Future IMO and ILO Legislation

Spring 2021

Upcoming changes to mandatory statutory regulations and instruments, including:

- Adopted amendments that are in a transitional period towards full application
- Adopted amendments entering into force on or after 1 March 2021
- Significant topics which are currently under discussion and development at IMO Committee and sub-committee meetings up to and including Human Element Training & Watchkeeping (HTW 7) in February 2021

How to use this document

Part 1 – Adopted future IMO and ILO legislation

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

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

1B – Adopted requirements entering into force in future

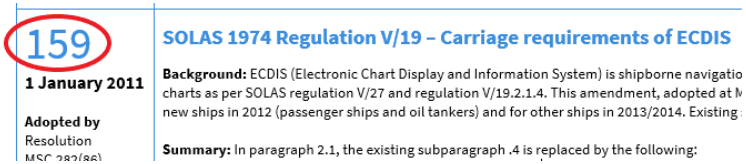
This part includes requirements that have been adopted and have an entry into force date which has been established by the IMO or ILO, but which has not yet been reached.

Part 2 – IMO and ILO requirements currently under development

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

Tables – quick references for application

The tables in the following pages provide a quick reference guide as to which items in this document are relevant for different ship types. 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 left-hand column of the full entry as shown in the example below and repeated in the index tables. The number in the index table is hyperlinked to the full entry.


159

1 January 2011

Adopted by
Resolution

SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS

Background: ECDIS (Electronic Chart Display and Information System) is shipborne navigatio
charts as per SOLAS regulation V/27 and regulation V/19.2.1.4. This amendment, adopted at M
new ships in 2012 (passenger ships and oil tankers) and for other ships in 2013/2014. Existing

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

- **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

Timelines

The timelines on pages 5, 6 & 7 show significant requirements referenced in this document. The reference number to the top left of each item is hyperlinked to the full entry in the document.

Navigation of this document

This edition of the document includes a new hyperlinked shortcut menu which you will see at the bottom of each 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 the below tables have staggered application dates and multiple entries. Application details should be carefully checked.
6. SOLAS amendments now follow a four-year cycle (next entry into force date is 1 Jan 2024), unless adopted under conditions of exceptional circumstance (see IMO Circular MSC.1/Circ.1481) in which case implementation may be earlier. (also see note 11 below)
7. If there is a shipbuilding delay after contract signing, it is important to note that most IMO requirements apply based on the keel laying date and some also have a delivery date requirement, so a delay may necessitate different equipment or design.
8. Some requirements only apply according to certain operational choices, such as geographical trading area or activities which may or may not be carried out. In these cases, the widest possible applicability is shown in the tables, and it is necessary to assess whether or not that requirement applies to an individual ship.
9. There are occasional entries which only concern one specialised ship type and are therefore not included in the reference tables. In this edition, unmanned non-self-propelled(UNSP) barges (**302**); and fishing vessels (**238**).
10. IMO have restarted Committee and sub-committee meetings using virtual technology. It should be noted that the current meetings are concentrating on clearing the backlog of business (approving and adopting agreed items). New items will not be considered until 2022 at the earliest. Currently (March 2021) the IMO programme includes Maritime Safety Committee meetings in May (MSC 103) and October (MSC 104) and Marine Environment Protection Committee meetings in June (MEPC 76) and November (MEPC 77).
11. Because of the disrupted programme of IMO meetings due to the COVD-19 pandemic, MSC is expected to apply the 'exceptional circumstances' clause to the adoption and entry into force of some items that will not be finalised in time to meet their expected entry into force date of 1 January 2024. If agreed, such draft regulations will enter into force 18 months after adoption.

Further information from Lloyd's Register

As well as this document, we publish agenda previews and reports of IMO meetings which are relevant to Lloyd's Register. To register to receive these by email, and to download previous documents, please visit **www.lr.org/imo**.

Summary of major developments since the last edition:

This version covers updates from FAL 44, MSC 102, MEPC 75 and HTW 7 and reflects LR's revised estimates for future developments in light of the delays to IMO's meeting schedule. The number in brackets is the LR reference used in this document for the detailed entry.

Significant approvals or adoptions:

- Draft amendments to Chapter 4 of MARPOL Annex VI - MEPC 75 approved short-term GHG reduction measures, combining EEXI, SEEMP and CII rating, the aim is for international shipping to achieve at least 40% carbon intensity reduction by 2030 when compared to 2008 figures (**387**).
- Safe Mooring – MSC 102 adopted amendments to SOLAS addressing the design requirements and inspection and maintenance for equipment to ensure safe mooring (**365**).
- Draft amendments to SOLAS Chapter II-1 on the design, construction and installation of lifting appliances and anchor handling winches were approved at MSC 102 and are expected to enter into force 1 January 2024 (**383**).

Significant new items being considered or milestones in ongoing developments:

- A draft amendment to the AFS Convention to include controls on cybutryne was agreed and is expected to enter into force 30 October 2022. The draft amendments would mean that anti-fouling systems containing cybutryne shall not be applied or reapplied to ships on or after 1 January 2023 (**368**).
- IMO is expected to approve draft amendments to SOLAS chapters III and IV (requirements of the GMDSS) and draft consequential amendments to associated IMO instruments at MSC 103 (May 2021) (**234**).

Timeline 1 – Significant Future Safety Requirements:

2022

384 IMDG Code (amendment 40-20):

- Lithium-ion batteries
- FRP tanks

386 ESP Code: Thickness measurement requirements for double hulled tankers

2024

365 SOLAS II-1:

Mooring arrangements

LSA Code:

- 395 Draft amendments to the LSA Code and resolution MSC.81(70) Revised recommendation on the testing of life-saving appliances on the ventilation of totally enclosed lifeboats and survival craft
- 380 The removal of the requirement to launch free-fall lifeboats with the ship making headway at speeds up to 5 knots in calm water
- 379 Amended requirements for the use of single fall and hook systems

350 IGF Code:

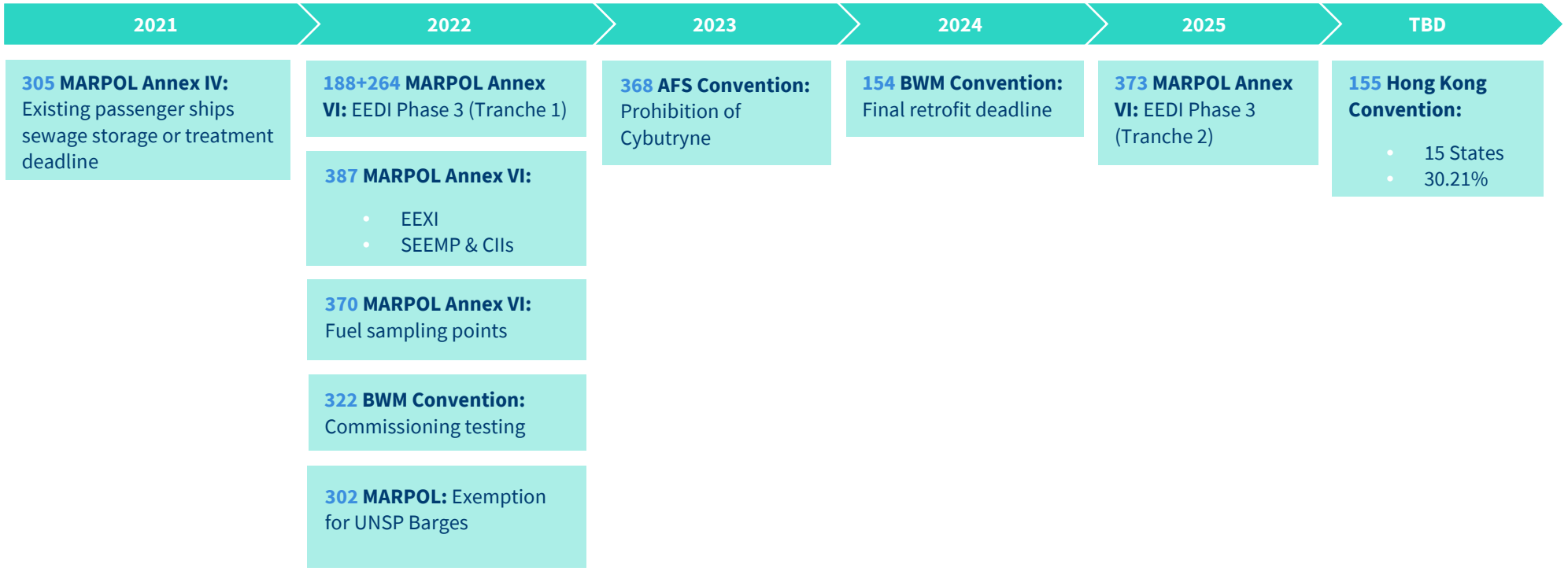
- Lessons learned
- Fire protection
- Fuel containment
- Fuel tank loading limits
- Pressure relief on IC engines

