Lloyd's Register Marine

Working together for a safer world

Future IMO legislation

October 2015

This publication provides an overview of the known amendments to the existing statutory regulations and instruments, mandatory under the conventions and codes.

The known amendments include: amendments that are in transitional period toward full implementation; adopted amendments that will enter into force on or after 1 October 2015; and the major topics currently under discussion and development (discussions up to MSC 95 in June 2015).

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Part 1 – Adopted future IMO legislation

A – Adopted IMO requirements in transitional period for full application
This part includes requirements that have recently entered into force but are still in a transition period due to their application formulation. For example, SOLAS regulation V/19 entered into force on 1 January 2011, however, the requirement applies on different dates depending on type and size of ship, as well as whether target is a new ship or retrofitting to an existing ship.

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

Part 2 – IMO 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.

Tables – quick references for application

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

- Table 1a – New ships – Adopted mandatory regulatory amendments which are coming into effect
- Table 1b – New ships – Likely amendments which are currently under discussion and development – subject to change

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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. This table refers only to those which are permanently applicable. Requirements for offshore supply vessels (OSVs) are the same as those listed for general cargo ships.
5. Entries marked with * in below tables have staggered application dates and multiple entries.
6. As of 1 Jan 2016 new SOLAS amendments will follow a four year cycle (first entry into force date will be 1 Jan 2020), unless adopted under conditions of exceptional circumstance (see MSC.1/Circ.1481).

Summary of major developments:

This version covers updates out of PPR 2, HTW 2, SDC 2, NCSR 2, SSE 2, MEPC 68 and MSC 95. The number in brackets is the reference used in this document for the detailed entry.

Significant approvals or adoptions:

The environmental aspects of the Polar Code were adopted at MEPC 68. Coupled with the previously adopted safety aspects, the code is now confirmed to enter into force on 1 January 2017 (241).

The IGF Code for ships using gas as fuel was adopted (185). Work will continue to develop requirements for other low-flashpoint fuels.

Significant new items being considered or milestones in ongoing developments:

At MEPC 68 a date was agreed for the previously adopted Baltic Sea sewage controls to come into effect (195).

Significant entries into force in the near future:

Tier III NOx controls will apply for new ships from 1 January 2016 which will sail in the existing NOx emission control areas (150-1 and 263).

Fixed inert gas systems will be required for new oil and chemical tankers between 8,000-20,000 dwt (239).

Additional requirements will be introduced for the fire resistance of ventilation ducts on new ships (252).

New requirements for an additional means of escape from machinery spaces will be required on board new ships (254).

The comprehensively revised IGC Code for gas carriers will enter into force (189).

Requirements for damage stability instruments on tankers will be introduced (255).

Table 1a – NEW SHIPS – Adopted mandatory regulatory amendments which are coming into effect

	From 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	FSUs and FPSOs	MODUs
Prior to 1 January 2016	11	150-1* 153-1* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 167 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	150-1* 153-1* 159* 182 188/264 208 209* 219* 226* 236*	153-3*		
1 January 2016	25	150-1* 252 254 259 260 262 270	150-1* 252 254 259 260 262 270	150-1* 218 252 254 259 260 262 270	150-1* 239 252 254 255* 259 260 261 262	150-1* 239 252 254 255* 259 260 262	150-1* 252 254 259 260 262	150-1* 252 254 259 260 261 262 270	150-1* 252 253 254 259 260 262 270	150-1* 252 254 259 260 262 270	150-1* 252 254 259 260 262 270			
1 March 2016	36	271 281 282 283	271 281 282 283	271 281 282 283				271 281 282 283	271 281 282 283	271 281 282 283	271 281 282 283		282	282
1 July 2016	38	268 284	268 284	268 284	175 268 284 285	268 284 285	189 255* 268 284 285	175 268 284 285	267 268 284 285	268 284 285	268 284 285			
12 December 2016	42	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002
1 January 2017	43	232* 241*	185 232*	185 232*	185 232*	185 232*	232* 241*	185 232*	185 232*	185 232*	185 232*	241*		

			241* 273	241* 273 274	241* 273 277	241* 273 277	277	241* 269 273	241* 273	241* 273	241* 273 274			
1 June 2019	50		195*	195*										
1 January 2020	50	188/264	188/264	188/264	188/264	188/264	188/264	188/264	188/264	188/264	188/264			
1 January 2025	50	188/264	188/264	188/264	188/264	188/264	188/264	188/264	188/264	188/264	188/264			

* - entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case

Table 1b – NEW SHIPS – Likely amendments which are currently under discussion and development – subject to change

	From 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	FSUs and FPSOs	MODUs
Expected 1 January 2017	52	154	154	154	154	154	154	154	154	154	154		154	154
Expected 1 September 2017	54	289 300	289 300	289 300	289 300	289 290 300	289 300	289 300	289 300	289 300	289 300			
Expected 1 January 2018	56	291 292 297	291 292 297	291 292 297	291 292 294 297	291 292 297	291 292 297	291 292 294 297	291 292 297	291 292 297	291 292 297			
Expected 1 March 2018	58	265	265	265	265	265	265	265	265	265	265			
Expected 1 July 2018	59	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155	155	155
Expected 1 January 2020 onwards	61	256/296 258 295 298	256/296 258 293 295 298	256/296 258 293 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298			256/296

*- entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case

Table 2a - EXISTING SHIPS – Adopted mandatory regulatory amendments which are coming into effect

	From 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	FSUs and FPSOs	MODUs
Prior to 1 January 2016	11	150-1* 153-1* 182 209* 219* 226* 236*	150-1* 153-1* 159* 182 209* 219* 226* 236*	150-1* 153-1* 159* 182 209* 219* 226* 236*	150-1* 153-1* 159* 182 209* 219* 226* 236*	150-1* 153-1* 159* 182 209* 219* 226* 236*	150-1* 153-1* 159* 182 209* 219* 226* 236*	150-1* 153-1* 182 209* 219* 226* 236*	150-1* 153-1* 182 209* 219* 226* 236*	150-1* 153-1* 182 209* 219* 226* 236*	150-1* 153-1* 182 209* 219* 226* 236*	153-3*		
1 January 2016	25	150-1* 259 260 262 270	150-1* 259 260 262 270	150-1* 218 259 260 262 270	150-1* 255* 259 260 261 262	150-1* 255* 259 260 262	150-1* 255* 259 260 262	150-1* 259 260 261 262 270	150-1* 259 260 262 270	150-1* 259 260 262 270	150-1* 259 260 262 270			
1 March 2016	36	271 281 282 283	271 281 282 283	271 281 282 283	281 282 283	281 282 283	281 282 283	271 281 282 283	271 281 282 283	271 281 282 283	271 281 282 283		282	282
1 July 2016	38	268 284	268 284	268 284	268 284 285	268 284 285	255* 268 284 285	159* 268 284 285	159* 267 268 284 285	159* 268 284 285	159* 268 284 285			
12 December 2016	42	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002	ILO0002
1 January 2017	43	232*	185 232* 273	185 232* 273 274	185 232* 273	185 232* 273	232*	185 232* 269 273	185 232* 273	185 232* 273	185 232* 273 274	241*		
1 July 2017	49							159*	159*	159*	159*			

1 January 2018	49	**241***	**241***	**241***	**241***	**241***	**241***	**241***	**241***	**241***	**241***			
1 July 2018	49	**226***	**226***	**226***	**226***	**226***	**226***	**159*** **226***	**159*** **226***	**159*** **226***	**159*** **226***			
1 June 2021	50		**195***	**195***										

*- entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case

Table 2b - EXISTING SHIPS – Likely amendments which are currently under discussion and development –subject to change

	From 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	FSUs and FPSOs	MODUs
Expected 1 January 2017	52	154	154	154	154	154	154	154	154	154	154		154	154
Expected 1 September 2017	54	300	300	300	300	290 300	300	300	300	300	300			
Expected 1 January 2018	56	292 297	292 297	292 297	292 294 297	292 297	292 297	292 294 297	292 297	292 297	292 297			
Expected 1 March 2018	58	265	265	265	265	265	265	265	265	265	265			
Expected 1 July 2018	59	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155 234	155	155	155
Expected 1 January 2020 onwards	61	256/296 258 295 298	256/296 258 295 298	256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298	192 256/296 258 295 298			

* - entry has staggered application dates according to ship type and size, and therefore multiple entries below. You are advised to read application details carefully in each case

Part 1 – Adopted future IMO legislation

A – Adopted IMO requirements in a transitional period for full application*

* Requirements that have already entered into force but have application dates which exceed the entry into force date. For example, requirements with more than one phase of introduction or requirements with a period of grace.

150-1, 263 & 257

1 July 2010

Adopted by Resolution MEPC.176(58), further amended by resolution MEPC.251(66)

Class News **Nos. 19/2011, 33/2012,22/2014** and **20/2015**

Lloyd's Register Guidance Document **Guidance for Shipowners and Operators on the Annex VI SOx and NOx regulations**

The Revised MARPOL Annex VI (Chapters 1 - 3)

MARPOL Annex VI was comprehensively revised by resolution MEPC.176(58) adopted in 10 October 2008 which entered into force on 1 July 2010. The following elements of the amendments introduced by resolution MEPC.176(58) are still in transition toward their full implementation. Readers are to note that there are subsequent amendments to this part of the MARPOL Convention that are in transitional stage toward taking full effect which are introduced hereunder in this entry.

Further, there are more related amendments introduced in this document as follows:

- Adopted and waiting for entry into force - see item 281 and 282 in Part 1B of this document
- Under development – see items 289 and 300 in Part 2 of this document

The new chapter adopted on a later date for introducing EEDI requirements is given below as item 188 & 264.

150-1

SOx control

Global
1 January 2020: 0.50% (or 1 January 2025: 0.50% depending of the review of the fuel availability in 2018)

NOx control

Tier III control (Emission Control Area in North and Central Americas only)	1 January 2016

NOx control – new engine

For ships built after 1 January 2016 (Tier III limits) for operation in the North and Central America ECA:

	(The requirement applies to a diesel engine installed on a ship with a length of 24 metres or over; or to a diesel engine installed on a ship with a combined nameplate diesel engine propulsion power of 750kW or more) When operating within a designated Emissions Control Area: 3.4 g/kWhr where n is less than 130 rpm; 9.0 x n (-0.2) g/kWhr when n is 130 rpm or more but less than 2000 rpm; 1.96 g/kWhr when n is 2000 rpm or more When operating outside a designated Emissions Control Area the Tier II limits shall apply. Note: Operation within a designated Emissions Control Area will require the operation of exhaust gas treatment devices, such as a Selective Catalytic Reduction (SCR) device. **263** The requirements were further revised by MEPC.251(66) as follows: – Ships that will be operating in ECAs in America (North American and US Caribbean Sea) and are constructed on or after 1 January 2016. – Ships that will be operating in future ECAs (that might be established) - applies to ships constructed on or after the date that ECA is adopted by MEPC, or a date decided by the parties concerned but not earlier than the date of adoption. – Notwithstanding the above, yachts (ships used solely for recreational purposes) of less than 500 gt constructed before 1 January 2021 do not need to comply with the Tier III requirement, and recreational yachts of less than 24 metres will not need to comply with Tier III even after that date. **257** Further, the resolution MEPC.251(66) also introduced a change to govern dual fuelled vessels (gas / liquid). These amendments clarify that for testing and approval, including calculation values, the requirement for dual fuel engines to be tested at their maximum liquid/gas fuel ratio (i.e., the worst NOx emission case) is retained. It was confirmed that these changes are in no way a means of offering a single certification on gas for engines for which the normal in-service NOx emission values will be higher due to operating with a greater liquid/gas fuel ratio than that used in the testing process. These additions are fully consistent with ISO 8178-1 on which Chapter 5 of the Code is based. Therefore, there are no changes to either the fundamentals or details of the application of the Code in respect of Parent Engine selection, engine testing or either the Simplified Measurement Method or Direct Measurement and Monitoring options as Onboard NOx Verification Procedures. The amendments also include addition of other alternative fuels such as methanol, propane and butane and this should provide clarity and uniformity to those who are tasked with testing and approving such engines.

	Implication: **Shipowners:** The remaining challenge is the 2020 global sulphur content issue. Due attention is to be paid to the discussions at MEPC on fuel availability. **Application**: All ships to which MARPOL Annex VI applies – generally speaking, ships of 400 gt and above (new and existing ships). Relevant instruments MEPC.1/Circ.795/Rev.2 on Unified Interpretations to MARPOL Annex VI clarifies the applicability of the requirements for bunker delivery notes
153-1 1 January 2011 Adopted by Resolution MSC.269(85) Class News **No. 40/2010**	**SOLAS 1974 Regulations II-2/1 and II-2/19 – Carriage of dangerous goods (Note to table 1 and 2 and entire table 19.3)** **Background:** Inconsistencies between SOLAS and the IMDG Code led to the adoption of subject update. **Summary:** The proposal was to update the Note 1 to table 19.1 and 19.2 as well as replace entire table 19.3 with the relevant amendments to regulation 1. Similar amendments were proposed to chapter 7 of the HSC Code. **Implication:** No changes are required to the ship construction. Carriage of dangerous goods in packaged form will be mainly affected while there will be little or no effect on carriage of solid dangerous goods in bulk. **Application (further amendments were approved at MSC 89, please see MSC.338(91)):** New ships (constructed on or after 1 January 2011). Application to existing ships is effected through amendments to Chapter II-2, regulation 1. The following ships must comply no later than the date of the first renewal survey on or after 1 January 2011: – Cargo ships of 500 gt and above and passenger ships constructed on or after September 1,1984, but before January 1, 2011; and – Cargo ships of less than 500 gt constructed on or after February 1, 1992, but before January 1, 2011. **Exceptions:** Chapter II-2, regulation 1 exempts older vessels from complying with certain requirements of the revised regulation 19 if they differ from those contained in the previous regulation 19 and the older regulation 54, which is being phased out. Specifically, alterations to cargo space fire detection systems are not required on older vessels if the revised regulation 19 requirements are different, and vessels built before July 1, 1998, do not need to comply with the revised regulation 19 on ro-ro space separation requirements. **Note:** MSC 85 confirmed that the provisions of regulation II-2/19 do not apply to dangerous goods in "excepted quantities" pending entry into force of the relevant amendments to regulation II-2/19 (1 January 2011). (Refer to chapter 3.5 of the IMDG Code)

