

Information Updates KISHPNI-IU-03-2020 (Regulations Summary for 2020)

► Introduction:

From the beginning of 2020, there were regulations that took effect apart from the IMO Sulphur cap. Discussions during IMO Meeting and preparations have been ongoing and with immediate implementation, the first day of the year was dominated by many amendments to SOLAS Chapters, MARPOL Annexes and Code revisions.

A summary of what shall be here in 2020 is collected below:

SOLAS amendments:

1. Protection against noise (Amendments to SOLAS II-1/3-12):

Because of a discrepancy in the application of the Code on Noise Levels on Board Ships, there has been a necessary amendment through a minor modification, in paragraph 2.1 of Chapter II-1/ Regulation 3-12. Namely, according to <u>MSC.409 (97)</u>, the existing paragraph 2.1 is amended to read as follows:

".1 contracted for construction before 1 July 2014 and the keels of which are laid or which are at a similar stage of construction on or after 1 January 2009; or"

2. Damage control drills for passenger ships (Amendments to SOLAS II-1/19, III/30 and III/37):

Amendments to SOLAS chapter II-1 regulation 19 and chapter III regulations 30 and 37 to mandate damage control drills were adopted. The requirements are operational in nature with drills required at regular intervals for all passenger ships. According to <u>MSC.421 (98)</u>, the drills will have to involve crew members who have damage control responsibilities. Additionally, drills will have to be recorded and should cover different damage scenarios.

3. Fire integrity of windows on passenger ships (Amendments to SOLAS regulation II-2/20):

According to <u>MSC.421(98</u>), Amendments to SOLAS regulation II-2/20 were drafted to clarify the requirements in chapter II-2 for the fire integrity of windows on passenger ships carrying not more than 36 passengers and special purpose ships with more than 60 (but no more than 240) persons on board. The amendments explicitly require that for ships carrying not more than 36 passengers, windows facing survival craft and escape slides, embarkation areas and windows situated below such areas shall have a fire integrity at least equal to "A-0" class.

4. Fire protection of domestic boilers (Amendments to SOLAS Chapter II-2/10.5):

The text of regulation II-2/10.5.1.2.2 has been amended. Prior to the amendment domestic boilers of less than 175kW were not required to carry an approved 135l foam-type fire extinguisher. The 135l foam extinguishers are now not required for boilers that are protected by a fixed local water-based firefighting system. Namely, according to <u>MSC.409 (97)</u>, in paragraph 5.1.2.2, the last sentence is replaced with the following:

"In the case of domestic boilers of less than 175 kW, or boilers protected by fixed water-based local application fire-extinguishing systems as required by paragraph 5.6, an approved foam-type extinguisher of at least 135 l capacity is not required."



5. Evacuation analysis now mandatory (Amendments to SOLAS II-2/13):

Existing paragraph II-2/13.7.4 is deleted. New paragraphs II-2/13.2.7.1 and II-2/13.2.7.2 have been introduced which require escape routes to be evaluated to demonstrate that the ship can be evacuated in the required time. According to <u>MSC.404 (96)</u>, the evacuation simulation will be used to identify and eliminate congestion which may develop during abandonment and demonstrate that escape arrangements are sufficiently flexible to provide for the possibility that certain routes/areas may not be available as a result of a casualty.

6. Helicopter facility foam firefighting appliances (Amendments to SOLAS Regulation II-2/18 and the FSS Code Chapter 17):

<u>MSC.404 (96)</u> states that amendments to SOLAS II-2/18 have a new paragraph 2.3 to require a foam application system that complies with the new chapter 17 of the FSS Code. The new Chapter 17 of the FSS Code details the specifications for foam firefighting appliances for the protection of helidecks and helicopter landing areas as required by chapter II-2 of SOLAS. As per <u>MSC.403(96)</u>, for helicopter landing areas, at least two portable foam applicators or two hose reel foam stations shall be provided, each capable of discharging a minimum foam solution discharge rate.

