

Subject: Brief Summary on Outcome of MSC 108.

1. The 108th session of the Maritime Safety Committee (MSC) of IMO was held from 15th to 24th May 2024.
2. Following are the summary of important outcomes and discussions which took place at the meeting:

i. Adoption of amendments to mandatory instruments:

a. SOLAS Chapter II-1, Regulation 3-4:

Adopted amendments to SOLAS regulation II-1/3-4 to require emergency towing arrangements on ships other than tankers of not less than 20,000GT. In addition, guidelines specifying specific requirements for the arrangement are under consideration by the Sub-Committee on Ship Design and Construction (SDC) with a target completion in 2025.

The amendments will enter into force from **1 January 2028.**

Key points to be noted are as follows:

- Ships must be capable of rapid towing deployment without main power.
- Towing arrangements should facilitate easy connection to the towing ship.
- The equipment must be strong enough to handle the ship's size and bad weather conditions.
- The design, construction, and testing of the towing arrangements need approval by the Administration, based on the guidelines developed by the Organization.

Implications:

- Shipbuilders must incorporate these towing arrangements into new ship designs.
- Ship owners need to ensure new ships comply with these safety requirements, increasing initial costs.

b. SOLAS Chapter II-2, Regulation 4:

Adopted the resolution MSC .550(108) for amendments to SOLAS Chapter II-2, Regulation 4 in relation to addition of a new functional requirement vide paragraph 2.1.9 specifying the oil fuel delivered and used on ships should not jeopardize the safety of the ship or adversely affect the performance of machinery or be harmful to personnel.

The amendments will enter into force from **1 January 2026.**

c. SOLAS Chapter II-2, Regulation 7:

Adopted amendments to SOLAS Chapter II-2 (resolution MSC.550(108)), Part C, concerning fire suppression.

These amendments affect regulation 7, paragraphs 5.2 and 5.5:

- Paragraph 5.2: Now includes the word "fire" before the alarm system for spaces with low fire risk (for passenger ships carrying more than 36 passengers).
- Paragraph 5.5: Requires detection and alarm systems for “control stations and cargo control rooms” on cargo ships according to the applicable method (i.e. IC; IIC; IIIC).

Implications:

- Shipbuilders must upgrade fire detection and alarm systems in new designs.
- For new cargo ships, ship owners need to comply with amended requirements, thereby increasing cost.

The amendments will enter into force from **1 January 2026**. Cargo ships constructed before this date are to comply with the previous requirements.

d. SOLAS Chapter II-2, Regulation 20:

These changes are based on the EMSA FIRESAFE studies (2016-2018), aiming to reduce fire risks on ro-ro passenger ships.

Key amendments include the following:

- The term ‘ro-ro’ spaces is now expanded to clarify ro-ro spaces as open and closed ro-ro spaces as well as weather decks intended for carriage of vehicles.
- Fixed Water-Based Fire-Extinguishing Systems: Requirements to Protect weather decks and ro-ro spaces with closing devices. Includes continuous video monitoring for existing ships.
- Linear Heat Detectors: Reg II-2/20.4.1 now requires smoke and heat detectors in vehicle, special category, and ro-ro spaces. Linear heat detectors are acceptable, if tested under normal ventilation conditions. Existing ships must also comply, and smoke detectors cannot be substituted.
- Video Monitoring: Amendments to Reg II-2/20.4.4 require effective video monitoring systems in these spaces. Systems must provide immediate playback capability and cover the entire space, with cameras high enough to see over cargo and vehicles.
- Arrangement of Openings in Ro/Ro and Special Category Spaces: Reg II-2/20.5.2 changes include the term "normally occupied service spaces" and specific safety distance requirements.
- Water Monitors for Existing Ships: Reg. II-2/20.6.2 mandates retrofitting existing ro-ro passenger ships with fixed water-based fire extinguishing systems for weather decks.
- New section 7 requires suitable signage and markings for fixed fire extinguishing systems in new ships, considering crew movement patterns and cargo obstructions.

Implications:

- Shipbuilders: Must incorporate new fire protection measures, linear heat detectors, and video monitoring systems in designs.
- Ship Owners: Need to retrofit existing ships with compliant systems and ensure new builds meet updated standards, impacting operational costs and safety protocols.

Applicable to new ships (fitted with vehicles, special categories, open and closed ro/ro spaces, and weather decks intended for the carriage of vehicles) built on or after **1 January 2026**, and existing ships, which must comply by their first survey on or after **1 January 2028**.

e. SOLAS Chapter V, Regulations 31 & 32:

The Committee adopted the resolution MSC.550(108) for amendments to Regulation 31 pertaining to the communication of incidents related to loss of freight containers from ships. The Master of the involved ship is required to communicate the particulars of such incident to all ships in the vicinity, the nearest coastal state, and the flag Administration of the ship. Also, the Master of any Ship upon observation of freight containers drifting at sea is required to communicate the particulars of such observation to all ships in the vicinity and the nearest coastal state.