153-3 1 January 2011 Adopted by Resolution MSC.271(85)	**International Code of Safety for High-Speed Craft, 2000 (HSC Code 2000)** Paragraph 7.17 – Fire Safety – Note 1 to table 7.17-1 and entire table 7.17-3 Background: Similar amendments were approved for SOLAS chapter II-2. (see item 153-1) Summary: A set of amendments similar to those to the SOLAS Chapter II-2 were introduced in the HSC Code 2000. Existing Note 1 to table 7.17-1 has been revised to clarify the application of ventilation requirements for different classes of dangerous goods carried in container cargo spaces. Similar to the re-insertion of the footnote for SOLAS Regulation 19, footnotes 17 and 18 under table 7.17-3 of the 2000 HSC Code were also agreed for re-insertion. Footnotes 9 and 10 under table 7.17-3 were also inserted. The MSC 85, in conjunction with the decision made to SOLAS Regulation II-2/19 above, agreed not to apply the requirements to dangerous goods in excepted quantities pending entry into force of the relevant amendments (1 January 2011). Implication: Nominal, as this is primarily solving the inconsistencies between texts. Application: New crafts (constructed on or after 1 January 2011) and not later than the date of the first renewal survey on or after 1 January 2011 for existing crafts (crafts constructed on or after 1 July 2002). Note: MSC 85 confirmed that the provisions of paragraph 7.17 do not apply to dangerous goods in "excepted quantities" pending entry into force of the relevant amendments to Paragraph 7.17 (1 January 2011). (Refer to chapter 3.5 of the IMDG Code)
159 1 January 2011 Adopted by Resolution MSC.282(86) Class News **Nos. 33/2009** and **21/2015**	**SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS** Background: ECDIS (Electronic Chart Display and Information System) is shipborne navigational equipment, which is regarded as an equivalent to paper charts as per the SOLAS regulation V/27 and the regulation V/19.2.1.4, thus its carriage was not mandatory. By the amendment adopted at MSC 86, ECDIS became mandatory for new ships in 2012 (passenger ships and oil tankers) or 2013/2014 (other ships). Existing ships are required to retrofit the system. Summary: In paragraph 2.1, the existing subparagraph .4 is replaced by the following: ".4 nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage. An electronic chart display and information system (ECDIS) is also accepted as meeting the chart carriage requirements of this subparagraph. Ships to which paragraph 2.10 applies shall comply with the carriage requirements for ECDIS detailed therein;" After the existing paragraph 2.9, the new paragraphs 2.10 and 2.11 are added. Paragraph 2.10 provides application details and paragraph 2.11 states that "administrations may exempt ships from the application of the requirements of paragraph 2.10 when such ships will be taken permanently out of service within two years after the implementation date specified in subparagraphs .5 to .9 of paragraph 2.10."

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

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

Flag Administrations and their ROs: Relevant survey guidelines should be prepared, which should include appropriate back up arrangements and the location of ECDIS in case of retrofitting.
ISM auditors are to be made aware of the new requirements and the need for companies to introduce the corresponding training and familiarisation.

Application: To ships engaged on international voyages only as per the below table:

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

	*The first survey means the first annual survey, the first periodical survey or the first renewal survey, whichever is due first after the date specified. For a passenger ship, this is the first renewal survey for Passenger Ship Safety Certificate; for a cargo ship (non-passenger ship), this is either the Cargo Ship Safety Equipment Survey or, for ships with a Cargo Ship Safety Certificate, the Cargo Ship Safety Survey. For both passenger ships and cargo ships which are under construction, if the keel is laid before, but the ship is delivered after, the date specified in the relevant regulation, the first survey is the initial survey.
209 1 January 2012 Adopted by 2010 Manila Conference Class News **Nos. 31/2013** and **15/2014**	**2010 STCW Convention and STCW Code** Background: A comprehensive revision to the STCW Convention was concluded in 2010. Summary: Major changes are: – Updated standards of competence required, particularly in light of emerging technologies; – Detailed requirements on hours of work and rest, prevention of drug and alcohol abuse, and medical fitness standards for seafarer;. – Improved measures to prevent fraudulent practices associated with certificates of competency and strengthen the evaluation process (monitoring of Parties' compliance with the Convention); – New certification requirements for able seafarers; – New requirements relating to training in modern technology such as electronic charts and information systems (ECDIS); – New requirements for marine environment awareness training and training in leadership and teamwork; – New training and certification requirements for electro-technical officers; – Updating of competence requirements for personnel serving on board all types of tankers, including new requirements for personnel serving on liquefied gas tankers; – New requirements for security training, as well as provisions to ensure that seafarers are properly trained to cope if their ship comes under attack by pirates; – Introduction of modern training methodology including distance learning and web-based learning; – New training guidance for personnel serving on board ships operating in polar waters; and – New training guidance for personnel operating Dynamic Positioning Systems. Implication: Shipowners and Ship Managers are to note: Implication of the change made to the rest periods may affect manning level. During the transitional periods, Shipowners must ensure that seafarers will have new certificates meeting the new standard. Application: The new requirements will apply to all vessels (existing and new, of all the ship types). While the requirements entered into force on 1 January 2012, there is a 5 year transitional period granted for taking full effect (until 1 January 2017).

167 1 January 2013 **Adopted by** Resolution MSC.291(87) Class News **No. 24/2012** Lloyd's Register Guidance Note - Corrosion protection of crude oil cargo tanks – New IMO regulations	**SOLAS 1974 Regulation II-1/3-11 - Corrosion protection of cargo oil tank of crude oil tankers** Background: Following accidents resulting from the structural failure of tankers, corrosion protection measures for cargo oil tankers were developed. Summary: This regulation makes the performance standard mandatory. The following are the key points of the SOLAS regulation: – It sets up entry into force date by building contract, keel lay date and delivery date (in the same manner current SOLAS regulation II-1/3-2 defines); – It refers to the mandatory coating standard, which is to be adopted simultaneously; – It accepts the alternative measures i.e., use of the corrosion resistant steel, subject to compliance with the mandatory standard that will be developed by the IMO; – The requirements do not apply to combination carriers and chemical tankers; and – For the definition of a "crude oil tanker", references are made to items 1.11.1 and 1.11.4 of the Supplement to the International Oil Pollution Prevention Certificate (Form B). Implication: Shipowner and Shipbuilders: The coating standard will affect the fabrication process of crude oil tankers and to some extent, design itself. Shipbuilders would be required to have a qualified paint inspector for the job. Flag Administrations and their ROs: To supervise the appropriate implementation of the requirements. . Application: To new crude oil tankers of 5,000 dwt or above engaged on international voyages from the following date: Contract date: 1 January, 2013; or keel laid date (in the absence of a building contract): 1 July, 2013; or delivery date: 1 January, 2016. In conjunction with the amendment to SOLAS, the following instruments were adopted Resolution MSC.288(87) - Performance standard for protective coatings for cargo oil tanks of crude oil tankers Resolution MSC.289(87) - Performance standard for alternative means of corrosion protection for cargo oil tanks of crude oil tankers MSC.1/Circ. 1381 on Updating footnotes of Performance Standards for Protective Coating (PSPC) for Cargo Oil Tanks of Crude Oil Tankers (Resolution MSC.288 (87)) and Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in all Types of Ships and Double-Side Skin Spaces of Bulk Carriers (MSC.215 (82)) MSC.1/Circ. 1399 on Guidelines on the procedures for in-service maintenance and repair of coating systems for cargo oil tanks of crude oil tankers MSC.1/Circ. 1421 on Guidelines on exemptions for crude oil tankers solely engaged in the carriage of cargoes and cargo handling operations not causing corrosion MSC.1/Circ.1478 on Unified Interpretation on the application of the performance standard for alternative means of corrosion protection for cargo oil tanks of crude oil tankers (Resolution MSC.289(87)) MSC.1/Circ.1479 on Unified Interpretation on the application of the performance standard for protective coatings for cargo oil tanks of crude oil

	tankers (Resolution MSC.288(87))
182 1 January 2013, Entry into force 1 July 2014, Entry into effect **Adopted by** Resolution MSC.317(89) Class News **No. 09/2011** Lloyd's Register Guidance Note - **Lifeboat release and retrieval systems**	**Amendments to the SOLAS Regulation III/1 – on-load release mechanisms and to the LSA Code paragraph 4.4.7.6 – on-load release hooks** Background: In order to minimise accidents associated with on-load release mechanisms the IMO developed amendments to SOLAS regulation III/1.5, the LSA Code chapter IV, and "Recommendations on the test procedure for Life Saving Appliances (MSC.81(70))" with a view to applying the requirements to both new and existing ships on-load release and retrieval systems. The circular MSC.1/Circ.1392 was also developed to evaluate compliance of existing on-load release and retrieval systems. Summary: As a result of many years of discussion the Guidelines for evaluation and replacement of lifeboat release and retrieval systems (MSC.1/Circ.1392) were finalised by DE 55. These guidelines consist of a multi stage evaluation: initial design assessment of each release mechanism type by the manufacturer; a design review by the Flag Administration and/or Recognised Organisation against relevant parts of the LSA Code, followed by a performance test; and reporting of the results of the evaluation to the IMO. Additionally, an onboard verification will be carried out (one-time follow up overhaul examination) for every operating mechanism on every ship. Implication: Shipowners and Ship Managers: Existing ships: Identify whether installed lifeboats' on-load release mechanisms have been evaluated and identified as being in compliance with the LSA Code Chapter IV, as amended by MSC.320(89). If not, replacement of release mechanisms will be required. Further, if the manufacturer of the hooks on board is no longer in existence, there may be a possibility that such hooks will be required to be replaced, as design appraisal, etc. may not be possible. New ships: On-load release mechanisms on lifeboats installed on/after the entry into force date of the amendments to the LSA Code will be required to comply with the new requirements in full. The application scheme is crucial in this regard – see the "Application" section below. Manufacturers: Ensure that past and existing lifeboats' on-load release mechanism designs have been evaluated as being a "safe design/have a good safety record". If not, then clients will be required to replace mechanisms. New mechanisms will be required to comply with the new requirements of the LSA Code in full and be suitably type approved. Manufactures will be required to undergo a re-approval process for hooks that have previously been approved. There may be additional costs for this process. Flag Administrations and their ROs : Ensure that existing lifeboats' on-load release mechanism are evaluated to verify compliance with the LSA Code as amended by MSC.320(89) and share this information with other Administrations. Application: To lifeboat on-load release hooks as required by SOLAS chapter III (on passenger ships regardless of tonnage engaged on international voyages and cargo ships (non-passenger ships) of 500 gt or over engaged on international voyages). It is tentatively agreed that implementation (after the entry into force of the requirement) will be 1 July 2014 for new ships, and first scheduled dry docking for existing ships. However, it should be noted that design appraisal of the on-load release mechanism and other necessary verification work should be completed well before that date. Refer

to MSC.1/Circ.1393.

Associated requirements adopted/approved at MSC 89:
Resolution MSC.320(89) – Adoption of amendments to the international life-saving appliances (LSA) code
MSC.1/Circ.1392 on Guidelines for evaluation and replacement of lifeboat release and retrieval systems
MSC.1/Circ.1393 on Early application of new SOLAS regulation III/1.5
Resolution MSC.321(89) – Adoption of amendments to the revised recommendation on testing of life-saving appliances (Resolution MSC.81(70)), as amended

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

Class News **Nos.15/2011, 33/2012** and **46/2014**

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

Background: The EEDI is a design index for a ship's energy efficiency. It was originally developed as a non-mandatory instrument to help control CO_2 emissions from shipping but now the EEDI is mandatory under Annex VI of the MARPOL Convention which was concluded at MEPC 62 (July 2011). Further amendment was introduced by resolution MEPC.251(66)
Summary: The EEDI reflects the amount of CO_2 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 CO_2 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

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-Dec-24	Phase 3 1-Jan-25 onwards
Bulk carrier	20,000 and above	0	10	20	30
	10,000 – 20,000	n/a	0-10*	0-20*	0-30*
Gas tanker	10,000 and above	0	10	20	30
	2,000 – 10,000	n/a	0-10*	0-20*	0-30*
Tanker	20,000 and above	0	10	20	30
	4,000 – 20,000	n/a	0-10*	0-20*	0-30*
Container ship	15,000 and above	0	10	20	30
	10,000 – 15,000	n/a	0-10*	0-20*	0-30*