7. Fire safety requirements for cargo spaces containing vehicles with fuel in their tanks for their own propulsion (Amendments to SOLAS II-2/20):

Cargo spaces on all ships used for the transport of motor vehicles

(a) With fuel in their tanks for their own propulsion, that are loaded/unloaded into cargo spaces which do not meet the requirements of SOLAS II-2/20, "Protection of vehicle, special category and ro-ro spaces"; and

(b) That do not use their own propulsion within the cargo space are not required to comply with SOLAS II-2/20 provided the vehicles are carried in compliance with the appropriate requirements of regulation 19 and the IMDG Code, as defined in SOLAS VII/1.1, in accordance with <u>MSC.421(98)</u>

8. Requirements for lifeboats and rescue boats, launching appliances and release gear (Amendments to SOLAS Regulations III/3 and III/20):

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

9. Mobile Satellite Service (Amendments to Chapter IV):

Various regulations of Chapter IV and the Record of Equipment model form were amended to remove references to "Inmarsat" and replace with references to "a recognized mobile satellite service". <u>MSC.436 (99)</u> clarifies that as a recognized mobile satellite service is defined any service which operates through a satellite system and is recognized by the Organization, for use in the global maritime distress and safety system (GMDSS)



10. Harmonization of survey periods of cargo ships not subject to the ESP Code (SOLAS XI-1/2):

New regulation of SOLAS Chapter XI-1 revised the SOLAS Safety Construction Renewal Survey window for cargo ships which are not subject to the Enhanced Survey Program Code, so as to be harmonized with the Renewal Survey window under the ESP Code. <u>MSC.409(97)</u> states '' For cargo ships not subject to enhanced surveys under regulation XI-1/2, notwithstanding any other provisions, the intermediate and renewal surveys included in regulation I/10 may be carried out and completed over the corresponding periods as specified in the 2011 ESP Code, as may be amended, and the guidelines developed by the Organization, as appropriate''

11. Damage Stability Explanatory Notes (SOLAS II-1):

Explanatory notes correspond to the extensive revisions of SOLAS chapter II-1, adopted by resolution <u>MSC.421 (98).</u>

12. INS performance standards (SOLAS V/18) - from 1st of July, 2020:

Integrated Navigation Systems should comply with the revised performance standards, as per MSC.452 (99) and <u>MSC.252 (83)</u>

Amendments/ Revisions of Codes:

1. FSS Code, Chapter 8 - Automatic Sprinkler, Fire Detection and Fire Alarm Systems:

<u>MSC.1/Circ.1516</u> includes a new provision for water quality testing for automatic sprinkler systems and new flow charts for the testing and replacement of sprinkler heads and water mist nozzles. The related amendment to Chapter 8 of the FSS Code adds a new requirement for special attention to be paid to the specification of water quality provided by the system manufacturer, to prevent internal corrosion and clogging of sprinklers.

2. IGC Code - Applicable fire integrity of wheelhouse windows:

The IGC code has been revised to align with the requirements given in the SOLAS regulation II-2/4.5.2.3. The amendments remove the requirement for A-0 fire-rated wheelhouse windows. Namely, <u>MSC.411 (97)</u> states:

"3.2.5 Windows and side-scuttles facing the cargo area and on the sides of the superstructures and deckhouses within the limits specified in 3.2.4, except wheelhouse windows, shall be constructed to "A-60" class. Side-scuttles in the shell below the uppermost continuous deck and in the first tier of the superstructure or deckhouse shall be of fixed (non-opening) type."

3. IGF Code - Regulations for fire protection:

The amendments remove the requirement for A-0 fire-rated wheelhouse windows, as per $\underline{MSC.422}$ (98)



4. LSA Code - Amendments on winches and winch brakes:

Corrections to the provisions relating to winch and winch brake test loads as prescribed in the LSA Code. <u>MSC.425(98)</u> clarifies that " *Structural members and all blocks, falls, pad-eyes, links, fastenings and all other fittings used in connection with launching equipment shall be designed with a factor of safety on the basis of the maximum working load assigned and the ultimate strengths of the materials used for construction. A minimum factor of safety of 4.5 shall be applied to all structural members including winch structural components and a minimum factor of safety of 6 shall be applied to falls, suspension chains, links and blocks"*

5. 2008 Intact Stability (IS) Code - anchor handling, towing or lifting operations:

The Introduction and Part A of the 2008 IS Code have been amended to include new definitions and clarification about the new criteria. The new criteria require an assessment of the ship's intact stability when undertaking anchor handling, towing or lifting duties. The new criteria in Part B also require an assessment of the ship's intact stability when undertaking towing and lifting operations.

