading and stability information booklet referred to in 6 above;” in paragraph 7.</td>
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<td>Expected 1 December 2020</td>
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| **Implication:** | When the Certificate of Fitness is reissued it will include the statement relating to an approved stability manual. There will be no significant impact on ships. |
| **Application:** | to ships for which the IGC and IBC Codes and earlier versions are applicable. |
| **Related Instruments** | MSC-MEPC.5/Circ.14 on Guidance on completing the Certificate of Fitness under the IBC, BCH, IGC, GC and EGC Codes |

**Draft amendments to MARPOL Annexes I, II, V and VI - Use of electronic record books**

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

**Summary:** The use of electronic record books as an alternative to the current paper versions required under MARPOL Annexes I, II, V and VI has been agreed. Amendments to the relevant Annexes of MARPOL addressing the issue of electronic record-keeping are under progress. Further documentation will be created and existing procedures will be revised to support the amendments (see Related Instruments below).

The exact MARPOL format should be used to facilitate the transition to electronic record-keeping and any possible flexibility in the format can be considered again in the future.

**Implication:** Shipowners and Ship Managers can select to switch to electronic record books to reduce administrative burden and the amount of paper waste on board. Any electronic system used for this purpose will need to meet the specified criteria and be provided with written confirmation by the Administration which is to be carried on board the ship for the purpose of regulatory surveys or inspections.

**Application:** To ships subject to record-keeping requirements under MARPOL Annexes I, II, V and VI.

**Related Instruments**
- Draft Unified Interpretation to MARPOL Annexes I, II, V and VI
- Draft Guidance for the use of electronic record books under MARPOL
- Draft amendments to Procedures for port State control, 2011 (resolution A.1052(27))
Class News
No. 35/2017

**Draft 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. The latest version of the IMSBC Code is Amendment 04-17 (see item 307) and IMO is now looking at the next set of amendments 05-19.

**Summary:** Work on the latest set of amendments has focused on evaluating the properties of bauxite and revising the draft individual schedules for seed cake. Current proposals for further progression are as follows:

On bauxite cargoes:
- It was concluded that dynamic separation of the cargo can happen due to moisture content when the cargo is shipped above its Transportable Moisture Limit (TML) which in turn may affect the ship’s stability. For this reason, a draft new individual schedule for bauxite as a Group A cargo (liable to liquefy) was prepared in addition to the existing Group C individual schedule.
- Draft amendments to the existing individual schedule of bauxite as Group C cargo were prepared.
- A draft new test procedure for determining the TML for bauxite cargoes (Modified Proctor/Fagerberg test procedure for bauxite) was concluded for incorporation in Appendix 2 of the IMSBC Code.

On seed cake cargoes:
- New draft individual schedules for seed cakes as Group C and Group B (MHB(SH)) were prepared addressing oxygen depletion issues.
- Draft amendments to the individual schedules for seed cake UN 1386 (a), seed cake UN 1386 (b) and seed cake UN 2217 were prepared.

Ammonium nitrate based fertiliser (non-hazardous) is classified as Group C, but there are concerns that some of its properties may require it to be classified as MHB (OH) Group B.

The testing criteria for assessing materials which emit flammable gas or evolve toxic gas when in contact with water are under review.

There is consideration of developing new cargo individual schedules for metal sulphide concentrates, self-heating, UN 3190 and brucite.

Discussions are starting on the cohesiveness or non-cohesiveness of cargoes and the properties or hazards of these cargoes with regard to dust explosion.

**Implication:** Shipowners and Ship Managers should be aware of the changes

**Application:** It is expected that all ships carrying solid bulk cargoes, other than grain, will be required to apply the amendments from 1 January 2021, and that governments may apply the requirements voluntarily from 1 January 2020.

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**Draft 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 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 are currently under review. Among other amendments, the toxicity categorisation of products will be revised. The lists of requirements for specific cargoes (Chapters 17 and 18) will also be amended accordingly. Consequential changes to the BCH Code are expected.

Upon finalisation of the draft text at the PPR Sub-Committee, both the MSC and MEPC Committees will need to approve and adopt the changes.

**Implication:** Shipowners and Ship Managers need to monitor the developments for any required changes to operational requirements or minor modifications on board. Especially, attention must be paid to a high number of products that are not currently classified as toxic but are expected to be 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.