General Cargo ship	15,000 and above	0	10	15	30
	3,000 – 15,000	n/a	0-10*	0-15*	0-30*
Refrigerated cargo carrier	5,000 and above	0	10	15	30
	3,000 – 5,000	n/a	0-10*	0-15*	0-30*
Combination carrier	20,000 and above	0	10	20	30
	4,000 – 20,000	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 – 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 – 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 commences 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 light ship weight – Innovative solutions (air bubble – friction reduction) – Optimize 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 the ship types listed above which are greater than 400 gt. The following instruments were also developed in relation to this amendment **Resolution MEPC.262(68) & MEPC.1/Circ.850/Rev.1 on Revision to the 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse** **Resolution MEPC.231(65) – 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI)** **Resolution MEPC.233(65) – 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion** **Resolution MEPC.261(68) & MEPC.1/Circ.855 on Amendments to 2014 Guidelines on survey and certification of the EEDI** **Resolution MEPC.263(68) - 2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships** **Resolution MEPC.254(67) - 2014 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)**
219 1 July 2014 **Adopted by** Resolution MSC.338(91) Class News **No. 18/2014**	**Amendments to SOLAS Regulation II-2/10.10.1 - Audible alarm device to notify low air pressure in self-contained breathing apparatus cylinders** **Background:** FP 55 agreed that self-contained breathing apparatuses shall be fitted with an audible alarm and a visual or other device which would alert the user before the volume of the air in the cylinder has been reduced to no less than 200 litres. This is the only amendment to the FSS Code (Chapter 3.2.1.2) agreed at FP 55 that will be applied retrospectively. **Summary:** While considering the amendments to Chapter 3.2.1.2 of FSS Code, MSC 91 also recognised the need for amending SOLAS regulation II-2/10.10.1. Accordingly, MSC 91 adopted amendments to regulation II-2/10.10.1 and associated amendments to Chapter 3.2.1.2 of FSS Code (please see details below), to clarify that self-contained compressed air breathing apparatuses of fire-fighters' outfits shall be fitted with an audible alarm and a visual or other device which will alert the user before the volume of the air in the cylinder has been reduced to no less than 200 litres. The Committee also noted that the ships built prior to 1 July 2002 were only required to be fitted with smoke helmets/smoke masks (without portable tanks) as part of fireman's outfits and therefore a five year period of grace was allowed for such ships to be provided with the new equipment, to

	comply with the new requirements. Implication: The new requirement will pose stricter approval arrangements for the breathing apparatus equipment. This may result in a small cost increase. Training and operational procedures should be updated. In addition, training may be required for crews who have not used this type of breathing apparatus equipment before. Application: The new requirement will apply to new ships constructed on or after 1 July 2014. Existing ships will be required to comply accordingly by 1 July 2019. Relevant instruments Resolution MSC.339(91)) - Amendment to the FSS Code Chapter 3 - Personnel Protection (Breathing apparatus)
208 1 July 2014 Adopted by Resolution MSC.338(91) Class News **No. 25/2014**	**New SOLAS Regulation II-1/3-12 - Protection against noise and amendment to SOLAS Regulation II-1/36 (to delete the regulation in view of the new regulation II-1/3-12)** Background: In order to make the Code on Noise Levels on board Ships mandatory, amendment to SOLAS is required. Summary: MSC 91 adopted the new regulation II-1/3-12, which requires applicable ships to be constructed in accordance with the new Code on Noise Levels on board Ships. Application: Regulation II-1/3-12 and the Code on Noise Levels on board Ships will be applicable to new ships of 1,600 gt or above, based upon the following criteria: – for which the building contract is placed on or after 1 July 2014; or – in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2015; or – the delivery of which is on or after 1 July 2018 Ships satisfying the following criteria should comply with the requirements of existing regulation II-1/36, the text of which has been included in the new regulation II-1/3-12; consequentially II-1/36 will expire on 1 July 2014, when II-1/3-12 will enter into force. – Ships delivered before 1 July 2018 and: – contracted for construction before 1 July 2014 and constructed on or after 1 January 2009 but before 1 January 2015; or – in the absence of a building contract, the keels which were laid or at a similar stage of construction on or after 1 January 2009 but before 1 January 2015. The Code is not applicable to ship types mentioned in paragraph 1.3.4 of the Code, as shown below. – dynamically supported craft; – high-speed craft;

	– fishing vessels; – pipe-laying barges; – crane barges; – mobile offshore drilling units; – pleasure yachts not engaged in trade; – ships of war and troopships; – ships not propelled by mechanical means; – pile driving vessels; and – dredgers. Relevant instruments Resolution MSC.337(91) - Code on noise levels on board ships
226 1 July 2014 Adopted by Resolution MSC.338(91) Class News **No. 18/2014**	**New SOLAS Regulation II-2/10.4 - Communication equipment for fire-fighting teams** Background: This proposal came in the aftermath of an incident caused by fire in the engine room on board the Swedish tanker "Ek-River" while in dry-dock. Based on this, upgrades of radio-communication equipment for fire fighters including additional equipment such as smoke diver emergency alarm, PASS alarm and location lights were proposed. Summary: MSC 91 adopted amendments to SOLAS Regulation II-2/10 to add a new paragraph 10.4, to clarify that a minimum of two two-way portable radiotelephone apparatuses for each fire party for fire-fighter's communication shall be carried on board. These radio devices shall be of an explosion proof type or intrinsically safe. Implication: The new SOLAS Regulation II-2/10.4 do not specify a performance standard or criteria to verify whether portable radio apparatuses are fit for purpose, but only states that regardless of the ship type, these devices shall be of an explosion proof type or intrinsically safe. This could cause some problems as the specification requirements/acceptance criteria for individual Flag states/approval authorities can be different and therefore clients are advised to consult with the relevant authorities in advance to find out their requirements. Application: Applicable to all new SOLAS ships constructed on or after 1 July 2014. Existing ships should comply with this requirement not later than the first survey after 1 July 2018.
236 1 July 2014	**New SOLAS Regulation III/17-1 - Recovery of persons from the water** Background: The IMO had agreed (May 2006) that SOLAS should be amended to require all ships to have a means on board to recover persons from the sea who were unconscious or otherwise unable to help themselves. It had also been agreed that performance standards for these systems were needed before the amendment should enter into force. Following lengthy discussions it has been agreed that guidelines rather than a performance

Adopted by Resolution MSC.338(91) Class News **No. 34/2013**	standard should be developed. As the new SOLAS requirement is only applicable to ships on international voyages, this resolution will encourage flag Administrations to consider the extent to which the SOLAS provisions should apply to ships which are not covered by SOLAS chapter III. **Summary:** New regulation III/17-1 requiring all ships to have ship-specific plans and procedures for the recovery of persons from the water was adopted. The plans and procedures shall identify the equipment intended to be used for recovery purposes and measures to be taken to minimize the risk to shipboard personnel involved in recovery operations. **Implication:** All ships will need to ensure that they have plans and procedures on board showing how the ship can recover persons from the sea. **Application:** To new SOLAS ships constructed on or after 1 July 2014. To existing SOLAS ships by the first intermediate or first renewal survey after 1 July 2014. Relevant instruments **Resolution MSC.346(91) - Application of SOLAS Regulation III/17-1** to ships to which SOLAS Chapter III does not apply **MSC.1/Circular 1447 on Guidelines for the development of plans and procedures for recovery of persons from water**

B – Adopted IMO requirements entering into force in the near future

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

1 January 2016

260 1 January 2016 Adopted by Resolution MSC.365(93)	**Amendments to SOLAS Regulation II-1/29 concerning requirements for steering gear trials** Background: Some ships, particularly container ships, are not able to reach their operating draught using ballast water only. This causes problems when the vessel is on sea trials as the SOLAS regulations for testing steering gear require the vessel to be at the summer load draught. An IACS Unified Interpretation was recently adopted as an IMO Unified Interpretation (MSC.1/Circ.1425) as an interim measure. These amendments to SOLAS are designed to resolve the problem. Summary: Three different possible methods of demonstrating compliance have been agreed: – Ship at even keel and the rudder fully submerged with the speed of the ship corresponding to the number of maximum continuous revolutions of the main engine and maximum design pitch; – If full rudder immersion is not possible an appropriate speed should be used, calculated on the basis of the actual rudder submersion. The chosen speed should result in a force and torque on the steering gear which is at least as great as if the full service draught was being used; and – A prediction made of the actual service condition force and torque on the steering gear, which is then extrapolated to the full load condition. Implication: Ship Designers and Builders should be aware of the proposed changes and consider ways by which extrapolation can be done if it is needed. Flag Administrations and their ROs should note the conclusions. The method to extrapolate from the sea trial draught to the deepest seagoing draught will need to be agreed. Application: SOLAS ships where it is impracticable to demonstrate compliance with the requirements for testing steering gear at the deepest draught whilst on sea trials. The methods will be available to any ships (new or existing) which test steering gear on sea-trials from 1 January 2016.
252 1 January	**Amendments to SOLAS Regulations II-2/3 and II-2/9.7 concerning fire resistance of ventilation ducts for new ships** Background: MSC 93 adopted the amendments to SOLAS regulation II-2/3 to include definitions of various types of fire dampers and smoke dampers based on methods used for their activation as well as a comprehensive revision of the regulation II-2/9.7.

2016 Adopted by Resolution MSC.365 (93)	**Summary:** The following is a summary of changes that will impact the ventilation arrangements for ships: – Ventilation ducts shall be provided with hatches for inspection and cleaning; – Ventilation openings or air balance ducts between two enclosed spaces are now explicitly prohibited, except as permitted by paragraphs II-2/9.4.1.2.1 and II-2/9.4.2.3 (similar requirements was previously included in the IACS UI SC119); – Splitting of ducts having cross-sectional area exceeding 0.075 m^2 into smaller ducts at the penetration of an "A" class division and then recombination of them into the original duct once through the division to avoid installing the damper required by this provision is now explicitly prohibited; – A length of 5m of A-60 insulation beyond dampers is now required both in the case of machinery spaces ventilation running through accommodation spaces, service spaces and control stations, and vice versa; – Exhaust ducts from galley ranges on cargo ships and passenger ships carrying not more than 36 passengers are now required to be fitted with an automatically and remotely operated fire damper located in the lower end of the duct at the junction between the duct and the galley range hood and, in addition, a remotely operated fire damper in the upper end of the duct close to the outlet of the duct; and – In exhaust ducts from galley ranges on passenger ships carrying more than 36 passengers, remote-control arrangements for shutting off the exhaust fans and supply fans, for operating the fire dampers and for operating the fire-extinguishing system, shall be placed in a position outside the galley close to the entrance to the galley. Implication **Shipowners / Shipbuilders:** Both should consider the costs involved in improving the design and construction of ventilation ducts to comply with the new requirements. The costs for providing additional inspection hatches, fire dampers and extended length of insulation along the ventilation ducts should also be considered. Another cost, at the design stage, will result from the requirements concerning the location of ventilation openings and the arrangement of ducts, the requirements for galley exhaust ducts, in particular the provision for additional dampers, exhaust and supply fans and location of their controls. In addition, the galley exhaust ducts are required to be fitted with a fire protection system complying with 'ISO 15371:2009' and therefore builders and owners should familiarise with the requirements of the above standard while designing and installing such systems. **Fire protection system manufacturers:** Fire protection system manufacturers should consider performing fire testing in accordance with 'ISO 15371:2009' and seeking fire type approval by Recognised Organisations. **Flag Administrations and their ROs:** Surveyors involved in the design appraisal and plan approval, as well as on site surveyors will need to be aware of the new requirements. **Application:** The new requirements will apply to new cargo ships and passenger ships constructed (keel laid) on or after 1 January 2016
239 1 January	**Amendments to SOLAS Regulations II-2/4.5.5 and II-2/16.3.3 , FSS Code Chapter 15 as well as the IBC Code for requiring inerting for tankers of less than 20,000 dwt but more than 8,000 dwt** **Background:** Tankers of less than 20,000 dwt are not required to be fitted with a fixed Inert Gas System (IGS) but following several casualty reports on the explosion of tankers, IMO has addressed this issue and MSC 93 adopted amendments to SOLAS regulations II-2/4.5.5 and II-2/16 and FSS

2016 **Adopted by** Resolutions MSC.365(93), MSC.367(93) & MSC.369 (93) Class News **No. 22/2015**	Code Chapter 15. **Summary:** Fixed Inert Gas Systems are to be used on new oil and chemical tankers (8,000 to 20,000 dwt), constructed (keel laid) on or after 1 January 2016. The SOLAS regulation clarifies the operational requirements of the inert gas systems and sequence of applying the inerting medium in to the cargo tanks. The existing requirements in Chapter 15 of FSS code and Resolution A.567(14) - Regulation for Inert Gas Systems on chemical tankers - have been merged to form a new Chapter 15 of FSS Code. The following points are to be noted: – Oil and chemical tankers of 8,000 dwt and above that are constructed (keel laid) on or after 1 January 2016 shall be fitted with fixed inert gas systems complying with the proposed new Chapter 15 of the Fire Safety Systems Code (FSS) Code. The SOLAS amendments also allow for equivalent systems to be used in lieu of fixed inert gas systems installations on tankers between 8,000 dwt and 20,000 dwt; – Existing oil and chemical tankers of 20,000 dwt and above shall be fitted with fixed inert gas systems complying with the requirements in the Resolution MSC.98(73); – Under operational requirements, a new regulation II-2/16.3.3 has been agreed which clarifies that for chemical tankers only nitrogen is acceptable as the medium for inerting in loaded tanks, however for cargo free tanks, any suitable inerting medium may be used; and – The new requirements shall not apply to new gas carriers built under the IGC Code. It is also important to note that FP 56 has not agreed to any modifications to the existing text of the regulation concerning existing ships. **Implication:** **Shipowners/Shipbuilders:** The requirement will impact the design and operation of small oil and chemical tankers. Owners and builders should take into account the developments of these requirements when negotiating new building contracts, since the application date is based on the keel lay date. **Shipowners and Ship Managers:** Significant impact due to the costs involved for providing suitable type of inert gas systems (IGS) on board, depending on the type of the vessel. In addition, the new requirements could possibly result in extended port-stay periods. **Application:** Applicable to new oil and chemical tankers, carrying low flash point cargoes (not exceeding 60°C as determined in accordance with SOLAS II-2/1.6), constructed (keel laid) on or after 1 January 2016. Relevant instruments FSS Code Chapter 15 IBC Code
253 1 January 2016	**Amendments to SOLAS Regulation II-2/10 concerning fire protection requirements for on-deck cargo areas of new ships designed to carry containers and associated MSC circular on Guidelines for the design, performance, testing and approval of mobile water monitors** **Background:** The IMO responded to concerns raised by the industry regarding fire protection provisions for the carriage of large quantities of cargoes on deck inside containers and noted a need for the increased fire-fighting capability for container ships and ships carrying containers on or above the

Adopted by Resolution MSC.365(93) Class News **No. 02/2015**	weather deck. **Summary:** MSC 93 adopted the amendments to SOLAS II-2/10 along with the associated MSC circular. The following points were agreed: – All new ships (constructed on or after 1 January 2016) that are designed to carry containers on or above the weather deck shall be fitted with at least one water mist lance, in addition to all other fire protection arrangements that should be provided on board as per existing regulations; – All new ships (constructed on or after 1 January 2016) that are designed to carry five or more tiers of containers on or above the weather deck shall also be provided with mobile water monitors, in addition to the water mist lance mentioned above and all other fire protection arrangements that should be provided on board as per existing regulations. Ships with breadth up to 30 m should be provided with at least two mobile water monitors and those ships with breadth exceeding 30 m or more should be provided with at least four mobile water monitors; and – MSC.1/Circ.1432 (Revised guidelines for the maintenance and inspection of fire protection systems and appliances) should be amended to include mobile water monitors in its scope. **Implication:** **Shipbuilders/Shipowners/Manufacturers:** The on-deck fire protection arrangements for all new ships carrying containers on or above the weather deck will need significant improvement. Additional requirements that are applicable for larger containerships, capable of carrying five or more tiers of containers on or above the weather deck, should also be taken into consideration. Owners should also note that crew training is essential for the efficient use of the new firefighting equipment. **Application:** In general, the requirements will apply to new ships only (Please also see the 'Summary' section above for more specific information on the application). However, in the future, these requirements may also be extended to existing ships, when sufficient experience is gained with the use of this equipment. Relevant Instruments **MSC.1/Circ.1472 on Guidelines for the design, performance, testing and approval of mobile water monitors used for the protection of on deck cargo areas of ships designed and constructed to carry five or more tiers of containers on or above the weather deck**
254 1 January 2016 Adopted by Resolution MSC.365(93)	**Amendments to SOLAS Regulation II-2/13.4 concerning additional means of escape from machinery spaces** **Background:** Following a serious engine room fire on a cargo ship the IMO decided to improve the requirements for means of escape in machinery spaces on cargo ships and bring them in line with the regulation for passenger ships, which requires two means of escape from a machinery control room. **Summary:** The amendments require that two means of escape are provided from the main workshop within a machinery space with at least one of these escape routes providing a continuous fire shelter to a safe position outside the machinery space. In addition, improved access to the normal exit and emergency escape routes, with the provision that all inclined ladders or stairways with open treads, not located within a protected enclosure, are to be of steel and protected against heat and flame by steel shields attached to their undersides. **Implication:**