358 IGC and IGF Codes:

- Materials for cryogenic service

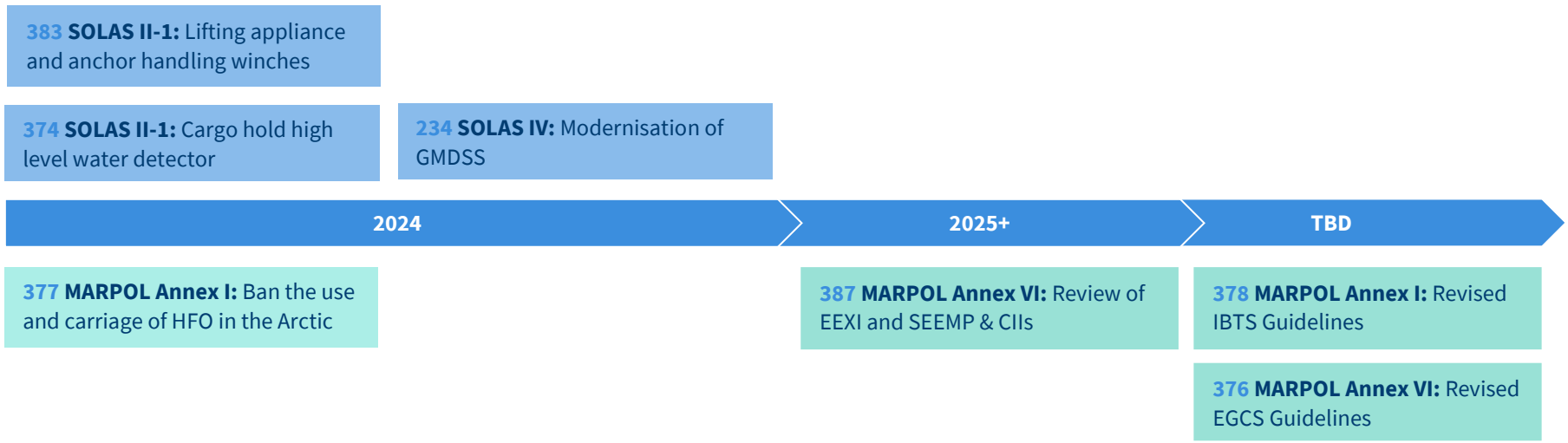
382 FSS Code: Fault isolation for individually identifiable fire detector systems

Timeline 2 – Significant Future Environment Requirements:



Timeline 3 – Significant Requirements in Development:

Safety



Environmental

Table I - NEW SHIPS – Adopted amendments coming into effect

	Page	Ship Type												
		All Ship types	Passenger Ships	Ro-Ro Passenger Ships	Oil Tankers	Chemical Tankers	Gas Carriers	Bulk Carriers	Container Ships	General Cargo Ships	Ro-Ro Cargo Ships	High Speed craft	FSU and FPSO	MODUs
Prior to 1 October 2020	13	154 188/264* 291 322 342	154 188/264* 291 305* 313 322 342	154 188/264* 291 305* 313 322 342	154 188/264* 291 322 342	154 188/264* 291 322 342	154 188/264* 291 322 342	154 188/264* 322 342	154 188/264* 291 322 342	154 188/264* 291 322 342	154 188/264* 291 322 342	 322 342	154 342	154 322 342
1 April 2022	27	369 370	369 370 373	369 370 373	369 370	369 370	369 370 373	369 370 373	369 370 373	369 370 373	369 370 373	369 370	369 370	
1 June 2022	30	 394	384 394	384 394	 394	 394	 394	384 394	384 394	384 394	384 394	384 394	 394	
1 January 2024	32	 358 361 362 365 366	 350 358 361 362 365 366	 350 358 361 362 365 366	338 350 358 361 362 365 366	338 350 358 361 362 365 366	338 358 361 362 365 366	338 350 358 361 362 365 366	338 350 358 361 362 365 366	338 350 358 361 362 365 366	338 350 358 361 362 365 366	 365 366	 366	
1 January 2025	36	188/264*	188/264*	188/264*	188/264*	188/264*	188/264*	188/264*	188/264*	188/264*	188/264*			

Table II - NEW SHIPS – Likely amendments under discussion and development

	Page	Ship Type												
		All Ship types	Passenger Ships	Ro-Ro Passenger Ships	Oil Tankers	Chemical Tankers	Gas Carriers	Bulk Carriers	Container Ships	General Cargo Ships	Ro-Ro Cargo Ships	High Speed craft	FSU and FPSO	MODUs
Expected 30 October 2022	38	368	368	368	368	368	368	368	368	368	368	368		368
Expected 1 December 2022	39				386									
Expected 1 January 2023	40	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	392 393	392 393
Expected 1 January 2024	42	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 374 379 380 382 383 389	234 374 379 380 382 383 389	234 374 379 380 382 383 389	234 389	234	234
Expected 1 July 2024 onwards	47	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 395	155 395	155 395

Table III - EXISTING SHIPS – Adopted amendments coming into effect

	Page	Ship Type												
		All Ship types	Passenger Ships	Ro-Ro Passenger Ships	Oil Tankers	Chemical Tankers	Gas Carriers	Bulk Carriers	Container Ships	General Cargo Ships	Ro-Ro Cargo Ships	High Speed craft	FSU and FPSO	MODUs
Prior to 1 October 2020	13	154 232* 322 342	154 232* 305* 313 322 341 342	154 232* 305* 313 322 341 342	154 232* 255* 322 342	154 232* 255* 322 342	154 232* 255* 322 342	154 232* 322 342	154 232* 322 342	154 232* 322 342	154 232* 322 342	 342	154 322 342	154 322 342
1 June 2021	27		305*	305*										
1 April 2022	27	369 370	369 370	369 370	369 370	369 370	369 370	369 370	369 370	369 370	369 370	369 370	369 370	
1 June 2022	30	 394	384 394	384 394	 394	 394	 394	384 394	384 394	384 394	384 394	384 394	 394	
1 January 2024	32	 358 361 362 365	 350 358 361 362 365	 350 358 361 362 365	338 350 358 361 362 365	338 350 358 361 362 365	338 358 361 362 365	338 350 358 361 362 365	338 350 358 361 362 365	338 350 358 361 362 365	338 350 358 361 362 365	 365	 	

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

	Page	Ship Type												
		All Ship types	Passenger Ships	Ro-Ro Passenger Ships	Oil Tankers	Chemical Tankers	Gas Carriers	Bulk Carriers	Container Ships	General Cargo Ships	Ro-Ro Cargo Ships	High Speed craft	FSU and FPSO	MODUs
Expected 30 October 2022	38	368	368	368	368	368	368	368	368	368	368	368		368
Expected 1 December 2022	39				386									
Expected 1 January 2023	40	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	387 392 393	392 393	392 393
Expected 1 January 2024	42	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 379 380 382 383 389	234 389	234	234
Expected 1 July 2024 onwards	47	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 376 377 378 395	155 395	155 395	155 395

Part 1 - Adopted future IMO and ILO legislation

Part 1A - Adopted Requirements in a transitional period for full application

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

188 + 264

1 January 2013

Adopted by
Resolution
MEPC.203(62)
further revised by MEPC.251(66)

Class News
No. 18/2018

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

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

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

Table - Reduction rate in percentage for the Required EEDI compared to the EEDI Reference line. Note that amendments to Phase 3 for selected ship types has been adopted by Resolution MEPC.324(75) (Reflected in table below). See item 373

Ship Type	Size (DWT)	Phase 0 1-Jan-13 – 31-Dec-14	Phase 1 1-Jan-15 – 31-Dec-19	Phase 2 1 Jan 20 – 31 Mar 22	Phase 2 1-Jan-20 – 31-Dec-24	Phase 3 1 Apr 22 onwards	Phase 3 1-Jan-25 onwards
Bulk carrier	20,000 DWT and above	0	10		20		30
	10,000 and above but less than 20,000 DWT	n/a	0-10*		0-20*		0-30*
Gas carrier	15,000 DWT and above	0	10	20		30	
	10,000 and above but less than 15,000 DWT	0	10		20		30
	2,000 – 10,000 and above but less than 10,000 DWT	n/a	0-10*		0-20*		0-30*
Tanker	20,000 and above	0	10		20		30
	4,000 and above but less than 20,000 DWT	n/a	0-10*		0-20*		0-30*
Container ship	200,000 DWT and above	0	10	20		50	
	120,000 and above but less than 200,000 DWT	0	10	20		45	
	80,000 and above but less than 120,000 DWT	0	10	20		40	
	40,000 and above but less than 80,000 DWT	0	10	20		35	
	15,000 and above but less than 40,000 DWT	0	10	20		30	

	10,000 and above but less than 15,000 DWT	n/a	0-10*	0-20*		15-30*	
General Cargo ship	15,000 DWT and above	0	10	15		30	
	3,000 and above but less than 15,000 DWT	n/a	0-10*	0-15*		0-30*	
Refrigerated cargo carrier	5,000 DWT and above	0	10		15		30
	3,000 and above but less than 5,000 DWT	n/a	0-10*		0-15*		0-30*
Combination carrier	20,000 DWT and above	0	10		20		30
	4,000 and above but less than 20,000 DWT	n/a	0-10*		0-20*		0-30*
LNG carrier***	10,000 DWT and above	n/a	10**	20		30	
Ro-ro cargo ship (vehicle carrier)***	10,000 DWT and above	n/a	5**		15		30
Ro-ro cargo ship***	2,000 DWT and above	n/a	5**		20		30
	1,000 and above but less than 2,000 DWT	n/a	0-5*, **		0-20*		0-30*
Ro-ro passenger ship***	1000 DWT and above	n/a	5**		20		30
	250 and above but less than 1,000 DWT	n/a	0-5*, **		0-20*		0-30*
Cruise passenger ship*** having non-conventional propulsion	85,000 GT and above	n/a	5**	20		30	
	25,000 –85,000 GT	n/a	0-5*, **	0-20*		0-30*	

* 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 400GT. **The following instruments were also developed in relation to this amendment** **Resolution MEPC.262(68) & MEPC.1/Circ.850/Rev.2 on Revision to the 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions** **Resolution MEPC.231(65) – 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI)** **Resolution MEPC.233(65) – 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion** **Resolution MEPC.261(68) & MEPC.1/Circ.855/Rev.1 on Amendments to 2014 Guidelines on survey and certification of the EEDI** **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** **Resolution MEPC.308(73) - 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships** **Resolution MEPC.322(74) - Amendments to the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (Resolution MEPC.308(73))** **Resolution MEPC.309(73) & MEPC.1/Circ.855/Rev.2 on Amendments to the 2014 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)**
255	**Demonstration of compliance with damage stability requirements for tankers** • **Amendments to MARPOL Annex I - Regulation 3 and 28 and Appendix II**

1 January 2016 (Oil and chemical tankers*)

1 July 2016 (Gas tankers*)
*** see Application for details**

Adopted by
Resolutions
MEPC.248(66),
MSC.369(93),
MSC.370(93) &
MSC.376(93)

Class News
No. 17/2015

- **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 have been made to the relevant Certificate of Fitness, also to the Form of the IOPP certificate and supplement 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 Control 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 had 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 had to comply by the first renewal survey on or after 1 January 2016 but no later than 1 January 2021.