**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).

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**Expected 1 September 2021**

**Draft amendments to MARPOL Annexes I, IV and VI concerning the exemption of UNSP barges from survey and certification requirements**

**Background:** The issue raised at the IMO was whether an unmanned non-self-propelled (UNSP) barge which does not constitute a source of pollution has to be certified under the MARPOL Convention and hold certificates with all blank entries in their supplement. A proposal to exempt UNSP barges from the survey and certification requirements of MARPOL is under discussion.

**Summary:** 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 for UNSP barges should be part of the individual MARPOL Annexes I, IV and VI. It is considered that the period of exemption is not lifetime but 5 years.

The text of the amendments was expected to be finalised at the fourth session of the III Sub-Committee (III 4) for approval and adoption at subsequent MEPC sessions, but this was postponed to III 5 so it cannot enter into force until at least 2021.

Guidelines which are intended to assist shipowners and operators in applying for exemptions are being prepared and will be issued as an MEPC circular.

**Implication:** Upon entry into force, the amendments are expected to reduce the administrative burden for Shipowners / Ship Managers and Flag Administrations.
A UNSP barge is defined as a barge that:

- Is not propelled by mechanical means;
- Has neither crew nor passengers or other persons on board during navigation;
- Carries no oil (as defined in MARPOL Annex I, regulation 1.1) in bulk; and
- Carries no noxious liquid substances (as defined in MARPOL Annex II, regulation 1.10) in bulk.

Expected 1 January 2024

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: The following are the notable changes under discussion:

- Provision of GMDSS satellite services and redefinition of Sea Area 3
- VHF Data Exchange System (VDES)
- NAVDAT (Proposed to be used in addition to NAVTEX or as an alternative where the NAVDAT service is available. It should be noted that the performance standards for NAVDAT are not expected to be approved before 2021)
- Routing of distress alerts and related information
- Search and Rescue technologies
- HF Communications
- GMDSS carriage requirements
- False alerts
- Training

Implication: It will be a challenge for both shipboard equipment and shore side facilities in terms of survey, certification and Port State Control inspection. The intention at this time is that most equipment will remain valid in order to reduce necessary additional investment in shore side services.

Application: Expected to apply to all ships of 300 GT and above, including new and existing ships.

Draft 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: MSC 96 considered a proposal to amend paragraph 6.1.1.3 of the LSA Code in order to facilitate the use of hand operated mechanisms
### Second Generation of the IGF Code

**Background:** The first version of the International Code of Safety for Ships using Gases or other Low-Flashpoint Fuels (IGF Code) was adopted by resolution MSC.391(95), which entered into force on 1 January 2017. This first version of the IGF Code addresses only LNG (methane). Other low flashpoint fuels are being considered and amendments will be made to the IGF Code as necessary. A second version of the Code is under development, addressing methyl/ethyl alcohol and other low-flashpoint fuels such as low-flashpoint diesel.

**Summary:** The second generation IGF code will address:
- The use of methanol and ethanol;
- Fuel cells; and
- The update of the first generation of the IGF code.

**Implication:**
**Ship Designers / Shipbuilders and Recognised Organisations:** The work will reduce the administrative burdens for using these new fuels, as they are currently assessed and certified under SOLAS regulation II-2/17 which requires risk assessments.

**Application:** Expected to be applicable to ships constructed on or after 1 January 2024.

### Draft 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:** Now that experience has started to be gained from applying the IGF Code, IMO is considering amendments and interpretations. While the original intention of revising the IGF Code was to consider low-flashpoint fuels other than LNG (see item 306), IMO has also agreed to consider matters related to LNG where there are opportunities to reflect lessons learned and make necessary improvements and additions.
Summary: Proposed amendments to parts A and A-1 of the IGF Code are being drafted. Amongst others, these would amend:
- the definition of the probability index $f_v$ 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;
- fire protection requirements for the separation of fuel containment systems from other spaces, and for type C fuel storage hold spaces;

Implication: These draft amendments are intended to improve application of the IGF Code by taking account of lessons learned so far. It is not expected that design requirements would be applied retrospectively to existing ships.

Application: Expected to be 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.

Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009

Adopted by the 2009 SR Conference

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. It is predicted that this condition will be met by July 2019. As of 1 March 2018, only six States have become party to the Convention, representing 21.23% of world tonnage.

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 (also 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” by 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.

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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 (15 flag States with an aggregated fleet of 14,000 ships) 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 then 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.