	Shipowners/Shipbuilders: There will be significant cost implications since the new amendments would require design changes to the escape routes of machinery spaces of cargo ships and smaller passenger ships, to provide the same level of protection as the passenger ships. **Application:** The requirements will apply to new cargo and passenger ships only.
218 1 January 2016 **Adopted by** Resolution MSC.365(93) Class News **No. 23/2015**	**Amendments to SOLAS Regulations II-2/1, II-2/3, and II-2/20-1 concerning protection of vehicle, special category and ro-ro spaces (and application)** **Background:** As demand increases for hydrogen fuel cell vehicles and compressed natural gas vehicles, IMO recognised the need to review the requirements for ships carrying such vehicles. The current SOLAS regulations have been developed based on the carriage of conventional vehicles fuelled by gasoline. **Summary:** In order to clarify the scope of application of the new requirements, a new definition for 'vehicle carrier' was developed for regulation II-2/3 as follows: "Vehicle carrier means a cargo ship with multi deck ro-ro spaces designed for the carriage of empty cars and trucks". New regulation II-2/20-1 contains requirements that are applicable to new and existing ships. All new requirements which could impact the ship structure, will only apply to new ships. These include the requirement that all electrical equipment and wiring used in spaces intended to carry such vehicles, including fans and other electrical equipment used in the ventilation ducts shall be of a certified safe type complying with IEC 60079 standard (Electrical Apparatus for Explosive Gas Atmospheres) and also to prohibit the use of any equipment that may constitute a fire/explosion risk in such spaces. However, as explained in paragraphs 2.2 and 5 of the regulation II-2/20-1, existing ships should comply with non-structure related requirements, such as at least two certified safe type portable gas detectors complying with IEC 60079 standard (Electrical Apparatus for Explosive Gas Atmospheres) which shall be provided for the detection of gas fuel emissions from the tanks of such vehicles. **Implication:** Significant impact since the amendments will affect the ship construction, including provision of installation of fire detection systems, type of ventilation and its location and provision of approved safe type electrical equipment. **Application:** These requirements will generally apply to "Vehicle Carriers", which carry HFCVs (Hydrogen Fuel Cell Vehicles) and CNGVs (Compressed natural Gas Vehicles). Please also see the 'Summary' section above for the different requirements that will be applicable to new and existing ships. Relevant instruments MSC.1/Circ.1471 on Recommendation on safety measures for existing vehicle carriers carrying motor vehicles with compressed hydrogen or natural gas in their tanks for their own propulsion as cargo.

259 1 January 2016 Adopted by Resolutions MSC.368(93) & MSC.378(93)	**Amendments to the LSA Code concerning reference test devices (RTDs) for lifejackets** Background: The LSA Code requirements concerning the testing of lifejackets using reference test devices (RTDs) have been used for some time now. Experience with them has identified that some changes to the requirements would be beneficial. Summary: The changes introduce some variation from the results using the RTDs. Further clarification is provided on the testing required for infants' and children's lifejackets and the need for infants and children to participate in jump and drop tests. Implication: Manufacturers will need to prepare for the changes. The intention is to make the manufacture and use of RTDs more consistent. Flag Administrations and their ROs will need to prepare for the changes in testing methods. Application: The new requirements will apply to the manufacture and testing of new SOLAS lifejackets. Relevant instruments Resolution MSC.81(70) - Amendments to the Revised Recommendation on testing of life-saving appliances MSC.1/Circ.1470 on Guidelines for validating the construction of a completed adult reference test device (RTD)
261 1 January 2016 Adopted by Resolution MSC.371(93)	**Amendments to the 2011 ESP Code** Background: The 2011 ESP Code covers the survey requirements for oil tankers and bulk carriers. To a certain extent it follows the IACS requirements, however the IACS requirements are frequently updated and it is necessary to track the amendments which IACS makes to ensure consistency with the 2011 ESP Code. Summary: These updates to the 2011 ESP Code bring it into line with the following revisions of the IACS UR Z10 series of unified requirements on surveys of oil tankers and bulk carriers: UR Z10.1 Rev.20, UR Z10.2 Rev.30, UR Z10.4 Rev.11 and UR Z10.5 Rev.13. Some changes have been made to the wording as contained in the IACS documents to ensure consistency with SOLAS I/10. Implication: Shipowners and Ship Managers should find that the IACS requirements and the IMO requirements are the same. This will make the planning for surveys easier. Ship Designers and Builders should consider the access to structure for survey and adjust designs where possible to make this easier. Flag Administrations and their ROs will need to ensure that any procedures relating to the survey of oil tankers and bulk carriers reflect the latest requirements. Application: The new survey requirements of the 2011 ESP Code are applicable to oil tankers and bulk carriers (including ore carriers and combination carriers) of 500 gt and above and will be enforced at the first survey after the entry into force date.

262 1 January 2016 Adopted by Resolution MSC.374(93)	**Amendments to the STCW Code related to Minimum in-service Eyesight Standards for Seafarers** Background: MSC 93 approved amendments to the STCW Code on colour vision requirements along with the STCW.7/Circ.20 on Interim guidance on colour vision testing, in order to address practical implementation issues as required by the 2010 Manila Amendments. Summary: It was agreed that until reasonable alternatives for colour vision testing can be identified, the colour vision requirements detailed in table A-I/9 of the STCW Code should be amended to allow Administrations the ability to develop alternative standards that ensure that seafarers have adequate colour vision for the certificate being sought. The revised text will give flexibility allowing other equivalent methods recognized by the flag Administration. Implication: None as this simply endorses current practice. Application: To seafarers certification; applicable to all the vessels (existing and new, of all the ship types). Relevant instruments STCW.7/Circ.20 on Interim guidance on colour vision testing
189 1 January 2016 *(see Application for actual enforcement date)* Adopted by Resolution MSC.370(93)	**Comprehensive revision of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code)** Background : The IMO identified the need to review all current areas of the IGC Code to fully revise and update the Code and, where necessary, to identify other instruments that may be affected and require consequential amendments, taking into account the latest technologies, operational practices and the increasing size of the newest ships. Lloyd's Register has been intimately involved in the SIGTTO project to develop a revised IGC Code. Significant technical input has been given by Lloyd's Register's specialists as members of the working groups. Summary: The revised IGC Code has been prepared as an amendment to the existing IGC code, rather than a new code. The major changes to the existing code include: Ship Design and Arrangement The definition and delineation of gas dangerous spaces has been changed to reflect IEC practice. The cross reference to IEC requirements when determining hazardous areas will increase the workload of the shipyard's initial design section to understand these requirements. Changes to the separation of the cargo tank from the side shell Safety principles and functional requirements introduced into Chapter 4- Cargo Containment Introduction of new material grade FH Introduction of "limit state methodologies" for novel configuration of cargo containment design that cannot meet prescriptive requirements given in the revised IGC Code.

	Electrical systems Substantial revision of Chapter 10 – Electrical Systems, to reflect current IEC requirements Tank pressures and hull temperatures to be controlled also in the event of single faults in the electrical supply. Cargo Handling Cargo tank pressure relief valve - in the event of a failure or a cargo tank pressure relief valve a safe means of emergency isolation shall be allowed Means to monitor the quality of inert gas supplied to the insulation space Introduction of requirements for vapour oxidation which include boilers and gas combustion units Operation Requirements for a Cargo Operation Manual Method to assess the acceptability of increased filling limits Sequential lifting of relief valves in order to minimise the release of vapour. The number of Safety Equipment sets increased from two to three Cargo transfer – requirements for a pre-cargo operation meeting **Implication:** The new code will affect the design and construction of all new gas carriers contracted after entry into force of the revised code. In terms of impact for ship owners, the requirement for increased separation between the cargo tank and side shell will have an impact on new fully refrigerated LPG ships and very small LNG carriers **Application:** The Code will apply to new gas tankers constructed (keel laid) from 1 July 2016, although the revised code will enter into force on 1 January 2016. Relevant instruments **Resolution MSC.370(93), Appendix 5 - Standard for the use of limit state methodologies in the design of cargo containment systems of novel configuration** **Note** - this amendment includes requirements on the verification of the damage stability. Please refer to item 255 below.
242 1 January 2016 **Adopted by** Resolution A.1070(28)	**IMO Instruments Implementation Code (III Code)** **Background:** A new code is being developed, to make the current voluntary code that applies to flag Administrations mandatory. The objective of this code is to enhance global maritime safety and protection of the marine environment and assist States in the implementation of instruments of the IMO. **Summary:** The code covers various elements, and stipulates obligations of Flag, Coastal and Port States. **Implication:** No direct impact to the industry.

	Application: To flag Administrations. Relevant instruments While the code was being prepared as a new Assembly Resolution, relevant amendments to the international conventions have also been prepared to make the code mandatory via these conventions: – New chapter XIII of the SOLAS (Resolution MSC.366(93) – New Annex B to the Load Line Convention (Resolution MSC.375(93) – Amendments to MARPOL Annexes I, II, III, IV and V (they will enter into force on 1st January 2016) ---also adopted amendments to annex VI – Amendments to the STCW Convention chapter 1 - General provisions - new definitions and new regulation 16 (Resolution MSC.373(93) – Amendments to the STCW Code - Chapter I - reflecting changes made to the STCW convention (Resolution MSC.374(93)
255 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**	**Demonstration of compliance with damage stability requirements for tankers** **Amendments to MARPOL Annex I - Regulation 3 and 28 and Appendix II** **Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) - Part A, Section 2.2.1 & Certificate of fitness** **Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) - Section 2.2 & Certificate of fitness** **Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - Section 2.2.6, 2.2.7 & Certificate of fitness** **Background:** The SLF Sub-Committee agreed that it was necessary for tankers to be able to demonstrate compliance with the relevant damage stability requirements. The easiest way to do this is to fit a stability instrument which is capable of carrying out these calculations. MARPOL Annex I, the IBC Code and the IGC Code are amended to mandate the provision of such a stability instrument. **Summary:** Tankers will have to be fitted with a stability instrument capable of verifying compliance with the relevant intact and damage stability requirements. It will need to be approved by the flag Administration. The requirement may be waived where the trading pattern of the ship means that only a limited number of loading conditions are necessary. These will all have to be present in the approved stability manual. Provision is also made for accepting a remote system providing the data (for example an approved shore based calculation), for ships which are loaded within an approved range of loading conditions and for existing ships which have an approved set of limiting KG curves. Additionally, where an existing ship already has an approved stability instrument on board which is capable of carrying out all the stability calculations, and has been approved for these functions, this does not have to be replaced.

	Appropriate amendments are also being made to the Form of the IOPP certificate and supplements, Form B. Implication: Shipowners and Ship Managers should prepare ahead for the implementation of these requirements. Approval of stability instruments requires time and cannot be done at the last minute. All proposals permit the continued use of previously installed stability instruments which can do the calculations. Crew members will need to be trained in the use of the programs and be confident that they can demonstrate compliance to port state officers when requested. Ship Designers and Builders will need to be aware of the requirements and be prepared to supply an approved stability instrument to tankers being built. Manufacturers will need to ensure that their damage stability programs are approved for use. This approval process can take some time and it is strongly recommended that early application to the relevant authorities is made. Flag Administrations and their ROs will need to have sufficient staff trained in the approval of stability instruments to enable them to approve the stability computers. Flag Administrations will need to train port state control inspectors in the different possibilities for compliance. Application: These amendments are applicable to new and existing tankers (oil, chemical and gas). Existing oil and chemical tankers will have to fit a stability instrument by the first scheduled renewal survey of the ship on or after 1 January 2016 but not later than 1 January 2021. Existing gas tankers, certified under the IGC Code, will have to comply by the first renewal survey on or after 1 July 2016 but no later than 1 July 2021 (refer to above item 189). Existing pre-IGC Code gas tankers will have to comply by the first renewal survey on or after 1 January 2016 but no later than 1 January 2021. Relevant instruments The following non-mandatory instruments have also been amended: – Amendments to the Code for Existing Ships Carrying Liquefied Gases in Bulk (EGC Code) - Section 2.3 & Certificate of fitness. – Amendments to the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (GC Code) - Section 2.2 & Certificate of fitness (Resolution MSC.377(93) – MSC.1/Circ. 1461 on Guidelines for verification of damage stability requirements for tankers (The circular will be effective from the date of the entry into force of the mandatory instruments)
270 1 January 2016 Adopted by Resolution MSC.372(93)	**IMDG Code (37-14) Amendments** Background: The IMDG Code is reviewed in a 2 year cycle. Summary: MSC 93 adopted the latest set of amendments which will be effective on a voluntary basis from 1 January 2015 and mandatory from 1 January 2016. Some of the amended items are: – Amendments to Column 16 – Stowage and segregation. The column has been divided providing more detailed information on the requirements under Chapter 7 of the IMDG Code; – New stowage code list has been developed; – Special provisions for the carriage of vehicles UN 3166 and UN3171 (SP 961 and SP 962);

	– Water-reactive materials issues; – Revision of DSC/Circ.12 (Guidance on the continued use of existing IMO type portable tanks and road tank vehicles for the transport of dangerous goods); – Marine pollutants; and – Counterfeit refrigerant. Implication: Shipowners and Ship Operators of ships carrying dangerous goods must be familiar with the developments on the IMDG Code amendments 37-14 with emphasis on the new emergency schedule for water reactive materials and the new amended provisions SP 961 and SP 962 for the carriage of vehicles. It is important to make a clear distinction that these amendments will only be coming into force on 1 January 2016. The focus at present should be in amendments 36-12 which are mandatory from 1 January 2014. Applicability: Applicable to new ships and existing ships – all ships intending to carry IMDG cargoes after the entry into force date.
150-1 (Repeated) 1 January 2016	**Revised MARPOL Annex VI** NOx Tier III control. See item 150-1 in part A.
195 1 January 2016 *See 'Application' for actual enforcement dates* Adopted by Resolution MEPC.200(62)	**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 within the Special Area for discharging sewage from passenger ships that are contracted for construction or in the absence of a building contract, the commencing construction (keel laying) 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. Performance standards for new treatment systems to meet these new requirements have been developed. MEPC 64 adopted Resolution MEPC.227(64) - 2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants.