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

The footnote to title of chapter 2, General Criteria, of Part A of IS Code is deleted, to remove any misunderstanding that the referenced regulations of Part B become mandatory via a footnote.

6. 1994 and 2000 HSC Codes:

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

7. 2009 MODU Code - Installations in hazardous areas, Fire Safety, LSA and Operational procedures:

Chapters 1, 6, 8, 9, 10, 13 and 14 of the 2009 MODU Code have been amended. As per <u>MSC.435(98)</u>, revisions to the text include defining the 'H' class fire protection standard, changes to the required drills, provision of a dedicated rescue boat and allowing multiple fixed monitors to be used as an alternative to the drill floor fixed pressure water-spraying system.

8. IGC Code – Stability PC:

An approved stability instrument capable of verifying compliance with the applicable intact and damage stability requirements is to be fitted onboard. The approval generally applies to the software using <u>MSC.1/Circ.1229</u>, but it may include hardware. This resolution revises the model form of the Certificate of Fitness for Carriage of Liquefied Gases in Bulk to reflect confirmation of this instrument or an accepted alternative during surveys.



9. BCH & IBC Code – Stability PC:

An approved stability instrument capable of verifying compliance with the applicable intact and damage stability requirements is to be fitted onboard. The approval generally applies to the software using <u>MSC.1/Circ.1229</u>, but it may include hardware. This resolution revises the model form of the Certificate of Fitness for Carriage of Dangerous Chemicals in Bulk to reflect confirmation of this instrument or an accepted alternative during surveys.

10. FTP Code Revision – Fire protection provisions:

The Code for Application of Fire Test Procedures, 2010, was revised by resolution MSC.437 (99) to be consistent with SOLAS Chapter II which applies the same fire protection provisions for exposed floor coverings on passenger ships carrying not more than 36 passengers with those carrying more than 36 passengers.

11. FSS Code Chapter 13 - Arrangement of Means of Escape:

A revision has been made to 2.1.2.2.2 distribution of persons, case 2 for passenger ship evacuation analysis, for the purpose of clarifying the distribution of crew in public places. In particular, <u>MSC.410</u> (97) mentions that *'Passengers in public spaces occupied to 3/4 of maximum capacity, 1/3 of the crew distributed in public spaces; service spaces occupied by 1/3 of the crew; and crew accommodation occupied by 1/3 of the crew''*

12. International Maritime Dangerous Goods Code - Amendment 39-18:

The IMDG Code amends the following classification categories:

- Class 1: Explosives hazard divisions for packages containing pyrotechnic substances are revised.
- Class 3: Flammable liquids the marking, labelling and testing of packages containing viscous liquids are revised.
- Class 4: Flammable solids revision of the classification of self-reactive substances.
- Class 5: Oxidizing substances and organic peroxides packing instructions and methods are revised. Class 8: Corrosive substances a completely new Chapter 2.8 is adopted.
- Class 9: Miscellaneous dangerous substances and articles, and environmentally hazardous substances the marking and packaging of lithium batteries are consolidated. MSC.1/Circ.1588 recommends voluntary application of the amendments as of January 1, 2019.

13. BCH Code - Model Form of Certificate of Fitness:

Revised text has been added to the model form to correlate with recent amendments to paragraph 2.2.6 of the Code, which requires provision of an approved stability instrument onboard, or other approved methods for ensuring safe loading of cargoes.

14. IBC Code- Model Form of Certificate of Fitness:

Revised text has been added to the model form to correlate with recent amendments to paragraph 2.2.6 of the Code, which requires provision of an approved stability instrument onboard, or other approved methods for ensuring safe loading of cargoes.