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

232

1 January 2017

Adopted by
Resolution MEPC.266(68)

Class News
No. 29/2016

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 IACS 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 400GT and above. It is to be noted that regulation 12.3.5 need only be applied as far as is reasonable and practicable for ships delivered on or before 31 December 1979, as defined in regulation 1.28.1. Ships constructed before 1 January 2017 shall be arranged to comply with regulation 12.3.3 not later than the first renewal survey carried out on or after 1 January 2017. **Related Instruments** **MEPC.1/Circ.867 - Revised Unified Interpretation of regulation 12 of MARPOL Annex I**
305 **1 September 2017** For actual application dates see Application section **Adopted by** Resolution MEPC.274(69) Class News **No. 06/2017**	**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 were required to comply ships from 1 June 2019; and
- Existing passenger ships will be required to comply from 1 June 2021 (with the exception of those affected by resolution MEPC.275(69) below).

Related Instruments

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

154

8 September 2017

Adopted by
Resolution
A.1088(28)

Class News
No. 5/2017

Ballast Water Management Convention

Adopted by the 2004 Ballast Water Management Conference

Note - see also items 322 in part 1A for amendment to regulation B-3.

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 and entered into force on 8 September 2017.

Summary: On entry into force, the BWM Convention required ships to manage their ballast water and sediment. Initially this could be by

No. 16/2017 **No. 27/2017** **No. 09/2018** **No. 10/2018** **No. 07/2019** **No. 10/2020** **No. 16/2020** Lloyd's Register Guidance **Understanding Ballast Water Management**	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) were 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 400GT and above to which the Convention applies, excluding floating platforms, FSUs and FPSOs). Ships that are registered with flag Administrations that are not yet a party to the Convention will need to demonstrate compliance and may wish to undergo surveys and be issued with a document of compliance, and • By the application date which applies to each ship based on its survey schedule, as explained in item **322**, install a ballast water treatment system on board and put it into operation. **Application:** The Convention applies to all ships and offshore structures that load and discharge ballast as follows: All ships are 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 entered into force) could comply by either exchanging ballast on every voyage or by treating ballast to comply with the D-2 discharge standard. IMO Assembly 28 (2013) adopted a resolution (A.1088(28)) which recommended a revised schedule for when existing ships (and ships under construction at the time the Convention entered into force) have to treat ballast water (i.e. when exchange is no longer be permitted). This is based on the ship's ballast water capacity, date of construction and IOPP renewal survey (not the renewal survey associated with the International Ballast Water Management Certificate). Please see item **322** for the latest application schedule. Ships constructed after the entry into force (8 Sept 2017) of the Convention will have to treat ballast water from delivery. All ships over 400GT are 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 400GT. **Exemptions:** 1. Exemptions may be granted to ships on voyages between specified ports or locations; or to ships which operate exclusively between specified ports or locations; 2. Such exemptions will be 2.1. Effective for a period of no more than five years, subject to intermediate review;

2.2. Granted to ships that do not mix ballast water or sediments, other than between the ports or locations specified in 1 above; and
2.3. Granted based on the Guidelines on risk assessment in accordance with MEPC.162(56).
2.4. However it should be noted that the exemptions can be withdrawn at any time by the issuing Flag Administrations.

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

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

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

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

Please note recent updates to the guidelines and relevant information:
- 2016 Guidelines for Approval of Ballast Water Management Systems (G8) (MEPC.279(70))
- 2017 Guidelines for ballast water exchange (G6) (MEPC.288(71))
- 2017 Guidelines for risk assessment under regulation A-4 of the BWM Convention (G7) (MEPC.289(71))
- The experience-building phase associated with the BWM Convention (MEPC.290(71))
- Amendments to the Guidelines for ballast water management and development of ballast water management plans (G4) (MEPC.306(73))
- BWM.2/Circ.33/Rev.1 - Guidance on scaling of ballast water management systems
- BWM.2/Circ.52/Rev.1 - Guidance on entry or re-entry of ships into exclusive operation within waters under the jurisdiction of a single Party
- BWM.2/Circ.61 - Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems
- BWM.2/Circ.62 - Guidance on contingency measures under the BWM Convention

	• BWM.2/Circ.63 - Application of the BWM Convention to ships operating solely in sea areas where ballast water exchange in accordance with regulation B-4.1 is not possible • BWM.2/Circ.69 - System Design Limitations of ballast water management systems and their monitoring • "Ballast Water Management – How to do it" (IMO publication – English edition ISBN: 9789280116816) • BWM.2/Circ.70/Rev.1 - 2020 Guidance for the commissioning testing of ballast water management systems • BWM.2/Circ.42/Rev.2 - 2020 Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)
322 **13 October 2019** **Adopted by** Resolution MEPC.297(72) Class News **No. 16/2018**	**Amendments to the Ballast Water Management Convention, Regulation B-3 - Ballast Water Management for Ships** **Background:** As the Ballast Water Management (BWM) Convention was written based upon the assumption that the Convention would enter into force by 2007, the provision for a retrofitting schedule had to be revised. An update was done by resolution A.1088(28) but that was subject to a formal amendment to the Convention. **Summary:** At MEPC 72, IMO adopted an amendment to regulation B-3, which entered into force on 13 October 2019. The amendment is summarised as follows: The deadline for installing Ballast Water Treatment Systems (BWTS) for existing ships is either: • No later than the first IOPP renewal survey on or after 8 September 2017 (providing that this survey takes place on or after 8 September 2019; or that the vessel has undertaken an IOPP renewal survey on or after 8 September 2014 but prior to 8 September 2017); or • No later than the second IOPP renewal survey on or after 8 September 2017 (providing that the first IOPP renewal survey on or after 8 September 2017 took place before 8 September 2019, and the vessel had not had an IOPP renewal survey on or after 8 September 2014 and prior to 8 September 2017). For new ships (keel laid on or after 8 September 2017) installation of a BWMS was required by the delivery of the ship. For ships of less than 150GT for oil tankers, and 400GT for others, and/or those which do not hold IOPP certificates, the installation deadline is the date determined by the Flag Administration but cannot be later than 8 September 2024 **Implication:** The new retrofitting schedule has significant impact on the industry, including the manufacturers of BWMS. However it should be noted that this BWMC amendment formalises the change which has already been announced by IMO. **Application:** All ships subject to the BWM Convention (survey and certification - 400GT or above that have ballast capacity). This includes

	offshore structures (MODU etc.) **Related instruments** **MEPC.287(71) – Implementation of the BWM Convention** **MEPC.298(72) – Determination of the survey referred to in Regulation B-3, as amended, of the BWM Convention**
341 **1 January 2020** **Adopted by** Resolution MSC.436(99) Class News **No. 14/2018**	**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 of a computer, able to carry out damage stability calculations on existing passenger ships, were considered to be necessary. **Summary:** The application regulations of SOLAS chapter II-1/1 make it clear which regulations are applicable to "new" and "existing" ships. Regulation II-1/8-1 has been amended to include a requirement for existing passenger ships to have either onboard or onshore the capability to assess stability after damage. New passenger ships (keels laid on or after 1 January 2014) are already required to provide this. **Implication:** Existing passenger ships will have to provide suitable stability support. Obtaining the data needed for developing the hull model could be challenging and owners are recommended to start considering what is needed at the earliest opportunity. Loading instruments which comply with IACS UR L5 Type 4 will meet these requirements. **Application:** Passenger ships constructed before 1 January 2014 of 120m or more in length or with three or more main fire zones from the first renewal survey after 1 January 2025. **Related Instruments** **MSC.1/Circ.1532/Rev.1 - Amendments to the revised guidelines on operational information for masters of passenger ships for safe return to port** **MSC.1/Circ.1589 - Guidelines on operational information for masters in case of flooding for passenger ships**
291 **1 January 2020**	**Amendments to SOLAS Chapter II-1 on damage stability** **Background:** Amendments to SOLAS Chapter II-1 to harmonise cargo ship and passenger ship damage stability have been in force since 1 January 2009. These amendments made probabilistic damage stability the main method for calculating damage stability for passenger ships and general cargo ships. Since the amendments have entered into force the need for a number of revisions has become apparent. A major review of the subdivision and damage stability requirements contained in Chapter II-1 of SOLAS has been undertaken.