	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 shipowners 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 onboard 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 ROs: 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. The application dates were agreed at MEPC 68, as follows: – For new passenger ships will be from 1 June 2019; and – For existing passenger ships will be from 1 June 2021. Relevant instruments Resolution MEPC.218(63) - Development of technical onboard equipment in relation to the designation of the Baltic Sea as a Special Sea under MARPOL Annex IV Resolution MEPC.227(64) - 2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants

1 March 2016

283 1 March 2016 Adopted by Resolution MEPC.256(67) Class News **No. 24/2015**	**Amendment to MARPOL Annex I, Regulation 43 - Use and carriage of Heavy Grade Oil (HGOs) in the Antarctic area** Background: While use (as fuel) and carriage (as cargo) of HGO was prohibited in the Antarctic area by MARPOL Annex I regulation 43, there was a case where a ship carried HGO as ballast. Summary: An amendment to the regulation has been made to clarify that carriage, even as ballast, is prohibited (MEPC 67). Implication: This is a rational interpretation of the regulation, thus no substantial impact is envisaged. Application: Ships operating in the Antarctic area from the date of entry into force.

271 March 2016 Adopted by Resolution MEPC.257(67)	**Amendments to MARPOL Annex III - amendments to the appendix on criteria for the identification of harmful substances in packaged form** Background: At the joint meeting of RID Committee on Transport of Dangerous Goods in Geneva it was decided to exclude class 7 radioactive materials as defined by the IMDG Code from Environmental Hazard Substance (EHS) provisions as it is difficult to differentiate between the environmental effects resulting from the chemical hazards posed by such substances and those related to radioactivity. Summary: The first sentence of the appendix to Annex III of MARPOL was revised. The replacement text excludes radioactive material from the list of harmful substances identified in the appendix. At MEPC 67, the meaning of radioactive material was clarified by inserting footnote referring to the IMDG Code. Implication: Shipowners/Ship Managers to be aware that the amendment now includes an exemption for radioactive material as defined in Class 7 of the IMDG Code for MARPOL Annex III. Application: All ships carrying harmful substances in packaged form from 1 March 2016.
281 1 March 2016 Adopted by Resolution MEPC.258(67)	**Amendments to MARPOL Annex VI, Regulations 2 and 13 – amended to include gas fuelled engines** Background: MEPC 65 agreed to the conclusion by the Tier III NOx Review Correspondence Group that engines fuelled solely by gaseous fuels, e.g. pure LNG, should be required to comply with the provisions of regulation 13 of MARPOL Annex VI. Summary: It was agreed that the scope of the regulations 2 and 13 is to be extended to also include gas fuelled engines. MEPC 67 revised the definition of "marine diesel engine" as given by regulation 2.14, to read "Marine diesel engine means any reciprocating internal combustion engine operating on liquid or dual fuel, to which regulation 13 of this Annex applies, including booster/compound systems if applied. In addition, a gas fuelled engine installed on a ship constructed on or after 1 March 2016 or a gas fuelled additional or non-identical replacement engine installed on or after that date is also considered as a marine diesel engine" Implication: While most of the LNG gas fuelled engines will not have a problem in meeting the NOx control requirement, this will cause administrative works for engine manufacturers, builders and ROs Application: While legal entry into force date is 1 March 2016, a careful reading is required. – Regulation 2 - All candidate gas engines on ships constructed on or after the relevant ECA-NOx date or additional / non-identical replacement engines installed on or after those dates as applicable. Gas engines in this context is to be understood to be gas only fuelled engines – engines which use dual fuel (i.e. main fuel gas but with a liquid pilot fuel) are already covered – Regulation 13 - Candidate engines on ships constructed 1.1.1990 – 31.12.1999 which have been so altered from their original condition that the AM in respect of engines in their original condition does not now apply.

282 1 March 2016 Adopted by Resolution MEPC.258(67)	**Amendments to MARPOL Annex VI, Supplement to the IAPP Certificate** Background: Some updates to MARPOL Annex VI resulted in the consequential change to the certification form. Summary: In order to fully and correctly record the NOx certification status of the engines installed on ship and to clearly give why a particular Tier of certification has been applied, 2.2.1 of the supplement was revised. This takes into account the Approved Method Process Guidelines adopted by MEPC 66. Minor consequential amendments to regulation 13.7.3 have been proposed. The amendment to the certificate also addresses shipboard incinerators. Implication: This should avoid any problem with the port State control by clearly stating the applicable regulation/requirement. Application: All ships subject to MARPOL Annex VI certification (ships engaged in the international voyage of 400 gt, including offshore structures). Certificates issued or replaced on or after 1 March 2016. Relevant instruments MEPC.1/Circ.849 on Guidance on the supplement to the IAPP Certificate

1 July 2016

267 1 July 2016 Adopted by Resolution MSC.380(94)	**Amendments to SOLAS Regulation VI/2 to require mandatory verification of container weight** Background: Mis-declared container weight has been identified as the cause, or a contributing cause, to operational and safety reported accidents in the past few years. An incorrect weight declared by the shipper is not uncommon and the incorrect weight is then used by the ship and the port facility in the handling and stowage of the container. An incorrect declaration of weight can cause instability in a container stack leading to loss of the stack and damage to the ship and cargo. It can also adversely affect the ship's overall stability. Summary: New regulation VI/2 introduces mandatory verification of the gross mass of containers and the guidelines for its implementation. Shippers will be responsible under SOLAS to obtain the gross mass of a container and provide this information in advance to the ship's Master and terminals. The ship's Master will be able to refuse a container that has not been provided with a verified gross mass. Implication: Shipowners and Ship Managers need to have the correct weight of the container provided by the shipper and ports/terminals worldwide will either need to provide calibrated measurement equipment or confirm with the shipper that the weight has been calculated prior to the container arriving in port to avoid ship delays or containers being caught in a dispute. Application: The Requirements will apply to all containers to which the International Convention for Safe Container (CSC) applies and which are to be stowed on a ship subject to SOLAS chapter VI.

	Containers carried on a chassis or a trailer when such containers are driven on or off a ro-ro ship engaged in short international voyages as defined in SOLAS regulation III/3 are exempted from the requirements. Relevant instruments MSC.1/Circ.1475 on Guidelines regarding the verified gross mass of a container carrying cargo
268 1 July 2016 Adopted by Resolution MSC.380(94) Class News No. 33/2014	**Amendments to SOLAS and the relevant codes concerning mandatory carriage of appropriate atmosphere testing instruments on board ships** Background: IMO adopted the Resolution A.1050(27) - Revised recommendations for entering enclosed spaces aboard ships. Following this adoption, IMO recognized that hazards originating from oxygen-depleted or oxygen-enriched, flammable or toxic atmosphere could be present on other ships types (not only tankers and bulk carriers) and agreed to develop relevant SOLAS and related Code amendments to mandate the carriage of appropriate atmosphere testing instruments. At MSC 91 it was clarified that tankers, bulk carriers and chemical tankers, already prescribed carriage requirements of suitable instruments for testing atmosphere in their tanks, and it was considered that the primary objective of the new proposal was to focus on non-cargo enclosed spaces, including, but not limited to, ballast tanks, (non-cargo) oil tanks, void spaces, chain lockers, steering gear spaces, inerted spaces adjacent to cargo spaces and sewage tanks. Whereas it was considered that only testing for oxygen in any enclosed space is not necessarily sufficient for evaluating whether it is safe to enter, it was proposed that multi-gas detectors should be carried on board. Summary: MSC 93 approved the new SOLAS Chapter XI-1/7 which introduced mandatory carriage requirements for portable atmosphere testing instruments on board all ships to which the SOLAS Chapter I applies – published as Resolution MSC.380(94). MSC.1/Circ.1477 on Guidelines to facilitate the selection of the portable atmospheric testing instruments has also been published. The new portable instrument is not to be used as part of the personal protective safety equipment; it is to be part of the ship's equipment. The portable testing instrument should be used to test the space from the outside to render the space safe for entry. The multi-gas meter should cover as a minimum the following gases: oxygen, flammable gases or vapours, carbon monoxide and hydrogen sulphide. Having recognised that MSC 92 adopted the new SOLAS regulation III/19 on emergency training and drills (which will require the checking and use of instruments for measuring the atmosphere for enclosed space entry and rescue drills) that has an entry into force date of 1 January 2015 and new regulation XI-1/7 has an entry into force date of 1 July 2016, the Committee have published the MSC.1/Circ.1485 to encourage the early implementation of the carriage requirements in order to expedite the carriage of portable atmosphere testing instruments for enclosed spaces. Amendments to the MODU Code 1979 (Resolution A.414 (XI)), 1989 (Resolution A.649(16)), 2009 Resolution A.1023(26) were also agreed to mandate this carriage requirement on structures covered by that instrument. Implication: In order to avoid duplication, equipment already available on board, required by SOLAS or other Codes as applicable to the ship type, can be considered to fulfil this requirement, provided the equipment is in compliance with the regulation and is not used as part of the personal protective safety equipment. Proper training to use the instruments, learn measurement procedures, including the interpretation of the obtained readings, prior to entering enclosed spaces should be provided. This instrument will be part of the ship's equipment and only be used by a competent person. In addition, the revised recommendations for entering enclosed spaces onboard ships (Resolution A.1050(27)) should be followed.

	Application: All new and existing ships. Relevant instruments Resolution MSC. 380(94) adopting the new regulation SOLAS XI-1/7 Resolution A.1050(27) - Revised Recommendations for entering enclosed spaces aboard ships Resolution MSC.382(94) - Amendments to the Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code) Resolution MSC.383(94) - Amendments to the Code for the Construction and Equipment of Mobile Offshore Drilling Units, 1989 (1989 MODU Code) Resolution MSC.384(94) - Amendments to the Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009 (2009 MODU Code) MSC.1/Circ.1477 on Guidelines to facilitate the selection of portable atmosphere-testing instruments for enclosed spaces as required by SOLAS regulation XI-1/7. MSC.1/Circ.1485 on Early implementation of SOLAS regulation XI-1/7 on atmospheric testing instrument for enclosed spaces
284 1 July 2016 **Adopted by** Resolution MSC.380(94)	**Amendment to SOLAS Regulation II-2/10.5.2 - Clarification on the application of SOLAS regulation II-2/10.5.2.2 relevant to the provision of additional fire-extinguishing arrangements** **Background:** MSC.1/Circ.1120 was developed to facilitate the understanding of SOLAS II-2 and specifically states "category A machinery spaces" in the first column of the table of "Number of systems, appliances, and extinguishers required in machinery spaces". This indicates that SOLAS regulation II-2/10.5.2 is applicable to category A machinery spaces that contain internal combustion machinery, and not all machinery spaces that contain internal combustion machinery. **Summary:** The amendment clarifies the application of SOLAS regulation II-2/10.5.2.2 relevant to the provision of additional fire-extinguishing arrangements by approving an amendment to the title of regulation II-2/10.5.2. The words "of category A" were added to read: "Machinery spaces of category A containing internal combustion machinery." **Implication:** In general, this is normal practice, therefore impact is limited. **Application:** All ships constructed on or after 1 July 2012.
175 1 July 2016 **Adopted by** Resolution MSC.290(87)	**SOLAS 1974 Regulations II-1/2 and II-1/3-10 – Goal-based ship construction standards for bulk carriers and oil tankers** **Background:** The notion of "goal-based ship construction standards" (GBS) was introduced in IMO in 2002. There was a desire for the IMO to play a larger role in determining the fundamental standards to which new ships are built. It was suggested that the IMO should develop initial standards that would permit innovation in design but ensure that ships are constructed in such a manner that, if properly operated and maintained under specified conditions, they could remain safe for their entire economic life. The standards would also have to ensure that all parts of a ship can be easily accessed to permit proper inspection and ease of maintenance. GBS can therefore be thought of as rules for classification rules, rather than direct rules for ship design.

	Summary: – Regulation 2 – Definition (new paragraph 28 is added) to define 'Goal-based ship construction standards for bulk carriers and oil tankers'. – New regulation 3-10 - 'Goal-based ship construction standards for bulk carriers and oil tankers' was adopted, which requires that classification rules shall comply with GBS. The regulation also requires ships to carry a Ship Construction File, provided upon delivery and kept updated throughout the ship's life. Implication: Shipowner sand Shipbuilders: New bulk carriers and oil tankers will be required to be designed and built in accordance with GBS, by using a set of classification rules which have been verified by IMO as conforming to the GBS functional requirements. The IACS harmonised Common Structural Rules for oil tankers and bulk carriers have been submitted to the IMO for audit. Owners and builders should make the necessary arrangements for the Ship Construction File to be produced and maintained. Owners should note that changes to GBS compliant ships will need to be recorded on the plans and documents in the Ship Construction File. Flag Administrations and their ROs: Classification rules applicable to these types of ships will be subject to the verification process given in the MSC resolution. This means that a classification society wishing to act as a recognised organisation for a flag Administration as far as safety construction is concerned will have to undergo a verification of its rules as well as a continuous verification of subsequent amendments to these rules in order to establish conformity with the GBS functional requirements. Application: Oil tankers of 150 metres in length and above and bulk carriers of 150 metres in length and above, constructed with single deck, top-side tanks and hopper side tanks in cargo spaces, excluding ore carriers and combination carriers: – for which the building contract is placed on or after 1 July 2016; – in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2017; or – the delivery of which is on or after 1 July 2020. Relevant instruments In conjunction with the above amendments, related documents have also been adopted or approved as applicable: Resolution MSC.287(87) - Adoption of the international goal-based ship construction standards for bulk carriers and oil tankers Resolution MSC.296(87) - Adoption of the guidelines for verification of conformity with goal based ship construction standards for bulk carriers and oil tankers MSC.1/Circ.1343 on Guidelines for the information to be included in a Ship Construction File
159 (Repeated) 1 July 2016	**SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS** See item 159 in part A - Retrofitting requirements for ships other than passenger ships or tankers (of 50,000 gt or above).