15. SPS Code Revisions:

The form of the Record of Equipment for Compliance with the SPS Code (Form SPS) has been revised in the "Radio Facilities" section, to refer to the use of a "Recognized mobile satellite service ship earth station", rather than referring to a "Inmarsat ship earth station".

MARPOL Amendments:

1. Sulphur Content in Fuel Oil (MARPOL VI Regulation 14):

Sulphur content of any fuel oil used on board ships outside of Sox Emission Control Areas (Global Cap) shall not exceed 0.5% m/m on or after 1 January 2020.

2. Ozone-depleting substances, Hydro chlorofluorocarbon (HCFC) Refrigerants (MARPOL Annex VI):

According to <u>MEPC.176 (58)</u>, regulation 12 of MARPOL Annex VI states that installations which contain hydro chlorofluorocarbons shall be prohibited:

- On ships constructed on or after 1st January 2020 or
- In the case of ships constructed before 1st January 2020 which have a contractual date of the equipment to the ship on or after 1st January 2020, or in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after 1st January 2020. However, this does not apply to permanently sealed equipment where there are no refrigerant charging connections or potentially removable components containing ozone depleting substances.

3. Energy Efficiency Design Index (EEDI) (New Chapter 4 of MARPOL Annex VI):

The CO2 reduction level includes three phases; Phase 2 starts on 01/01/2020.

The new chapter 4 Regulations on energy efficiency for ships to MARPOL Annex VI, makes mandatory the Energy Efficiency Design Index (EEDI), for new ships, and the Ship Energy Efficiency Management Plan (SEEMP) for all ships. Other amendments to Annex VI add new definitions and the requirements for survey and certification, including the format for the International Energy Efficiency Certificate.

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

4. Ship Fuel Oil Consumption Database Guidelines (MARPOL VI):

These 2017 Guidelines provide guidance to assist:

- Administrations in developing their program to verify ship's fuel oil consumption data
- The IMO Secretariat on the development and management of the IMO Ship Fuel Oil Consumption Database, and describe methods that will be used to anonymize ship data to ensure the completeness of the database.



Other Regulations:

1. At Berth Ocean Going Vessels Regulation:

Regulation applies to container-ship, passenger-ship, and refrigerated cargo ship fleets that visit the same California port at least:

- 1. 25 times per year for container-ship and refrigerated cargo ship or
- 2. 5 times per year for passenger ships.

Two options for compliance are provided:

- Reduced onboard generation option: 80% of the fleet's port visits must comply with regulations specifying a 3 hour or 5 hour total limit (dependent on power arrangements in port) for auxiliary diesel engine use while berthed.
- Equivalent emissions reduction option: NOx and particulate matter emissions must be reduced by 80% from the fleet's baseline.

2. IRNSS performance standards [from 1st of July, 2020]:

IRNSS is compatible with other navigation satellite systems worldwide. It comprises three major components: space segment, ground control segment and user terminals.

According to <u>MSC.449 (99)</u>, the IRNSS receiver equipment should include the following minimum facilities:

- 1. antenna capable of receiving IRNSS signals;
- 2. IRNSS receiver and processor;
- means of accessing the computed latitude/longitude position;
- 1. data control and interface; and
- 2. position display and, if required, other forms of output

3. Ballast Water Management System Code Approval (from 28th of October, 2020):

5 years later, with endless discussions, negotiations and multiple revisions of the G8, the IMO decided that a new BWMS Code (which is a revised G8) is to become mandatory for all BWMS that will be installed onboard ships after 28 October 2020. This means that in order to install a BWMS after 28 October 2020, that <u>BWMS must be type approved following the BWMS Code</u>.

Namely, BWM systems are to be approved in accordance with the new Code for Approval of BWMS, which incorporates and is technically consistent with the 2016 G8 Guidelines. Upon entry into force of the BWMS Code, the 2016 G8 Guidelines will be revoked. BWM systems installed before 28 October 2020 may be approved taking into account the earlier G8 Guidelines developed by the IMO.

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