Adopted by Resolution MSC.421(98)	**Summary:** Significant changes have been made to the following regulations in parts A, B, B-1, B-2, B-4 and C: • Regulation 4, making the alternative compliance part of the text rather than a footnote. • Regulation 5-1, requiring limiting stability information to include trim. • Regulation 6, modifying the required subdivision index, R, for passenger ships. • Regulation 7-2, amending the calculation for s. • Regulation 9, providing limits on the distance from the keel line that small wells should be located unless a damage stability check is made and introducing a minimum limit for the vertical damage extent. • Regulation 12, permitting a butterfly valve at the collision bulkhead on cargo ships. • Regulation 16, to require testing of watertight hatches. • Regulation 17, requiring air pipes which terminate in a superstructure to be considered unprotected openings unless fitted with a watertight means of closure. • Regulation 22, removing the possibility of leaving watertight doors open. Other minor changes have been made to a number of other regulations. **Implication:** **Ship Designers:** These are significant changes to the damage stability regulations that should be taken into consideration at an early stage. **Application:** The amendments will be applicable for ships where the contract for construction is signed on or after 1 January 2020, or the keel is laid on or after 1 July 2020 or delivered on or after 1 January 2024. **Related instruments** **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**
313 **1 January 2020** **Adopted by** Resolution MSC.421(98)	**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.

Class News **No. 40/2017** **No. 12/2019**	**Implication:** Additional drills will need to be included in the ships' normal operations. **Application**: Applicable to all passenger ships.
342 **1 October 2020** **Adopted by** Resolution MEPC.314(74) MEPC.316(74) MEPC.317(74) Class News **No. 07/2018** **No. 17/2020**	**Amendments to MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008 - Use of electronic record books** **Background:** IMO periodically reviews the administrative provisions of mandatory requirements and considers ways to make these more efficient. **Summary:** Amendments to MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008 have been adopted which allow the use of electronic record books as an alternative to hard copy record books when complying with the record keeping requirements of MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008. To be used as an alternative, the electronic recording system is required to be approved by the Administration and electronic records generated and retained by the system should be presented so that the records match the format defined in the relevant MARPOL Annexes. Any electronic system considered to conform to the criteria for approval should be provided with a written declaration from the Administration. The declaration should be carried on board the ship for the purpose of statutory surveys or inspections. Existing electronic recording systems for rechargeable systems containing ozone depleting substances shall only be considered an electronic record book if the system is approved by the Administration on or before the first IAPP renewal survey carried out on or after 1 October 2020, but not later than 1 October 2025. **Implication:** Companies have the option to use electronic recording systems approved by the Administration to comply with the record keeping requirements of MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008. Whilst the electronic records generated and retained by the system are currently required to be presented in the form of records required by the MARPOL Annexes, this may be reviewed in the future. **Application:** All ships using electronic record books to comply with the record-keeping requirements of MARPOL Annexes I, II, V and VI and the NOx Technical Code 2008. **Related Instruments** **MEPC.312(74) - Guidelines for the use of electronic record books under MARPOL** **MEPC.321(74) - 2019 Guidelines for port State control under MARPOL Annex VI Chapter 3**

Part 1B

Adopted IMO and ILO requirements entering into force in the future

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

1 June 2021

305 (Repeated)

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 April 2022

373

1 April 2022

Adopted by
MEPC.324(75)

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

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

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

Implication:
Shipbuilders and Designers: Potential change to ship/machinery design to reduce GHG emissions, will now happen at a different date than indicated previously in the Table 1 of Regulation 21 MARPOL Annex VI for some vessel types. This requires planning within the design process as some reduction dates are moving earlier to 1 Apr 2022, as indicated in the red highlighted sections of the copy of Table 1 below for easy reference. There are several ways to achieve this, such as:

- Increase ship size: engine power ratio
- Reduce lightship weight
- Innovative solutions (air bubble – friction reduction)
- Optimise propeller efficiency
- Hydrodynamics improvement
- Speed reduction
- Use of renewable power source (wind, solar power)
- Low carbon fuels (e.g. LNG)
- Energy saving devices (e.g. WHR, shaft generators)

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

Application: Applies to all new ships of the types or sizes shown in the table below with a change from the previous requirements in red.

Table 1

Ship Type	Size	*Phase 3 1-Apr-22 and onwards*	Phase 3 1-Jan-25 onwards
Bulk carrier	20,000 *DWT* and above		30
	10,000 *and above but less than* 20,000 *DWT*		0-30*
Gas Carrier	*15,000 DWT and above*	*30*	
	10,000 and above but less than 15,000 DWT		*30*
	2,000 and above but less than 10,000 DWT		*0-30**
~~*Gas tanker*~~	~~*10,000 and above*~~		~~*30*~~
	~~*2,000 – 10,000*~~	~~*0-30**~~	
Tanker	20,000 and above		30
	4,000 – 20,000		0-30*
Container ship	*200,000 DWT and above*	*50*	
	120,000 and above but less than 200,000 DWT	*45*	
	80,000 and above but less than 120,000 DWT	*40*	
	40,000 and above but less than 80,000 DWT	*35*	
	15,000 and above *but less than 40,000 DWT*	*30*	~~*30*~~
	10,000 *and above but less than* 15,000 *DWT*	*15-30**	~~*0-30**~~
General Cargo ship	15,000 and above	*30*	~~*30*~~
	3,000 – 15,000	*0-30**	~~*0-30**~~
Refrigerated cargo carrier	5,000 and above		30
	3,000 – 5,000		0-30*
Combination carrier	20,000 and above		30
	4,000 – 20,000		0-30*
LNG carrier***	10,000 DWT and above	*30*	~~*30*~~
Ro-ro cargo ship (vehicle carrier)***	10,000 DWT and above		30
Ro-ro cargo ship***	2,000 DWT and above		30
	1,000 *and above but less than* 2,000 DWT		0-30*
Ro-ro passenger ship***	1000 DWT and above		30
	250 *and above but less than* 1,000 DWT		0-30*
Cruise passenger ship*** having non-conventional propulsion	85,000 GT and above	*30*	~~*30*~~
	25,000 *and above but less than* 85,000 GT	*0-30**	~~*0-30**~~

* Reduction factor to be linearly interpolated between the two values dependent upon ship size.
The lower value of the reduction factor is to be applied to the smaller ship size.
** Phase 1 commenced for those ships on 1 September 2015.
*** Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.
Note: n/a means that no required EEDI applies.

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

Ship type defined in regulation 2	a	b	c
2.25 Bulk carrier	961.79	DWT of the ship where DWT≤279,000 279,000 where DWT > 279,000	0.477

370

1 April 2022

Adopted by
MEPC.324(75)

Amendments to regulations 2 and 14 and Appendix VI of MARPOL Annex VI with regard to the onboard sampling points

Background: MEPC had previously concluded sampling guidelines for fuel in use (MEPC.1/Circ.864), but without specifying the actual requirements for a ship to have such a sampling point in MARPOL. The new work programme on the new additional sampling point (in addition to the sampling point for fuel that the ship is receiving) for fuel in use was agreed at MEPC 71.

Summary: The draft amendments consist of the following parts:
- MARPOL Annex VI regulation 2; a new definition in regulation 2 on low flashpoint fuel, for which sampling points will be exempted.
- MARPOL Annex VI regulation 14; Requirements on sampling points. This applies to both new ships (constructed after entry into force) and existing ships (first renewal survey 12 months or later, after entry into force). Reference is made to the Guidelines for onboard sampling for the verification of the sulphur content of the fuel oil used on board ships (Circular MEPC.1/Circ.864)
- IAPP certificate supplement; New check boxes for indicating the presence of sampling points are to be added.

Implication: These amendments introduce requirements for “in-use” sampling points and “onboard” sampling. Whilst the former is the original work introduced in the above, the latter is for fuels delivered but not used yet. The supporting guidelines for the “onboard” sampling were approved at MEPC 75.

Application: All new and existing ships.
Existing ships will be required to comply at the first renewal survey of the IAPP certificate that will take place on or after 12 months or more from EIF date.

369

1 April 2022

Adopted by
MEPC.324(75)

Amendments to regulations 14 and 18 of MARPOL Annex VI in relation to analysis of sulphur content

Background: In order to accommodate "fuel-in use", a sampling analysis procedure was reviewed, and a package of amendments were made to MARPOL.

Summary: New paragraphs 8 and 9 are added for 'In-use and on board fuel oil sampling and testing' and paragraphs 10 to 13 for 'In-use fuel oil sampling point' under regulation 14. The verification procedure part 2 is to be followed in the new Verification procedures of Appendix VI of MARPOL Annex VI. For the test results, 95% confidence will be allowed (limit X +0.59R) and the acceptable sulphur limits are extended to 0.11% and 0.53% for 0.10% and 0.50% respectively. The laboratory is to be accredited to ISO17025:2017.
Paragraph 8.2 has been replaced under regulation 18.

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

Application: Sampling of fuel used on board all ships from the date of entry into force of the amendment.

Related Instruments
MEPC.326(75) - 2020 Guidelines for monitoring the worldwide average sulphur content of fuel oils supplied for use on board ships

1 June 2022

384

1 June 2022
(with voluntary early application from 1 January 2021)

Adopted by
MSC.477(102)

Amendments (40-20) to the International Maritime Dangerous Goods (IMDG) Code

Background: The IMDG Code is regularly reviewed to take into account new requirements for existing substances or new substances. The Editorial & Technical (E&T) Group meets intersessionally to review proposed amendments to the Code and reports to the CCC sub-committee.