285 1 July 2016 Adopted by Resolution MSC.380(94)	**Amendments to the Appendix to the SOLAS - Record of equipment** Background: MSC 93 considered an apparently unintended oversight concerning the lack of an entry for the total number of persons accommodated by free-fall lifeboats in the Record of Equipment for the Cargo Ship Safety Equipment Certificate and the Cargo Ship Safety Certificate. Summary: Editorial amendments have been made to the Record of Equipment for the Cargo Ship Safety Equipment Certificate and the Cargo Ship Safety Certificate. Implication: Replacement of the Record of Equipment for the Cargo Ship Safety Equipment Certificate and the Cargo Ship Safety Certificate will be issued on expiry of current certificates after 1st July 2016. Application: All SOLAS cargo ships (new and existing).
255 (Repeated) 1 January 2016 (Oil and chemical tankers*) 1 July 2016 (Gas tankers*)	**Demonstration of compliance with damage stability requirements for tankers** **Amendments to MARPOL Annex I - Regulation 3 and 28 and Appendix II** **Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) - Part A, Section 2.2.1 & Certificate of fitness** **Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) - Section 2.2 & Certificate of fitness** **Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - Section 2.2.6, 2.2.7 & Certificate of fitness** Tankers need to demonstrate compliance with the relevant damage stability requirements. See item 255 in Part B. * *see Application in item 255 in Part B for details*

12 December 2016

ILO0002	**2014 Amendments to the Maritime Labour Convention, 2006** Background: As of March 2014, the ILO's abandonment of seafarers' database listed 159 abandoned merchant ships, some dating back to 2006 with cases still unresolved. Many abandoned seafarers are working and living on board ships without pay, often for several months, and lack food and

12 December 2016	water supplies, medical care or means to return home. As such, amendments to the MLC 2006 were proposed to provide abandoned seafarers with further protection. Summary: Amendments to the MLC 2006 were adopted by the Special Tripartite Committee at the meeting in Geneva between 7 and 14 April 2014. The amendments were approved by the ILO in Geneva on 11 June 2014. Both of the amendments relate to provision of financial security in respect of: Regulation 2.5 - repatriation of seafarers following abandonment by the shipowner; and Regulation 4.2 - shipowners' liability and provision of a system of financial security to assure compensation for contractual claims following the death or disability of a seafarer. Implication: Appropriate financial security must be provided Application: All ships except warships and naval auxiliaries, ships engaged in fishing or similar pursuits, ships of traditional build such as dhows and junks and those that navigate exclusively in inland waters or waters within, or closely adjacent to, sheltered waters or areas where port regulations apply.

1 January 2017

277 1 January 2017 Adopted by Resolution MSC.392(95)	**Amendments to SOLAS Regulations II-2/4.5 and II-2/11.6** Background & Summary: Amendments to SOLAS regulations II-2/4.5, II-2/11.6.1, II-2/11.6.2, and II-2/11.6.3.2 were proposed to clarify the provisions relating to the secondary means of venting cargo tanks. In general terms, the proposal requires new tankers to install full flow P/V valves on each cargo tank in order to ensure adequate safety against over-and-under pressure in the event a cargo tank isolation valve is damaged or inadvertently closed. SSE 1 agreed to the amendments and MSC 95 adopted them. Implication: On new tankers, full flow P/V valves will be required to be installed on each cargo and slop tank instead of the small volume flow breather valves; the P/V valves being considered the 'secondary means.' Application: New tankers constructed on or after 1st January 2017.
274 1 January 2017	**Amendments to SOLAS Regulation II-2/20 on ventilation systems in vehicle, special category and ro–ro spaces** Background: Amendments to SOLAS regulations II-2/20.3.1.2.1 and II-2/20.3.1.2.2 were proposed to introduce air quality management for the ventilation of closed vehicle spaces, closed ro-ro and special category spaces together with proposed draft amendments to design guidelines and operational recommendations for ventilation systems in ro-ro cargo spaces (MSC/Circ.729). Summary: SSE 1 agreed the amendment to SOLAS II-2/20 allowing the optional use of an air quality management system in lieu of prescriptive

Adopted by Resolution MSC.392(95)	requirements for ventilation of ro-ro and special category spaces for approval at MSC 94 and subsequent adoption at MSC 95. SSE was unable to finalise the draft amendments to the above MSC/Circ.729 as there are no internationally accepted levels for CO and NO_2 and the nationally accepted levels differ considerably. It was agreed that the work should be completed at SSE 2 for approval at MSC 95 together with the associated draft amendments to SOLAS regulation II-20/20.3. The amendments were approved at MSC 95 and MSC.1/Circ.1515 has been published. Implication: This is an optional requirement (alternative). Ships may still meet the existing II-2/20 prescriptive requirements. Application: SOLAS regulation II-2/20 is applicable for all passenger and cargo ships as detailed in the regulation (new and existing) regardless of whether an air quality management system has been installed. Relevant instruments MSC.1/Circ.1515 on Revised design guidelines and operational recommendations for ventilation systems in ro-ro cargo spaces
241 1 January 2017 Adopted by Resolutions MSC.385(94), MSC.386(94), MEPC.264(68) & MEPC.265(68)	**New mandatory International Code for Ships Operating in Polar Waters (Polar Code)** Background: There has been a notable increase in shipping activities in the polar regions, particularly now that ice free waters are expanding in the Arctic. The IMO has previously issued some guidelines for ships operating in polar areas (Resolution A.1024(26) - Guidelines for ships operating in polar waters) but it was agreed that some mandatory requirements are needed. The IMO agreed on mandatory requirements for both safety and environmental aspects (SOLAS and MARPOL). Summary: The importance of including non-SOLAS ships has been raised by some delegations. It was, however, noted that a decision has been taken to cover SOLAS ships first and then non-SOLAS ships. The various environmental issues (discharge of grey water, black carbon emissions and others) have been extensively discussed and remain contentious. The new chapter XIV of SOLAS makes compliance with the related Polar Code mandatory. There are related amendments to MARPOL Annexes I, II, IV and V. The Polar Code covers all aspects of ship safety and is additional to SOLAS. Ships to which this new chapter applies will have to meet SOLAS as well as the Polar Code. The Polar Code includes requirements for the following areas: – Polar water operational manual – Ship structure – Subdivision and stability – Watertight and weathertight integrity – Machinery

	– Fire safety and protection – Life saving appliances and arrangements – Navigation – Communication – Voyage planning – Manning and training. The Polar Code is goal based to allow the use of innovation to meet the requirements. Mandatory regulation is contained in section A with supporting non-mandatory guidance in section B. Ice class notation may not be required depending on the intended area of operation, but operational limitations will be imposed to mitigate operation in waters where ice is likely to be present. Amendments to MARPOL to make the Polar Code mandatory were finalised at MEPC 68. The Polar Code has requirements covering the following MARPOL related matters: – Prevention of oil pollution (MARPOL Annex I) – Prevention of pollution from noxious liquid substances (MARPOL Annex II) – Prevention of pollution by sewage from ships (MARPOL Annex IV) – Prevention of pollution by garbage (MARPOL Annex V) Implication: All ships (new and existing) which intend to operate in the polar areas (as defined) will have to be assessed for compliance with the Polar Code and a polar certificate issued. Depending on the dates and areas of operation additional equipment suitable for use in low tempertures will be required. Ships intending to operate in waters with ice cover will be expected to have some ice strengthening. Those undertaking regular trips to the polar regions should start making an assessment as soon as possible and should ensure that all equipment is suitable for low temperature use. It will be possible for ships which only undertake a single one-off voyage in summer in ice-free waters to be issued with a polar certificate without survey, but an assessment will still have to be undertaken. Application: The new requirements will be applicable to all ships which have SOLAS certificates, including HSC, and which operate in polar waters. Ships constructed on or after 1 January 2017 will have to comply with the full Polar Code requirements from build. Ships constructed before 1 January 2017 will have to comply with the relevant requirements of the Polar Code by the first intermediate or renewal survey after 1 January 2018. Ships which do not operate in polar waters will not have to comply with the requirements of the code. Relevant instruments Resolution A.1024(26) - Guidelines for ships operating in polar waters
185 1 January 2017	**Development of the mandatory IGF Code - renamed "International code of safety for ships using gases or other low flashpoint fuels"** Background: BLG was tasked with producing interim guidelines for ships with natural gas fuelled engine installations, which were produced in 2009 (Resolution MSC.285(86)). These guidelines were an interim measure until an International Code for the Safety of Gas Fuelled Ships (IGF Code) was produced, which was intended to be mandatory for ships other than those regulated under the IGC Code. This has also been the subject of an inter-

Adopted by Resolution MSC.391(95)	sessional correspondence group between the last few Sub-Committee meetings and is a contentious issue among various parties who are pushing for particular approaches which are not necessarily in line with LR policy. Summary: The basic philosophy of the IGF Code is to provide mandatory provisions for the arrangement, installation, control and monitoring of machinery, equipment and systems using low flashpoint fuels, such as liquefied natural gas (LNG), to minimize the risk to the ship, its crew and the environment, having regard to the nature of the fuels involved. The Code addresses all areas that need special consideration for the usage of low flashpoint fuels, based on a goal-based approach, with goals and functional requirements specified for each section forming the basis for the design, construction and operation of ships using this type of fuel The change includes the new mandatory code and the amendments to the SOLAS Convention as follows: – Mandatory application of the International Code of safety for ships using gases or other low-flashpoint fuels (IGF Code). The following regulations were revised: – Regulation II-1/56 on application (intended to apply ships including those constructed prior to the entry into force date); – Regulation II-2/4; and – Form of certificate – there will not be a separate IGF certificate. Implication: There is a number of safety related aspects that affect design and building of such ships including the concept of emergency shut down arrangements and the location of low flash point fuel storage tanks. Application: All ships using low-flashpoint fuels except those regulated by the IGC Code. The IGF Code should apply to new ships and to existing ships converting from the use of conventional oil fuel to the use of gases or other low-flashpoint fuels, on or after 1 January 2017. The IGF Code does not apply to cargo ships of less than 500gt, but the provisions of the IGF Code could be applied to such ships on a voluntary basis, based on national legislation. Further information Lloyd's Register Rules for the Classification of Natural Gas Fuelled Ships were published July 2012 and revised in January 2014. The Rules enable the safe use of natural gas (and low flash point fuels with similar properties, provided any differences are taken into account as a part of the design and their hazards mitigated) as fuel for ships other than LNG carriers. The rules reflect the requirements of the annex of resolution MSC.285(86) and the IGF Code.
269	**IMSBC Code (03-15) Amendments** Background: This Code is in a constant 2 year update cycle. The last adopted amendments to the code, were amendments (02-13) which will be voluntarily applied from 1 January 2014 and will be applied on mandatory basis from 1 January 2015. Amendments (02-13) included a new individual schedule for Nickel Ore and a revised section 4 related to cargo liquefaction

1 January 2017 Adopted by Resolution MSC.393(95)	Summary: The new set of amendments, (03-15), were adopted by MSC 95 and will be voluntarily applied from 1 January 2016 and mandatorily from 1 January 2017. The amendments include a new schedule for Iron Ore fines Group A (cargo that may liquefy) and new test procedure for determining the TML (Transportable Moisture Limit) of Iron Ore fines. A recommendatory new section 14 - Prevention of pollution by cargo residues from ships is included in the (03-15) amendments. This section addresses the classification of solid bulk cargoes as harmful to the marine environment (HME) and the prohibition of their discharge at sea. Furthermore, it assigns the shipper as responsible to classify and declare whether a solid bulk cargo is an HME or non-HME. The provisions are the ones found in the *2012 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.219(63)). Currently, the IMSBC Code is mandatory only under the SOLAS Convention and so can only impose safety features. There is ongoing discussion at the IMO in order to mandate the classification and declaration requirements found in the (03-15) amendments by linking them to the MARPOL Convention. For the latest developments see the LR Summary Report on the second session of the IMO Sub-Committee on Carriage of Cargoes and Containers (CCC 2). Implication: New and amended schedules provide specific requirements for solid bulk cargoes intended to be carried. New test procedures to determine and verify the TML are included specifically for Iron Ore fines. Ship Managers should be aware of the new changes and advise their Masters accordingly. Application: All ships carrying solid bulk cargoes other than grain.
273 1 January 2017 Adopted by Resolutions MSC.396(95) & MSC.397(95)	**Amendments to the STCW Convention, 1978 (Part A) and the STCW Code (Part B) related to the International code of safety for ships using gases or other low-flashpoint fuels (IGF Code)** Background: In light of the new IGF Code changes were required which were prepared as amendments to the STCW Convention and part A and part B of the STCW Code, associated MSC resolutions and STCW circular. Summary: The amendments were adopted at MSC 95 and concern the mandatory minimum requirements for the training and qualifications of Masters, Officers, Ratings and other personnel on ships subject to the IGF Code. A certificate of basic training shall be required for seafarers responsible for designated safety duties associated with the care, use or in emergency response to the fuel on board such ships, however, seafarers who have been qualified and certified according to regulation V/1-2, paragraphs 2 and 5, or regulation V/1-2, paragraphs 4 and 5 on liquefied gas tankers, are to be considered as having met the requirements specified in section A-V/3, paragraph 1 for basic training for service these ships. Masters, engineer Officers and all personnel with immediate responsibility for the care and use of fuels and fuel systems on ships subject to the IGF Code shall hold a certificate in advanced training for service on these ships. Liquefied tanker experience again may be sufficient provided it meets the provisions of the convention. Implication: Shipowners / Ship Managers: The amendments will have a significant impact as they will require additional certification and training with refreshing requirements. It should be noted that there are no "transitional" arrangements for the new requirements. Application: All ships using gas or other low flash point fuels, except for those regulated by the IGC Code.

	Relevant instruments STCW.6/Circ.11 on Amendments to Part B of the Seafarers' Training, Certification and Watchkeeping (STCW) Code STCW.7/Circ.23 on Interim Guidance on training for seafarers on ships using gases or other low-flashpoint fuels
232 1 January 2017 Adopted by Resolutions MEPC.266(68)	**Draft amendments to MARPOL Annex I Regulation 12** Background: The requirements of regulation 12 of Annex 1 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 question on the application to existing ships. Interpretation was developed. – IACS UI - MPC99 (Dec 2011) – addressing common piping arrangements – MEPC.1/Circ.753/Rev.1 – this is reflection of IACS UI MPC99 Summary: The amendment addresses all the issues previously addressed by the above interpretations. It further addresses clarification on other means of disposal such as via approved methods (incinerator, auxiliary boiler suitable for burning oil residue etc.). The amendment also addresses common piping arrangements (further clarification of UI MPC99). Implication: 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 need to examine the position of their flag Administration as some flag Administrations indicated retroactive re-arrangements prior to the above developments. Application: To every ship of 400 gt and above. It is to be noted though that regulation 12.3.5 need only be applied as far as is reasonable and practicable for ships delivered on or before 31 December 1979, as defined in regulation 1.28.1. Ships constructed before 1 January 2017 shall be arranged to comply with regulation 12.3.3 not later than the first renewal survey carried out on or after 1 January 2017.

1 July 2017

159 (Repeated) 1 July 2017	**SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS** See item 159 in Part A - Retrofitting requirements for ships other than passenger ships or tankers (of 20,000 and above but less than 50,000 gt).

1 January 2018

241 (Repeated) 1 January 2018	**New mandatory International Code for Ships Operating in Polar Waters (Polar Code)** See item 241 above for existing ships which are required to comply by the first intermediate or renewal survey after 1 January 2018.

1 July 2018

226 (Repeated) 1 July 2018	**New SOLAS Regulation II-2/10.4 - Communication equipment for fire-fighting teams** See item 226 in Part A for existing ships which are required to comply by the first survey after 1 July 2018.
159 (Repeated) 1 July 2018	**SOLAS 1974 Regulation V/19 – Carriage requirements of ECDIS** See item 159 in Part A - Retrofitting requirements for ships other than passenger ships or tankers (of 10,000 and above but less than 20,000 gt).

1 June 2019

195 (Repeated) 1 June 2019	**MARPOL Annex IV - Establishment of Special Area under MARPOL Annex IV (Sewage) in the Baltic Sea** See item 195 above - Applicability for new passenger ships will be from 1 June 2021.

1 January 2020

188 & 264 (Repeated) 1 January 2020	**New Chapter 4 of MARPOL Annex VI –Energy Efficiency Design Index (EEDI)** See item 188 & 264 in Part A – Phase 2 of EEDI will apply from 1 Jan 2020 to 31 Dec 2024.

1 June 2021

195 (Repeated) 1 June 2021	**MARPOL Annex IV - Establishment of Special Area under MARPOL Annex IV (Sewage) in the Baltic Sea** See item 195 above - Applicability for existing passenger ships will be from 1 June 2021.

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 A – Phase 3 of EEDI will apply from 1 Jan 2025 onwards.

Part 2 – IMO 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.

Expected date unknown

238 Estimated entry into force date – Not yet known	**International Convention for the Safety for Fishing Vessels (Torremolinos Convention)** Background: The Torremolinos Convention and its 1993 Protocol have not yet entered into force as the entry into force requirements (15 flag States with an aggregated fleet of 14,000 ships) have not been met. There have also been some problems with the technical requirements. In order to address these issues an agreement has been agreed which change the entry into force requirements to 22 flag states and 3,600 fishing vessels which operate on the high seas and modifies some of the technical provisions. Summary: The diplomatic conference in South Africa in October 2012 agreed that the entry into force criteria should be 22 flag states which between then have at least 3600 fishing vessels of 24 metres in length and over operating on the high seas. The survey and certification requirements were amended to the five year cycle. A phased in application for some part 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, 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 ROs** will have to survey new and existing fishing vessels to the extent required and issue appropriate certification. **Applicability:** 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.

Expected 1 January 2017

154 **Estimated Entry into force – 1 January 2017 –** MIGHT BE SUBJECT TO FURTHER CHANGE Class News **No. 02/2014**	**Ballast Water Management Convention** **Adopted by the 2004 BWM Conference** **Background:** The problem of the transfer of harmful aquatic organisms via ships ballast water was first raised at IMO in 1988 and since then the Marine Environment Protection Committee (MEPC) has been dealing with the issue, focusing initially on the development of guidelines and then on developing a new Convention. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) was adopted on 13 February 2004. The BWM Convention will enter into force 12 months after ratification by 30 States, representing 35% of world merchant shipping tonnage. To date (31 October 2015), 44 States representing 32.89% of the world merchant shipping tonnage have ratified this Convention. MEPC 60 (March 2010) and each subsequent MEPC meeting has concluded that generally there are sufficient type-approved ballast water treatment technologies available. **Summary**: The IMO has published a list of relevant guidelines and guidance documents related to the implementation of the BWM Convention. On entry into force, the BWM Convention will require ships to manage their ballast water and sediment. Initially this may be by either exchanging ballast on every voyage or by treating ballast using an approved ballast water treatment system. Subsequently, only ballast water treatment will be accepted.

Lloyd's Register Guidance Note –

Understanding Ballast Water Management

Implication: Most ships are expected to comply by installing and using an approved ballast water treatment system which is to be installed on a defined time scale based on the ship's ballast water capacity, delivery date and IOPP renewal survey date (see table below).

Application:
Once the Convention enters into force, it will apply to all ships and offshore structures that load and discharge ballast as follows:

All ships will be required to manage ballast water and sediment, have an onboard approved ballast water management plan, maintain a ballast water record book and hold a valid ballast water management certificate. Initially, existing ships (and those under construction at the time that the Convention enters into force) may comply by either exchanging ballast on every voyage or by treating ballast to comply with the D-2 discharge standard. IMO Assembly 28 adopted a resolution (A.1088(22)) recommending a revised schedule for when existing ships (and ships under construction at the time the Convention enters into force) will have to treat ballast water (i.e. when exchange will no longer be permitted). This is based on the ship's ballast water capacity, date of construction and IOPP renewal survey (not the renewal survey associated with the International Ballast Water Management Certificate), and is shown in the table below. Ships constructed after the entry into force of the Convention will have to treat ballast water from delivery.

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

Exemptions:
1. exemptions may be granted to ships on voyages between specified ports or locations; or to ships which operate exclusively between specified ports or locations;
2. such exemptions will be
    2.1 effective for a period of no more than five years, subject to intermediate review;
    2.2 granted to ships that do not mix ballast water or sediments, other than between the ports or locations specified in 1 above; and
    2.3 granted based on the Guidelines on risk assessment in accordance with MEPC.162(56).

The Lloyd's Register Lead Specialist on this subject is Yildiz Williams; she can be contacted directly by email: **yildiz.williams@lr.org**

Reschedule for ships constructed (keel laid) before entry into force (EIF)* of the Convention

Ballast capacity	Constructed before 2009	Constructed in or after 2009 but before 2012	Constructed in or after 2012
Less than 1500m³	EIF before 2016: by 1st IOPP** renewal survey after the anniversary of the delivery of the ship in 2016 EIF after 2016: by 1st IOPP renewal survey	By 1st IOPP renewal survey after EIF	

	Between 1500m^3 and 5000m^3	By 1st IOPP renewal survey after EIF	
	Greater than 5000m^3	EIF in and before 2016: by 1st IOPP renewal survey after the anniversary of the delivery of the ship in 2016 EIF after 2016: by 1st IOPP renewal survey	By 1st IOPP renewal survey after EIF

* "EIF" means entry into force of the BWM Convention. This occurs 12 months after the date when condition for entry into force is met by sufficient number and tonnage of ratifications

** The IOPP renewal survey indicated in the table below refers to the renewal survey associated with the IOPP Certificate required under MARPOL Annex I

Relevant instruments

Resolution MEPC.252(67) - Guidelines for port State control under the BWM Convention

Resolution MEPC.253(67) - Measures to be taken to facilitate entry into force of the international convention for the control and management of ships' ballast water and sediments, 2004

Expected 1 September 2017

290 Estimated entry into force 1 September 2017 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to MARPOL Annex II – Appendix – Guidelines for the categorization of noxious liquid substances** Background: These are consequential amendments following the revision of chapter 21 of the IBC Code. Summary: MEPC 68 considered and approved a draft amendment to MARPOL Annex II which reflects Version 2 of GESAMP report No 64 for subsequent adoption at the forthcoming MEPC 69. This is just an editorial alignment of the referenced document. Implication: No direct impact to the industry. Application: To ships certified to carry noxious liquid substances in bulk.
300 Estimated entry into force 1 September 2017 MIGHT BE SUBJECT TO FURTHER	**Draft amendments to MARPOL Annex VI (Record requirements for operational compliance with NOx Tier III emission control areas)** Background: There have been discussions on how to record changeover of the engine operation mode (Tier II from/to III). Summary: During MEPC 68 a mutually acceptable wording was agreed, which is to be inserted as new requirement 13.5.3 of MARPOL Annex VI, consequently the proposed new paragraph 6.1.2 will not be inserted into the NOx Technical Code. The agreed amendment to the convention is: *5.3 The tier and on/off status of marine diesel engines installed onboard a ship to which paragraph 5.1 of this regulation applies which are certified to both Tier II and Tier III or which are certified to Tier II only shall be recorded in such log books as prescribed by the Administration at*

CHANGE	*entry into and exit from an emission control area designated under paragraph 6 of this regulation, or when the on/off status changes within such an area, together with the date, time and position of the ship.* Implication: As this is a record making (operational) requirement, there will be no impact on ship/equipment design and approval/certification. However, there may be differences of the requirement among flag States which might cause confusion during port State control inspections. Application: The approved text is expected to be adopted by MEPC 69 with (legal) entry into force on 1 September 2017 for ships subject to MARPOL Annex VI regulation 13 which will be operating in ECAs in America (North American and US Caribbean Sea) and are constructed on or after 1 January 2016.
289 Estimated entry into force 1 September 2017 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft Amendments to the NOx Technical Code 2008** A set of amendments to the NOx Technical Code was approved at MEPC 68 for subsequent adoption at MEPC 69. The amendments consist of the following two elements. Facilitate the testing of gas-fuelled engines (Engines fuelled solely by gaseous fuels) Background: While MEPC 67 adopted amendments to MARPOL Annex VI regarding engines solely fuelled by gaseous fuels by Resolution MEPC.258(67), which will enter into force on 1 March 2016, there were proposals on the consequential changes to the NOx Technical Code. MEPC 67 had instructed PPR 2 to consider these proposals. Summary: PPR 2 agreed on amendments to the NOx Technical Code. This included identifying a potential safety issue regarding the use of zirconium oxide analysers. A new paragraph 6.1.2 was developed to provide requirements for logging switch between Tier II and Tier III operation when entering and leaving a ECA-NOx. Implication: Gas engines are subject to the same emissions certification as oil and dual fuel engines. Further training might be needed on how the NOx Technical Code relates to gas and dual fuel engines. Operators planning to use gas engines will face some operational challenges once gas engines need to be certificated and have a technical file particularly with regards to buying spare parts. Application: The entry into force date is expected to be 1 September 2017. Use of dual fuel engines as a Tier III NOx control strategy Background: There have been expressed concerns at MEPC 67 that neither MARPOL Annex VI nor the NOx Technical Code 2008 contain a definition of "dual-fuel" providing information on the use of dual-fuel engines as a Tier III NOx emission control strategy and draft amendments to MARPOL Annex VI and the Code were proposed. PPR 2 was instructed to further address the proposals. Summary: At PPR 2 a new paragraph 6.1.2 for insertion into the NOx Technical Code was agreed which was approved at MEPC 68 for subsequent adoption at MEPC 69

	Implication: This amendment provides clarification on the status of "dual fuel engine" which should help with the implementation of the NOx Technical Code and engine certification. **Application**: The entry into force date is expected to be 1 September 2017.

Expected 1 January 2018

291 **Estimated entry into force 1 January 2018** MIGHT BE SUBJECT TO FURTHER CHANGE	**Amendments to SOLAS Chapter II-1 part A, part B, part B-1, part B-2, part B-4 and part C** **Background**: Amendments to SOLAS chapter II-1 to harmonize cargo ship and passenger ship damage stability have been in force since 1 January 2009. These amendments made probabilistic damage stability the main method for calculating damage stability for passenger ships and general cargo ships. Since the amendments have entered into force the need for a number of revisions has become apparent. A major review of the subdivision and damage stability requirements contained in chapter II-1 of SOLAS has been undertaken. **Summary**: Significant changes have been made to the following regulations: 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 7-2, amending the calculation for s. Regulation 9, providing limits on the distance from the keel line which small wells should be unless a damage stability check is made and introducing a minimum limit for the vertical damage extent. Regulation 12, permitting a butterfly valve at the collision bulkhead on cargo ships. Regulation 16, to require testing of watertight hatches. Regulation 17, requiring air pipes which terminate in a superstructure to be considered unprotected openings unless fitted with a watertight means of closure. Regulation 22, removing the possibility of leaving watertight doors open. Other minor changes have been made to a number of other regulations. **Implication**: These are significant changes to the damage stability regulations and designers should take them into consideration at an early stage. **Application**: The amendments will be applicable to cargo and passenger ships constructed from a date to be determined but expected to be no earlier than 1 January 2018.
292	**Draft amendments to the Introduction of the 2008 IS Code regarding vessels engaged in anchor-handling operations** **Background**: New intact stability criteria to cover anchor handling operations have been developed following the loss of the "Bourbon Dolphin". As not all ships undertake these duties the criteria have been included in the non-mandatory part of the 2008 Intact Stability Code.