Summary: In addition to the regular updates to classification, segregation, packing and marking of dangerous goods, Amendment 40-20 includes:

- Segregation requirements for alcoholates
- Amendments to SG 53 and SG 48 regarding liquid organic substances
- Amendments to UN 1361 PG II and UN 1362 to clarify the differences between carbon-related substances particularly with regard to charcoal
- A new special provision and handling code for medical waste

	Amendments have also been made to the footnotes in the IMDG Code. Footnotes are considered to be advisory or recommendatory (non-mandatory) and mandatory text should be avoided. Several footnotes in the IMDG Code were found to use mandatory language. These have now been included in the main body of the Code. **Implication:** Owners, operators and masters of ships subject to the IMDG Code are to take note of the amendments. **Application:** Applicable to all ships carrying cargoes that are subject to the IMDG Code. These amendments will enter into force 1 June 2022 with voluntary early application from 1 January 2021.
394 **1 June 2022** **Adopted by** MEPC.325(75)	**Amendments To The International Convention For The Control And Management Of Ships' Ballast Water And Sediments, 2004 - Amendments to regulation E-1 and Appendix I** **Background:** The purpose of commissioning testing is to validate the installation of the BWMS by demonstrating its mechanical, physical, chemical and biological processes are working correctly. **Summary:** To clarify the conduct of statutory surveys for Ballast Water Management Systems (BWMS), MEPC 75 adopted the amendments proposed to BWM regarding commissioning testing of ballast water management systems (Regulation E-1) and the form of the International Ballast Water Management Certificate (Appendix I). Consequently, revised Guidance for the commissioning testing of ballast water management systems was approved and available as BWM.2/Circ.70/Rev.1. The commissioning testing is to be conducted by an accredited entity which is independent from the BWMS manufacturer or supplier and one that is approved by the flag Administration or the Recognised Organisation working on its behalf **Implication:** Although mandatory commissioning testing of BWMS during installation surveys comes into force 1 June 2022, individual flag Administrations may enforce early implementation. It should be noted that commissioning testing is to be conducted by an entity independent from the BWMS manufacturer or supplier and approved by flag Administration or its Recognised Organisation for this purpose. **Application:** All new and existing ships that engage in international trade and are capable of exchanging ballast water **Related Instruments** **BWM.2/Circ.70/Rev.1 – 2020 Guidance for the commissioning testing of ballast water management systems**

1 January 2024

365

1 January 2024

Adopted by
MSC.474(102)

Amendments to SOLAS regulation II-1/3-8 to cover mooring arrangements

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

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

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

Three sets of supporting guidance covering design, maintenance and the strength of mooring equipment have also been produced.

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

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

Related instruments
MSC.1/Circ.1619 - Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fitting for safe mooring (Design guidelines)
MSC.1/Circ.1620 - Guidelines for inspection and maintenance of mooring equipment including lines (Maintenance guidelines)
MSC.1/Circ.1175/Rev.1 - Guidance on Shipboard Towing and Mooring Equipment (MSC.1/Circ.1175)

366

1 January 2024

Adopted by
MSC.474(102)

Amendments to SOLAS chapter II-1 concerning doors, hatches and valves which pierce watertight boundaries

Background: The amendments to SOLAS chapter II-1 part B and B-1 (MSC.216(82) and MSC.421(98)) introduced inconsistencies with parts B-2 to B-4. These arose from the different philosophies behind the probabilistic damage stability assessment and the assumptions made for the regulations in parts B-2 to B-4. The probabilistic method does not rely on a single deck (the bulkhead deck) to provide the uppermost watertight boundary, instead the upper boundary of the buoyant volume may be used. In theory this does not need to be a single horizontal surface. The watertight integrity requirements contained in parts B-2 to B-4, however, continue to make reference to the

	bulkhead deck. **Summary:** Amendments to the following regulations are agreed: • 7-2.5 to remove the inconsistency with regulation 17 regarding the treatment of doors in watertight bulkheads. • 12.6.1 to simplify the requirements for any valve which is installed at the collision bulkhead. The draft amendment does not specify the type of valve (e.g. screw-down or butterfly) but instead provides a number of functional requirements: "The valve shall be a remotely controlled valve capable of being operated from above the bulkhead deck of passenger ships and the freeboard deck of cargo ships. The valve shall be normally closed. If the remote control system should fail during operation of the valve, the valve shall close automatically or be capable of being closed manually from a position above the bulkhead deck of passenger ships and the freeboard deck of cargo ships." • 13 to restructure and clarify the requirements particularly with regard to the safety centre and location of the central operating console on passenger ships. • Various regulations regarding doors and hatches above the bulkhead deck that might be allowed to be open during navigation have been changed to standardise requirements. **Implication:** There will be more choice available for valve type at the collision bulkhead and other requirements will be clear. **Application:** These amendments provide clarity to the requirements and affect the subdivision arrangements and design of vessels. They will enter into force 1 January 2024 and will be applicable to ships constructed on or after that date (unless early implementation applies). **Related instruments** **MSC.8/Circ.1 -Voluntary early implementation of the amendments to SOLAS regulation II-1/12 adopted by Resolution MSC.474(102)**
361 **1 January 2024** **Adopted by** MSC.457(101)	**Amendments to the FSS Code – Chapter 15, paragraphs 2.2.3.21, 2.2.3.2.6 and 2.2.4.2.1 concerning inert gas flow and revision of the term 'forward of' to 'downstream of'.** **Background:** The term 'forward of' is used in paragraphs 2.2.3.2.1, 2.2.3.2.6 and 2.2.4.2.1 of chapter 15 of the FSS Code which is in contradiction with MSC.1/Circ.1582 (Unified interpretations of chapter 15 of the FSS Code). **Summary:** In these amendments to the FSS Code the term 'forward of' is amended to read 'downstream of' considering that normally the inert gas generator is located in the aft part of the ship, the cargo tanks are located in the forward part of the ship, and the inert gas flows from the inert gas generator to the cargo tanks. **Implication:** This amendment stems from the unified interpretation (MSC.1/Circ.1582/Rev.1) and has not changed the regulation but instead clarifies the text.

	Application: This amendment will enter into force 1 January 2024 and is applicable to all ships which have inert gas systems. This clarification was originally published in MSC.1/Circ.1582/Rev.1 *Unified Interpretations of Chapter 15 of the FSS Code* effective from December 2018. **Related Instruments** **MSC.1/Circ.1582/Rev.1 - Amendments to MSC.1/Circ.1582 Unified interpretations of chapter 15 of the FSS Code**
362 **1 January 2024** **Adopted by** MSC.459(101)	**Amendments to LSA Code Paragraph 4.4.8.1 concerning the exemption of the requirement for buoyant oars in lifeboats with two independent propulsion systems** **Background:** Paragraph 4.4.8.1 of the LSA Code provides that, except for free-fall lifeboats, sufficient buoyant oars to make headway in calm seas should be provided. These requirements were originally intended for standard lifeboats with a single engine rather than lifeboats with two independent propulsion systems. **Summary:** The amended text allows that for lifeboats equipped with two independent propulsion systems no such buoyant oars are necessary. **Implication:** This amendment incorporates MSC.1/Circ.1597 *Unified Interpretation of Paragraph 4.4.8.1 of the LSA Code* into the LSA Code. As it is unlikely that both propulsion systems will fail at the same time, lifeboats with two independent propulsion systems are no longer required to carry buoyant oars. **Application:** This amendment is only applicable to lifeboats with two independent propulsion systems and revokes MSC.1/Circ.1597. It will enter into force 1 January 2024. **Related Instruments** **MSC.1/Circ.1597 - Unified interpretation of paragraph 4.4.8.1 of the LSA Code**
338 **1 January 2024** **Adopted by** MSC.459(101)	**Amendments to the LSA Code paragraph 6.1.1.3 - to allow the use of hand-operated mechanisms for the launching of rescue boats** **Background:** Paragraph 6.1.1.3 of the LSA Code requires that a launching appliance 'shall not depend on any means other than gravity or stored mechanical power which is independent of the ship's power supplies to launch the survival craft or rescue boat'. IMO has agreed amendments to this paragraph to allow hand-operated mechanisms for launching rescue boats. It has been suggested that the use of hand-operated mechanisms simplifies davit construction and improves the reliability substantially but concerns over

	potential safety hazards have also been expressed. **Summary:** The amendments allow hand-operated mechanisms for launching rescue boats and includes the means of embarkation for the crew and an additional requirement for means to bring the rescue boat against the ship's side and holding it alongside so that persons can be safely embarked. **Implication:** This amendment will only be applicable to rescue boats that are not one of the ship's survival craft. It should be noted that SOLAS Chapter III has different requirements for cargo and passenger ships in this respect. **Application:** The amendment enters into force 1 January 2024 and will apply to rescue boats installed on board cargo ships on or after 1 January 2024.
358 **1 January 2024** **Adopted by** MSC.475(102) MSC.476(102)	**Amendments to IGC code (Paragraph 6.5.3.5) & IGF Code (Paragraph 16.3.3.5) on the use of materials such as aluminium alloys - Welding procedure tests for cargo tanks and process pressure vessels (consequential change in accepting high manganese austenitic steel)** **Background:** Following the development of the interim guidelines on the application of high manganese austenitic steel for cryogenic service, the relevant paragraphs in the IGC and IGF Code needed to be made more general in their application. **Summary:** Paragraph 6.5.3.5 of the IGC Code and paragraph 16.3.3.5 of the IGF Code are amended to read "…For materials such as aluminium alloys, reference shall be made…" **Implication:** These relatively minor amendments enable alternative materials to be used and make it clear that the requirements for welding and non-destructive testing are met. **Application:** The amendments are expected to enter into force on 1 January 2024 and will apply to those ships which use high manganese steel in the construction of tanks carrying low temperature cargo or fuel. **Related Instruments** **MSC.1/Circ.1599/Rev.1 - Interim guidelines on the application of high manganese austenitic steel for cryogenic service.** These guidelines give practical information on the design and construction of cargo and fuel tanks when high manganese steel is used.