Estimated entry into force 1 January 2018 MIGHT BE SUBJECT TO FURTHER CHANGE	Summary: The new criteria require an assessment of the ship's intact stability when undertaking anchor handling duties. It will be necessary to know the following to carry out the assessment; displacement of a loading condition, vertical and horizontal angle of the tow wire and the location of the anchor point with respect to the centre of the propulsive force, the stern of the vessel and the ship centreline. It will also be necessary to know some limiting information such as the bollard pull of the vessel, the design maximum wire tension and the permissible tension (the wire tension which can be applied to the vessel as loaded whilst working through a specified tow pin set). An additional heeling moment will then be added to the intact stability GZ curve. There are limits on the area between the heeling moment curve and the GZ curve, the residual righting lever between the heeling moment curve and the GZ curve, the angle of first intercept between the two curves and a minimum freeboard. Additional constructional matters are included in the amendments to part B of the 2008 IS Code covering the provision of a loading instrument, access to the machinery space, location of freeing ports, winch systems and on deck markings. Implication: Where a ship is expected to carry out anchor handling duties the necessary calculations should be carried out and the stability criteria satisfied. The amendments to Part A are to include a new definition for "ships engaged in anchor handling operations" for which the new criteria will be applicable. Implication: This will provide standard additional calculations to be assessed and approved where mandated by the Flag Administration. Approval would be carried out by the relevant Flag Administration or Recognised Organisation where the assessment is delegated. Application: Vessels engaged in anchor handling operations. Expected entry into force date is 1 January 2018. Related amendment to the non-mandatory part of the IS Code: Amendments to Part B of the 2008 IS Code for anchor handling operations.
294 Estimated entry into force 1 January 2018 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to the ESP Code** Background: The ESP Code is based on IACS Unified Requirements UR Z10.1, UR Z10.2, UR Z10.4 and UR Z10.5. As the IACS documents get updated so the ESP Code requires updating to keep them in line with each other. Summary: These amendments update the ESP Code to make reference to the new resolution A.1050(27) which is also concerned with enclosed space entry. Implication: These amendments will help ensure harmonization between the IMO and IACS requirements. There is no significant impact on LR classed vessels. Application: Applicable to bulk carriers and oil tankers. The amendments are expected to be adopted at MSC 96 (May 2016) and enter into force on 1 January 2018.

297 Estimated entry into force 1 January 2018 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to chapter V of the STCW Convention and Code – alignment with the Polar Code requirements** **Background:** The International Code for Ships Operating in Polar Waters (Polar Code) will enter into force on 1 January 2017 as it was adopted by MSC 94 and MEPC 68. Changes to the STCW Convention and STCW Code are required to align these instruments with the new Code. **Summary:** HTW 2 prepared draft amendments to the STCW Convention and the STCW Codes (Part A and Part B) which were approved at MSC 95 and are expected to be adopted at MSC 96. Entry into force date is therefore expected on 1 January 2018. Some key discussion points were the following: – A certificate of proficiency will be required; – Relation between STCW training and ISM Code/Polar Operation Manual – HTW 2 responded to concerns expressed about possible duplication of requirements and it was agreed that separate requirements will be set up; and – Service area - with regard to the required service area, HTW 2 agreed that it should not be limited to the polar area but experiences in areas considered equivalent to the polar area should also be accepted. **Implication:** Shipowners and Ship Managers: Although the entry into force of the amendments to the STCW Convention is one year after the entry into force of the Polar Code, all training requirements will have to be met by 1 January 2018. **Application:** Training/certification of seafarers working on board a ship subject to the Polar Code.

Expected 1 March 2018

265 Estimated entry into force 1 **March 2018** - MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendment to MARPOL Annex V (Appendix) - Record of Garbage Discharge** Background: A comprehensive revision to MARPOL Annex V entered into force on 1 January 2013. There are still some clarifications required out of the new requirements entered into force. Summary: The amendment aims to clarify the term "Estimated amount of Discharged or Incinerated" – whether into the sea or to reception facilities. Discussion has been ongoing since MEPC 65 (May 2013) when the proposal was submitted, as discrepancies were noted between the text of the MARPOL Convention and the proposed amendments to the Garbage Record Book. The need for further refinement was pointed out during next sessions of the MEPC such as the discharge of cargo residues (for solid bulk cargoes) which have been classified as harmful to the marine environment. A proposal at MEPC 67 was that the Garbage Record Book is split into two parts (one part for all operations related to garbage other than cargo residues and a second part for all operations related to cargo residues). MEPC 69 (April 2016) is asked to consider this issue further. Implication: The current format of the Garbage Record Book will be revised accordingly in order to prevent possible conflicts during Port State Control inspections.

	Application: Ships required to have garbage record book (ships of 400 gt or above) Relevant instruments **Resolution MEPC.239 (65) - Amendments to the 2012 Guidelines for the implementation of MARPOL Annex V**

Expected 1 July 2018

155 **Estimated entry into force** **1 July 2018 -** SUBJECT TO MEETING THE CONDITION FOR THE ENTRY INTO FORCE Class News **No. 14/2009** Lloyd's Register Guidance Note - **Ship recycling, Practice and Regulation today**	**Ship Recycling Convention** Adopted by the 2009 SR Conference **Background & Summary:** In 2009, the International Convention for the Safe and Environmentally Sound Recycling of Ships was signed by 67 Member States of the IMO. This internationally binding Convention has been adopted due to concerns about standards of ship recycling. It affects both recycling facilities and shipowners. The Convention will enter into force 24 months after it has been ratified by 15 States, representing 40% of the world fleet, and with an annual ship recycling capacity of 3% of that fleet. It is predicted that this condition will be met by January 2019. As of 31 October 2015, only three States have become party to the Convention, representing 1.86% of the world's fleet. 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 also 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 ship breaking industry; especially where safety, environmental and quality standards are concerned. It covers the entire ship life cycle; from design and construction, through in-service operation to dismantling and requires: – Ships to have an IHM (also known as 'the Green Passport'); – New builds to exclude certain hazardous materials; – Ship recycling facilities to be authorised by the national authority; – Ship recycling facilities to provide an approved 'Ship Recycling Plan' detailing how the ship will be recycled; – Ships flying the flag of parties to the Convention to be recycled only in authorised recycling facilities; and – Ship recycling facilities which are located in parties to the Convention to recycle only ships which they are authorised to recycle. At the final survey before the ship is taken out of service, the IHM will be completed for items such as operational stores and bunkers. The approved Ship Recycling Plan will then be checked against the IHM to ensure it properly reflects the information it contains. Various Guidelines have been developed for the implementation of the Convention.

	Implication: Shipowners and Ship Managers: – to provide an Inventory of Hazardous Materials for their ship – to inform the Flag State before a final survey takes place – to arrange the final survey before the ship is taken out of service for the completion of IHM for items such as operational stores and bunkers Recycling facilities: – to obtain "Document of Authorization for Ship Recycling" by the competent authority of the recycling State – to inform their authorities should they wish to recycle a ship – to prepare a specific 'Ship Recycling Plan', based on the IHM which the owner provides – to report when recycling is finished National authority of States with recycling facilities: – to authorise ship recycling facilities – to approve Ship Recycling Plans Application: Once the Convention enters into force it will apply to all ships and MODUs, high-speed craft, FSUs/FPSOs and barges. For newbuilds 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.
234 Estimated entry into force 1 July 2018 - SUBJECT TO MEETING THE CONDITION FOR THE ENTRY INTO FORCE	**Comprehensive review of SOLAS Chapter IV (Review of the requirements)** Background: The current SOLAS chapter IV (GMDSS) requirements were adopted in 1988 based upon the technologies developed in 1970s. Noting development in technologies and change of the status of INMARSAT, a comprehensive review of the requirements is under way. Summary: The following are the notable changes under discussion: – Use of non-INMARSAT, new additional satellite system; – Possible incorporation of Chapter V (AIS and LRIT), XI-2 (SSAS); – Sea maintenance requirement (Regulation 8 and 15); and – Redundancy of DSC EPIRB. Implication: It will be a challenge for both shipboard equipment and shore side facilities in terms of survey, certification and Port State Control inspection. Application: Expected to apply to all ships of 300 gt and above, including new and existing ships

Expected 1 January 2020

293 Estimated entry into force 1 January 2020 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to SOLAS II-2/13 to make evacuation analysis mandatory** Background: As technology has advanced it is now relatively simple to analyse the way a passenger ship can be evacuated. These amendments to SOLAS will make such an analysis mandatory. Summary: Existing paragraph II-2/13.7.4 is deleted. New paragraphs II-2/13.2.7.1 and II-2/13.2.7.2 were introduced which require escape routes to be evaluated to demonstrate that the ship can be evacuated in the required time. Implication: An evacuation analysis will be required for applicable ships. It should be noted that ro-ro passenger ships already have to undertake such an analysis under the requirements of SOLAS II-2/13.7.4. Application: All passenger ships constructed on or after a date still to be determined but which is expected to be 1 January 2020 and which carry more than 36 passengers.
258 Estimated entry into force 1 January 2020 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to SOLAS Regulations III/3 and III/20 on requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear** Background: Lifeboats and their fittings require maintaining and servicing to ensure their fitness to function in an emergency. This is done by service providers who can either be associated with a specific manufacturer or can be independent. Currently the requirements for the recognition of such service suppliers are given in non-mandatory instruments, i.e., MSC.1/Circ.1206/Rev.1 (and MSC.1/Circ.1277) Summary: The amendments to the SOLAS Convention will introduce mandatory application of the requirements for such service suppliers. Implication: Shipowners and Ship Managers: This should have little effect for Lloyd's Register owners/operators as we already apply these requirements. Manufacturers will need to find out how their flag Administration intends to authorize them as service suppliers and make appropriate arrangements for authorization as necessary. Lloyd's Register already imposes this standard through the Lloyd's Register 'Procedures for the Approval of Service Suppliers', so this should not have a significant impact to Lloyd's Register's clients. Flag Administrations and their ROs will need to authorize their lifeboat service suppliers. A list of approved service suppliers will have to be provided to the IMO. Application: Applicable to SOLAS ships and service suppliers maintaining their lifeboats and davits. Relevant instruments Draft MSC resolution on requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear. Draft MSC circular on Guidelines on safety during abandon ship drills using lifeboats

298 Estimated entry into force 1 January 2020 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to SOLAS Chapter II-2/10.5 for the fire protection of boilers** Background: SSE 1 considered a proposal to amend the existing SOLAS regulation II-2/10.5.1.2.2 regarding the arrangement of 135 / foam-type extinguishers in boiler rooms. This was discussed further at SSE 2 where the amendments were agreed Summary: The SOLAS text will be amended to include boilers protected by fixed local water based firefighting systems. The amendments will be sent to MSC 96 for approval Implication: Ships with boilers protected by fixed local water based firefighting systems will now have to comply with SOLAS regulation II-2/10.5.1.2.2 Application: The amendments are expected to enter into force in 1 January 2020 and will apply to new and existing ships.
295 Estimated entry into force 1 January 2020 MIGHT BE SUBJECT TO FURTHER CHANGE	**Draft amendments to the FSS Code - Chapter 8 Automatic Sprinkler, Fire Detection and Fire Alarm Systems** Background: MSC 94 considered a report that drew attention to the fact that during annual testing of automatic sprinkler systems on passenger ships, several sprinklers had failed to operate. MSC 94 decided to issue an interim circular with guidance to raise awareness of the problem and referred the matter to SSE 2 (MSC.1/Circ.1493). Summary: SSE 2 agreed to the draft amendments to MSC.1/Circ.1432 which reflect the concerns raised about the inspection and maintenance of automatic sprinkler and water mist systems. MSC 95 approved MSC.1/Circ.1516 as a replacement for MSC.1/Circ.1432 and draft amendments to Chapter 8 of the FSS Code which are expected to be adopted at MSC 96. Implication: Manufacturers / Builders./ Ship Owners to note the new requirements for the inspection and maintenance of automatic sprinkler and water mist systems. Application: All ships but especially passenger ships fitted with such systems. Relevant instruments MSC.1/Circ.1516 on Amendments to the Revised guidelines for the maintenance and inspection of fire protection systems and appliances (MSC.1/Circ.1432)
256 & 296 Estimated entry into force	**Draft amendments to the FSS Code Chapter 17 - Helicopter Facility Foam Firefighting Appliances** **Background**: It was proposed that the guidelines in the annex to MSC.1/Circ.1431 should be redrafted as a new chapter to the FSS Code. **Summary:** A draft new Chapter 17 of the FSS Code for Helicopter Facility Foam Firefighting appliances submission was agreed by SSE 2 and

1 January 2020 MIGHT BE SUBJECT TO FURTHER CHANGE	approved at MSC 95. SSE 2 had noted that if the new Chapter 17 was approved at MSC 95 for subsequent adoption at MSC 96 it wouldn't enter into force until 1st January 2020 so SSE 2 also agreed to a draft MSC circular for early implementation. The draft circular will be submitted to MSC 96 in conjunction with the adoption of the new Chapter 17. The Sub-Committee also agreed to consequential amendments: - Draft amendments to Chapter 9 of the 2009 MODU Code; - Draft amendments to MSC/Circ.895 Recommendation on helicopter landing areas on ro-ro passenger ships; and - Proposed modifications to the draft amendments to SOLAS Chapter II-2. **Implication:** Manufacturers / Shipbuilders / Shipowners should be aware of the new FSS Code specifications for foam firefighting appliances for the protection of helicopter facilities, as required by the Chapter II-2 of SOLAS **Application:** All ships with helicopter facilities for use on both a regular as well as occasional or emergency basis. Relevant instruments Draft MSC circular on Early implementation of the amendments to the FSS Code.

Expected 1 July 2020

192 Estimated entry into force 1 July 2020 – SUBJECT TO MEETING THE CONDITION FOR THE ENTRY INTO FORCE Adopted by: MSC.204(81)	**Amendments to SOLAS 1974 Regulation I/10** Please note that amendments to SOLAS Chapter I are subject to ratification criteria (as BWM Convention, Ship Recycling Convention, MLC Convention), i.e., in accordance with article VIII(b)(iv) of the International Convention for the Safety of Life at Sea, 1974 and article VI(b) of the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, the amendments shall be deemed to have been accepted on the date on which they have been accepted by two-thirds of the Parties to the Protocol and shall enter into force six months after that date. The IMO have received acceptances from Norway and the Netherlands, however since 2010 no further Administrations have accepted these amendments. Regulation 10 - Surveys of structure, machinery and equipment of cargo ships The existing text of subparagraph (v) of paragraph (a) of the regulation is replaced by the following: "(v) a minimum of two inspections of the outside of the ship's bottom during the five-year period of validity of the Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate, except where regulation 14(e) or 14(f) is applicable. Where regulation 14(e) or 14(f) is applicable, this five-year period may be extended to coincide with the extended period of validity of the certificate. In all cases the interval between any two such inspections shall not exceed 36 months." Background: Bottom survey requirements were amended based upon the current practices by classification societies. Implication: None to Lloyd's Register ships. Application: To cargo ships that are subject to the SOLAS convention (cargo ships - non-passenger ships) of 500 gt or over engaged on international voyages.

Lloyd's Register Marine

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