350

1 January 2024

Adopted by
MSC. 458(101)

Amendments to the IGF Code (Various – including definitions, probability index fv, loading limit, fuel distribution, internal combustion engines, fuel containment system, type C tanks)

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

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

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

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

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

Further Information
Lloyd's Register's **Marine Gas webpage** provides further information on alternative fuels and the IGF Code.

1 January 2025

188 & 264
(Repeated)

1 January 2025

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

See item **188 & 264** in Part 1A – Phase 3 of EEDI will apply from 1 Jan 2025 onwards. Note that this is subject to amendment for selected ship types/sizes, see **373**

Part 2

IMO and ILO requirements currently under development

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

Expected 1 September 2022

302

Predicted entry into force

1 September 2022

Information subject to change

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

Background: The draft amendments to MARPOL Annexes I, IV, and VI regarding the exemption of UNSP barges from the survey and certification requirements together with an associated draft MEPC.1 Circular 'Guidelines for the exemption of unmanned non-self-propelled (UNSP) barges from the survey and certification requirements under the MARPOL Convention' have been approved although not yet adopted.

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

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

Implication: It should be noted that a condition of the exemption certificate will be an obligation on the shipowner or operator to notify the flag Administration and port State if the UNSP barge becomes non-compliant. Any such exemption certificate will cease to be valid whenever the UNSP barge does not continue to meet the definition of a UNSP barge as contained in the three annexes regardless of whether the owner or operator informs the Administration and the port State.

Application: A UNSP barge is defined as a barge that:

- Is not propelled by mechanical means; and
- Has neither persons nor living animals on board during navigation; and
- Carries no oil; has no fuel oil tank, lubricating oil and bilge oil residues tank and has no machinery fitted that may use oil or generate oil residues (Annex I); and/or
- Is not used for holding sewage during transport or have any arrangements that could produce sewage (Annex IV); and/or
- Has no system, equipment and/or machinery fitted that may generate emissions (Annex VI).

Expected 30 October 2022

368

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

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

Predicted entry into force **30 October 2022** Information subject to change	**Summary:** Amendments to Annex 1 of the AFS Convention have been drafted to apply control measures to AFS containing cybutryne, plus associated amendments to the form of the International AFS Certificate. **Implication:** The draft amendments would mean that anti-fouling systems (AFS) containing cybutryne shall not be applied or reapplied to ships on or after 1 January 2023. Ships bearing an AFS that contains cybutryne in the external coating layer of their hulls or external parts or surfaces on 1 January 2023 shall either: • Remove the anti-fouling system; or • Apply a coating that forms a barrier to this substance leaching from the underlying non-compliant AFS; no later than either the next scheduled renewal of the anti-fouling system after 1 January 2023, but no later than 60 months following the last application to the ship of an anti-fouling system containing cybutryne. Shipowners and ship managers should expect to be required by flag Administrations to apply for a survey for the issue of an International AFS Certificate no later than 1 January 2025. Such a survey should not affect the time available to shipowners and ship managers to comply with the new control measures in Annex 1 to the AFS Convention. **Application:** All AFS containing cybutryne and all ships except: • Fixed and floating platforms, FSUs, and FPSOs that have been constructed prior to 1 January 2023 and that have not been in dry-dock on or after 1 January 2023; • Ships not engaged in international voyages; and • Ships of less than 400GT engaged in international voyages, if accepted by the coastal State(s). Further amendments to the exemption of ships not engaged in international voyages and ships of less than 400GT engaged in international voyages may be reviewed before adoption. **Related Instruments** **MEPC.195(61) - 2010 Guidelines for Survey and Certification of Anti-fouling Systems on Ships**

Expected 1 December 2022

386 **Predicted Entry into force** **1 December 2022**	**Draft amendments to the 2011 ESP Code, 2011, as amended by resolution MSC.461(101)** **Background:** The 2011 ESP Code, as amended by resolution MSC.461(101), in annex B, part A, annex 2, prescribes the following thickness measurements to be taken at the first renewal survey of double-hull oil tankers; • One section of deck plating for the full beam of the ship within the cargo area; • Measurements, for general assessment and recording of corrosion pattern, of those structural members subject to close-up survey according to annex 1; and • Suspect areas.

Information subject to change	Draft amendments are proposed to the Code, as amended, such that only “suspect areas” of double-hull oil tankers are subject to thickness measurements during the first renewal survey. **Summary:** To evaluate the actual wastage while undertaking thickness measurements of the areas identified in annex B, part A, annex 2 of the 2011 ESP Code, as amended by resolution MSC.461(101) at the first renewal survey; extensive data collection from oil tankers was undertaken by the industry and presented to the IMO for consideration. Deliberations over the analysis of this data resulted in a consensus that the normal range of reported wastage was minimal and, as such, amending the first renewal survey requirements to include only “suspect areas” was proposed. **Implication:** The amendment, once adopted, deems it sufficient to consider only suspect areas for thickness measurements of the areas identified, at the first renewal survey of double hull oil tankers. **Application:** These amendments will be adopted at MSC 103 and on entry into force will apply to new and existing double hull oil tankers. **Related Instruments** **MSC.461(101) - Amendments to the International Code on The enhanced programme of inspections during surveys of bulk carriers and oil tankers, 2011 (2011 ESP Code)**
Expected 1 January 2023	
387 **Predicted entry into force** **No later than 1 January 2023** Information subject to change	**Draft amendments to Chapter 4 of Marpol Annex VI - Mandatory goal-based technical and operational measures to reduce carbon intensity of international shipping** **Background:** MEPC 75 approved short-term GHG reduction measures as set out in the draft amendments to MARPOL Annex VI combining EEXI, SEEMP and CII rating with a view to enabling international shipping to achieve at least 40% carbon intensity reduction by 2030 when compared with 2008 in line with the Initial IMO GHG Strategy. It is envisaged that these measures would also allow for the gathering of additional information and, therefore, gain more experience on the functioning of the measures which in turn would help feed into further development of the medium and longer term GHG reduction strategies. The Ship Energy Efficiency Management Plan (SEEMP) is expected to evolve to become a management system designed to support compliance with new regulation 22B and will be subject to verification audits. Guidance on the development of a revised SEEMP and guidance on verification audits are corrective actions is under development. **Summary:** These draft amendments introduce a goal based short-term measure in which an Energy Efficiency Existing Ship Index (EEXI) and in-service carbon intensity management are functional requirements.

	A new regulation 20A (attained EEXI) and 21A (required EEXI) will require existing ships to improve their technical efficiency, in general so that they catch up with an equivalent new ship of the same type and deadweight which would be required to comply with the applicable EEDI Phase. A new regulation 22A (operational carbon intensity) which is expected to require a linear reduction in in-service carbon intensity of ships between 2023 and 2030, such that the global fleet achieves an average reduction of at least 40% by 2030, relative to 2008. MEPC 75 approved these amendments with a view to adoption at MEPC 76. **Implication:** The EEXI imposes very similar requirements to the later phases of EEDI, to all existing ships. It is intended as a one-off certification which is to be verified by the ship's flag Administration or the Recognised Organisation (RO) on their behalf. Ships above 5000GT will be rated (A – E) based on their attained annual carbon intensity reduction measures by a Carbon Intensity Indicator (CII). Data submitted under regulation 22A (collection and reporting of ship fuel oil consumption data) will be used as the basis of calculation and verification of CIIs and determination of a rating. Corrective actions will be required for ships which are rated D for three consecutive years, or E in any one year. **Shipowners and Ship Managers:** Need to determine whether their vessels will be impacted and measures to be taken for compliance upon entry in force. The verification of ship's EEXI will generally be similar to that for EEDI and will include an inspection of the the EEXI Technical File for the ship. **Application:** To all vessels 400GT and above to which MARPOL Annex VI applies. **Further Information** Lloyd's Register's **As a shipowner, what will I need in order to comply?** provides further information.
392 **Predicted entry into force** **1 January 2023** Information subject to change	**Draft MSC resolution on amendments to the STCW Convention 1978, as amended** **Background:** There are references to "*high-voltage*" in the Seafarers' Training, Certification and Watchkeeping Convention (STCW Convention) without a specific definition for the term. **Summary:** The draft resolution proposes a new definition for "*high-voltage*": "*High-voltage* means an alternating current (AC) or direct current (DC) voltage in excess of 1,000 volts." **Implication:** In each instance in the STCW Convention where there is a minimum standard of competence using the terminology "high-voltage", the new definition will apply. **Application:** This is expected to apply from 1 January 2023.

393

Predicted entry into force

1 January 2023

Information subject to change

Draft MSC resolution on amendment to section A-I/1 of the STCW Code

Background: In 2010 the International Convention on Standards of Training, Certification and Watchkeeping of Seafarers (STCW), adopted some new provisions in line with the new technological and operational developments on ships that required new competencies. New requirements for certification of electro-technical officers were included.

Summary: The functions in the standards of competence for electro-technical officers are provided at operational level, but the definition of the term operational level does not include electro-technical officers. This amendment would include electro-technical officers in the definition of "operational level" and clarifies their responsibilities.

Implication: Electro-technical officers will be considered as being responsible at the operational level.

Application: All ships carrying electro-technical officers.

Expected 1 January 2024

374

Predicted entry into force

1 January 2024

Information subject to change

Draft amendments to SOLAS chapter II-1, requirements for water level detectors on non-bulk carrier cargo ships with multiple cargo holds

Background: SOLAS regulation II-1/25 currently requires single hold cargo ships of less than 80 metres (100 metres if constructed before 1 July 1998) to have a water level detection alarm. These ships are not required to undertake a damage stability assessment which means that there is no requirement to assess the effect of flooding of the cargo hold. Should damage occur and water start to enter the hold, there is a need for the crew to be aware of the situation so that appropriate mitigation actions can be taken. The "El Faro" was a multi-hold ship and as such did not require a water level detection alarm to be fitted. She unfortunately sank following flooding with loss of life.

Summary: A new regulation II-1/25-1 was drafted with the intent to capture all ships – except for bulk carriers – which are currently not required to have a water level detection alarm. The requirement applies to the ships irrespective of length, presence of wing tanks or applied damage stability standard.

Implication: Shipowners and Shipbuilders: Bilge alarms, which are commonly installed on cargo ships that do not carry bulk cargoes, will no longer exclusively fulfil the requirements of the proposed new regulation, and additional detectors will be required to do so. As this is not retrospectively applied, this gives owners and builders time to gain awareness and understand the commercial ramifications of this proposal.
Proposed SOLAS regulation II-1/25-1 deviates from SOLAS II-1/25, in that, the latter is dependent on the ship's length which is not the case for the newly proposed regulation. Therefore, a review of SOLAS II-1/25 could be expected in the future to maintain consistency.

	Application: Applies to all cargo ships with more than one cargo hold constructed on or after 1 January 2024, except tankers and those carrying cargo in bulk.
383 **Predicted entry into force** **1 January 2024** Information subject to change	**Draft MSC resolution on Amendments to SOLAS Chapter II-1** **Background:** IMO has developed new mandatory requirements to cover lifting appliances and anchor handling winches. These consist of amendments to SOLAS and supporting guidelines. **Summary:** The draft SOLAS regulations require new lifting appliances to be designed, constructed and installed in accordance with the requirements of a classification society which has been recognised by the flag Administration. Anchor handling winches will have to meet the requirements of the flag Administration for design, construction, and installation. SOLAS will also require all lifting appliances and anchor handling winches to be operationally tested, thoroughly examined, inspected, operated and maintained, based on the guidelines. Provision has also been made for inoperative equipment. **Implication:** The new draft SOLAS regulation does permit flag Administrations to decide to what extent the provisions of new regulations 3-13.2.1 and 3-13.2.4 (design, construction, installation, thorough examination and testing of new and existing lifting appliances) do not apply to lifting appliances which have a safe working load (SWL) below 1000 kg. **Application:** Once adopted the amendments to SOLAS and the associated Guidelines are expected to enter into force 1 January 2024.
382 **Predicted entry into force** **1 January 2024** Information subject to change	**Draft MSC resolution Amendments to Chapter 9 of the FSS Code** **Background:** IMO agreed to a proposal to develop fault isolation requirements for individually identifiable fire detector systems (installed in lieu of section identifiable fire detector systems) on cargo ships and passenger ship cabin balconies. The two systems can be defined as: • A section identifiable system – "a system with the capability of identifying the section in which a detector or manually operated call point has activated" (paragraph 1.2.2 of chapter 9 of the FSS Code); • An individually identifiable system – "a system with the capability to identify the exact location and type of detector or manually activated call point which has activated, and which can differentiate the signal of that device from all others" (paragraph 1.2.3 of chapter 9 of the FSS Code). **Summary:** SSE 7 agreed draft amendments to the FSS Code chapter 9 to add a new paragraph 2.1.8, thus: "2.1.8 In cargo ships and in passenger ship cabin balconies, where an individually identifiable system is fitted, notwithstanding the provisions in paragraph 2.1.6.1, isolator modules need not be provided at each fire detector if the system is arranged in such a way that the number and location of individually identifiable fire detectors rendered ineffective due to a fault would not be larger than an equivalent section in a section identifiable system, arranged in accordance with paragraph 2.4.1." MSC 102 approved the amendments with a view for

	adoption at MSC 103. **Implication:** Once approved and adopted. Ship builders, Ship managers and owners to note that these amendments shall apply to all new construction cargo ships and to new construction passenger ships with cabin balconies. Where there is a refit, these amendments shall also be applicable. **Application:** The amendments to the FSS Code once adopted by MSC, will apply to new cargo ships and passenger ship cabin balconies to which SOLAS Ch.II-2 applies, and existing ships when systems are fitted. They are expected to enter into force on 1 Jan 2024.
395 **Predicted entry into force** **1 January 2024** Information subject to change	**Draft amendments to the LSA Code and resolution MSC.81(70) Revised recommendation on the testing of life-saving appliances on the ventilation of totally enclosed lifeboats and survival craft** **Background:** The investigation into the sinking of the MOL Comfort in the Indian Ocean considered the discomfort experienced by many crew members in totally enclosed lifeboats and proposed that further investigation into the issue of the ventilation of totally enclosed lifeboats should be carried out with a view to improving the thermal loading of occupants in emergency situations. The scope of the review was further expanded to the ventilation requirements of survival craft. **Summary:** The draft amendments to the LSA Code and Resolution MSC.81(70), include the following: • the CO2 concentration is the determining parameter for ventilation requirements and should not exceed 5,000 ppm, which required a ventilation rate of at least 5 m3/h per person; • to ensure sufficient power for the ventilation, adequate fuel should be provided to allow for 24 h of ventilation and, at the same time, run the fully loaded lifeboat at 6 knots for a period of not less than 24 h (as per paragraph 4.4.6.8 of the LSA Code) • If the totally enclosed lifeboat, partially enclosed lifeboat or survival craft is using powered ventilation to achieve the required ventilation rate then enough energy has to be provided for 24hours. • The amendments to MSC.81(70) address the testing of ventilation systems. **Implication:** Once these amendments enter into force all new build totally enclosed lifeboats, partially enclosed lifeboats and survival craft will need to meet the required ventilation requirements. **Application:** The new ventilation requirements will apply to all newly built totally enclosed lifeboats installed on board a ship on or after the expected entry-into-force date of the amendments (not before 1 January 2024).

379 **Predicted entry into force** **1 January 2024** Information subject to change	**Draft amendments to LSA Code (Chapter IV Survival Craft)** **Background:** Lifeboats and rescue boats with single fall and hook systems face a similar risk of potential accidental release during recovery operations as those with twin fall and hook systems. As these systems are used and tested in a similar way as twin fall lifeboats, they should have similar safety standards. **Summary:** IMO agreed to amend paragraph 4.4.7.6.17 of the LSA Code to read as below (new text, ~~deleted text~~): "where a single fall and hook system is used for launching a lifeboat or rescue boat in combination with a suitable painter, the requirements of paragraphs 4.4.7.6.7, ~~4.4.7.6.8~~ and 4.4.7.6.15 need not be applicable, provided that the single fall and hook system does not have the capability to release the lifeboat or rescue boat with a load on the hook when it is not fully waterborne;" **Implication:** It should be noted that there are a significant number of amendments to the LSA Code currently being drafted by the SSE sub-committee. These amendments will not be submitted to MSC for consideration until all have been completed by the sub-committee. **Application:** Once adopted these amendments are expected to enter into force 1 January 2024 and be applicable to new and existing ships.
380 **Predicted entry into force** **1 January 2024** Information subject to change	**Draft amendments to SOLAS Chapter III, the LSA Code and MSC 81(70) as amended, and draft MSC Circular on voluntary early implementation of the amendments** **Background:** SOLAS regulation III/33.2 and paragraph 4.4.1.3.2 of the LSA Code currently refers to 'lifeboats' which could be read as 'all lifeboats including free-fall lifeboats (FFLB)'. The IMO agreed that the text should be clarified so that this regulation should only be applicable to davit-launched lifeboats. **Summary:** These draft amendments to SOLAS regulation III/33.2 and para 4.4.1.3.2 of the LSA Code remove the requirement to launch free-fall lifeboats with the ship making headway at speeds up to 5 knots in calm water. **Implication:** It should be noted that this amendment applies to free-fall lifeboats only. **Application:** Once adopted, these amendments are expected to enter into force 1 January 2024. MSC 103 will also consider voluntary early implementation of the amended regulation.

234

Predicted entry into force

1 January 2024

Information subject to change

Draft amendments to SOLAS chapters III and IV (requirements of the GMDSS) and draft consequential amendments to associated IMO instruments

Background: The current SOLAS chapter IV (GMDSS) requirements were adopted in 1988 based upon technologies developed in the 1970s. Noting current developments in technologies and satellite service providers, a comprehensive review of the requirements is now nearing completion.

Summary: As well as amendments to SOLAS Chapters III and IV and related and consequential amendments to other IMO instruments, it should be noted that:

- The carriage requirements for ships subject to the GMDSS will not change.
- Although the Iridium satellite system provides coverage in the Polar regions, in order to comply with the requirements of the GMDSS, ships are still required to carry HF communications equipment when transiting the Polar Regions.
- The scope of application for the text moving from Chapter III to Chapter IV will not change and the text of SOLAS regulation IV/1.1 should remain unaltered.
- With regard to SOLAS regulation III/6.2 (which will be relocated to SOLAS Chapter IV) the application is currently the same as that of SOLAS Chapter IV, so no changes are needed.
- The relevant SOLAS related certificates and Records of Equipment will be included as part of the consequential amendments.

Implication: It should be noted that the carriage requirements are not expected to change. The intention at this time is that most equipment will remain valid in order to reduce necessary additional investment in both ship equipment and shore side services.

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

389

Predicted entry into force

1 January 2024

Information subject to change

Draft amendments to the 1988 Load Line Convention; the IBC and IGC Codes and MARPOL Annex I regarding watertight doors on cargo ships

Background: In order to address inconsistencies in various IMO instruments, MSC 102 approved amendments to the 1988 Load Line Convention; the IBC and IGC Codes and noted the proposed amendments to MARPOL Annex I.

Summary: These draft amendments align the requirements with respect to doors in watertight bulkheads with that of the SOLAS Convention:

- Draft amendments to the 1988 Load Line Protocol: regulation 27 (13)(a)
- Draft amendments to the IBC Code (subject to concurrent approval by MEPC 76): Chapter 2 paragraph 2.9.2.1
- Draft amendments to the IGC Code: Chapter 2 paragraph 2.7.1.1

	Implication: No significant impact seen as this clarifies and aligns the requirements of watertight doors with that of the SOLAS Convention. **Application:** These amendments are expected to be adopted at MSC 103 and enter into force 1 January 2024. As they have no impact on existing ships it was decided that they should be applicable to all ships.
Expected 1 July 2024	
377 **Predicted entry into force** **1 July 2024** Information subject to change	**Draft amendments to MARPOL Annex I - Prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters** **Background:** MEPC74 approved the scope of work for a development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters. At PPR7, members agreed to the draft amendments to MARPOL Annex I to incorporate a prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters The draft amendments were approved at MEPC 75 with expected adoption at MEPC 76. **Summary:** The new proposed draft regulation 43A (Special requirements for the use and carriage of oils as fuel in Arctic waters) to MARPOL Annex 1, specifies applicability and EIF for the HFO ban. This new regulation specifies, with the exception of ships engaged in securing the safety of ships or in search and rescue operations, and ships dedicated to oil spill preparedness and response, the use and carriage of oils identified in paragraph 1.2 of regulation 43 as fuel by ships shall be prohibited in Arctic waters **on and after 1 July 2024**. However, for ships with oil fuel tanks which comply with regulation 12A of MARPOL Annex 1 or regulation 1.2.1 of Chapter 1, Part II-A of the Polar Code shall be prohibited in Arctic waters **on and after 1 July 2029**. **Implication:** Ship owners, ship managers and service providers operating in and around the Arctic region shall be impacted. The prolonged application date is planned to provide reaction time to those affected and was a result of the discussions by concerned member States (especially those having a coastline in the Arctic region). **Application:** As expressed in summary, application shall be to all ships with the exception of ships engaged in securing the safety of ships or in search and rescue operations, and ships dedicated to oil spill preparedness and response.
Expected Date Unknown	
376	**Draft MEPC Resolution - 2020 Guidelines For Exhaust Gas Cleaning Systems** **Background:** MEPC 70 tasked the PPR sub-committee to review and update the 2015 EGCS guidelines (Res. MEPC.259(68)) based on the

Entry into force **Not yet known** Information subject to change	report of the correspondence group established at PPR 5, which resulted in the revised draft 2020 EGCS guidelines finalised at PPR 7. **Summary:** A Review of the 2015 EGCS guidelines was completed (along with a review of MEPC.1/Circ.883). A revised set of guidelines was finalised during PPR 7. **Implication:** Shipyards, Ship owners and equipment manufacturers will have a new set of guidelines for the new installations on new and existing ships, with no retrospective impact on already installed and previously approved EGCS installations. **Application:** Applicable to new installations on new and existing ships only, without the need for reapproval of installations approved under the 2015 EGCS guidelines. Implementation of these revised 2020 EGCS guidelines will be 6 months from date of adoption at MEPC.
378 **Entry into force** **Not yet known** Information subject to change	**Draft amendments to MARPOL Annex I - Amendments to Appendix II (Form of the IOPP certificate and Supplements) and Appendix III (Form of Oil Record Book)** **Background:** MEPC 70 noted that new tankers are being delivered with Integrated Bilge Treatment Systems (IBTS) which are installed in accordance with the specifications provided in the annex to the 2008 Revised Guidelines for systems for handling oily wastes in machinery spaces of ships. PPR 5 had agreed to develop a set of consolidated IBTS Guidelines (by amalgamating all relevant IBTS guidance and circulars into a single document) and consequential draft amendments to the IOPP Certificate (IOPPC) and the Oil Record Book (ORB), with the aim of updating the IBTS Guidelines and allowing industry to implement new technology and management options on existing and new ships. **Summary:** PPR 7 discussed and reviewed the IBTS Guidelines and new draft MEPC Circular (including '2020 Guidelines for Systems for Handling Oily Wastes in Machinery Spaces of Ships Incorporating Guidance Notes for an Integrated Bilge Water Treatment System (IBTS)) was prepared. It was agreed that the amendments to the IOPP supplement Form B and the ORB shall be forwarded to MEPC 76, and further discussed by the Committee prior to approval. Further advice was also sought on whether the amendments relating to the disposal of oily bilge water by evaporation were allowable (since not explicitly mentioned in MARPOL Annex I). **Implication:** Ship owners and operators will have to reconsider their operational practices. The draft amendments to the IOPP certificate and the ORB have not yet been finalised. Further discussions at MEPC. **Application:** For all ships subject to the survey and certification requirements of MARPOL Annex I.

155

Entry into force
Not yet known

Subject to meeting the conditions for entry into force

LR's ship recycling webpage

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

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

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

The Convention will enter into force 24 months after it has been ratified by 16 States, representing 40% of the world fleet, and with an annual ship recycling capacity of 3% of that fleet. As of 2 March 2021, sixteen States have become party to the Convention, representing 29.58% of world tonnage.

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

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

- Ships to have an IHM;
- New build ships to not have certain hazardous materials fitted;
- Ship recycling facilities to be authorised by the national authority;
- Ship recycling facilities to provide an approved 'Ship Recycling Plan' detailing how the ship will be recycled;
- Ships flying the flag of parties to the Convention to be recycled only in authorised recycling facilities; and
- Ship recycling facilities which are located in parties to the Convention to recycle only ships which they are authorised to recycle.

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

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

Implication:
Shipowners and Ship Managers:

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

	bunkers **Recycling facilities:** • to obtain "Document of Authorization for Ship Recycling" from the competent authority of the recycling State • to inform their authorities should they wish to recycle a ship • to prepare a specific 'Ship Recycling Plan', based on the IHM which the owner provides • to report when recycling is finished **National authority of States with recycling facilities:** • to authorise ship recycling facilities • to approve Ship Recycling Plans **Application:** Once the Convention enters into force it will apply to all ships and MODUs, high-speed craft, FSUs/FPSOs and barges. For new ships it will enter into force 24 months after the ratification criteria are met. Existing ships will have up to five years after the criteria are met. **Further Information** Lloyd's Register's **Ship recycling webpage** provides further information. Lloyd's Register **Guidance notes for the inventory of hazardous materials.**
238 **Entry into force** **Not yet known**	**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 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 States with an aggregate of 3,600 fishing vessels of 24m in length and over and modifies some of the technical provisions. **Summary:** The diplomatic conference in Cape Town, South Africa, in October 2012 agreed that the entry into force criteria should be 22 flag states which between them have at least 3,600 fishing vessels of 24 metres in length and over. The survey and certification requirements were amended to a five year cycle. A phased-in application for some parts of the requirements for existing fishing vessels was also agreed. A procedure for confirming the number of fishing vessels each signatory has was agreed by MSC 92. Signatories will be expected to provide the number of fishing vessels which are registered with them at the same time they advise the IMO of their signing of the Cape Town Agreement. If numbers are not provided then the IMO will follow various routes to obtain accurate information.

	Implication: **Shipowners and Ship Managers:** The Protocol has requirements covering the following areas: • construction, watertight integrity and equipment; • stability and associated seaworthiness; • machinery and electrical installations and periodically unattended machinery spaces; • fire protection, detection, extinction and firefighting; • protection of crew; • life-saving appliances and arrangements; • emergency procedures, musters and drills; • radiocommunications; and • shipborne navigational equipment and arrangements. When it enters into force these safety items will need to be provided on board fishing vessels. Some of the requirements are applicable to existing fishing vessels as well as to new construction. It should be noted that some flag Administrations have already enacted the Torremolinos Convention and Protocol, so fishing vessels flagged with these Administrations will find that nothing will change following these amendments. **Shipbuilders / Designers of fishing vessels** will need to ensure that the regulations are complied with. This may require additional or different safety equipment to be provided. **Flag Administrations and their Recognised Organisations** will have to survey new and existing fishing vessels to the extent required and issue appropriate certification. **Application:** The Torremolinos Convention and Protocol is, in general, applicable to fishing vessels of 24 metres in length and over. Although the majority of the requirements are applicable only to new ships, the following are also applicable to existing ships: • Life-saving appliances and arrangements - only regulation 13 ‘Radio life-saving appliances’ and regulation 14 ‘Radar transponders’; • Emergency procedures, musters and drills; • Radiocommunications; and • Shipborne navigational equipment and arrangements.

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