Regulation 32 is consequently amended to reflect the format of the information required to be included regarding incident pertaining to loss of freight containers or sighting of freight containers drifting at sea.

Implications:

- Ship owners must implement procedures for reporting lost containers, potentially increasing operational responsibilities.

The amendments will enter into force from **1 January 2026** and will apply to any ship carrying or sighting lost containers.

f. IGF Code:

The MSC 108, following the work of the CCC, adopted several amendments to the IGF Code through resolution MSC.551(108). These changes cover various aspects of safety and operational requirements for ships using low-flashpoint fuels.

Key amendments include the following:

- Venting, Pressure Relief, and Ventilation Requirements: Paragraphs 9.6, 9.6.1, 11.6.2, 9.4.7, 12.5, and 6.7.3.1.1 amended
- Fuel Supply Failures: Paragraph 9.3.1: Focuses on managing the failure of essential fuel supply auxiliaries and allows for a partial reduction in propulsion capability.
- Delivery Pressure and Bunkering Line Design: Part A-1, Paragraphs 5.12.1, 6.9.1.1, 9.8.1, 9.8.2, 9.8.4, and Part C-1, Paragraph 18.4.1.1.1 amended.
- General Pipe Design: Paragraph 7.3.2 amended focusing on the wall thickness requirements.

- Bunkering Manifolds and Level Indicators: Paragraph 8.4 amended for the design and safety of bunkering manifolds. Paragraph 15.4.1 updated providing the requirements for level indicators in liquefied gas fuel tanks.

Implications:

- Shipbuilders: Must incorporate the new venting, pressure relief, ventilation, and design requirements into ship construction.
- Ship Owners: Need to ensure that both new and existing ships comply with the updated IGF Code provisions, impacting safety systems, operational procedures, and compliance protocols.

The amendments will enter into force from **1 January 2026**.

g. Grain Code:

The Committee adopted resolution MSC.552(108) to amend the International Code for the Safe Carriage of Grain in Bulk (Grain Code). The amendments introduce a new class of loading conditions for "specially suitable compartment, partly filled in way of the hatch opening, with ends untrimmed" and specify the requirements under which grain could be carried in such compartments.

Implications:

- Shipbuilders: Design and classify compartments according to the new loading condition standards.
- Ship Owners: Need to update stability booklets and ensure compliance with the new loading conditions, impacting operational procedures and safety documentation.

The amendments will enter into force from **1 January 2026**. Applicable to both new and existing ships. Stability Booklet is to include relevant information before the first loading in accordance with the new conditions after the 1 January 2026.

h. 2011 ESP Code:

The MSC 108 adopted an amendment to the annexes of the 2011 ESP Code (2019 Amendments) through resolution MSC.553(108). These changes clarify the roles of Administrations and their Recognized Organizations regarding the approval and certification of firms engaged in thickness measurement of hull structures.

Key amendments include the following:

- Amendments addresses inconsistencies in the definition of "Administration" in the 2019 amendments to the ESP Code. Previously, "Administration" was defined as either the Administration or an organization recognized by the Administration, differing from definitions in SOLAS, MARPOL, and Load Line conventions. Changes made ensure that Administrations can participate directly in the document review and certification process of firms engaged in thickness measurements of hull structures.

The amendments will enter into force from **1 January 2026**.

i. LSA Code:

The Committee adopted resolution MSC. 554(108) for amendments to the LSA Code. The amendments correspond to the following topics:

- Chapter II, Section 2.2.1 (General requirements for lifejackets) – The amendment further clarifies the expected performance for the self-righting of the lifejacket.
- Chapter IV, Section 4.4.7 (Lifeboat fittings) – The amendment is targeted at providing clarification on the hook as well as the single fall and hook system.
- Chapter VI, Section 6.1.2 – The amendment pertains to the lowering speed of the survival craft or the rescue boat. The amendment specifies maximum speed of the survival craft or the rescue boat to be 1.3 m/s.

Implications:

- Shipbuilders: Accommodate lifesaving appliances meeting the new/ clarified safety standards.
- Ship Owners: Need to retrofit or replace existing lifesaving appliances to comply with new/ clarified safety standards.

The amendments apply to lifesaving appliances installed on or after **1 January 2026**.

j. Amendments to the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (Res. MSC.402(96)):

MSC 108 adopted resolution MSC.559(108), introducing amendments to paragraph 6.2.3 of the Requirements for Maintenance, Thorough Examination, Operational Testing, Overhaul, and Repair of Lifeboats and Rescue Boats, Launching Appliances, and Release Gear (resolution MSC.402(96)). These amendments follow new ventilation requirements for totally enclosed lifeboats (resolution MSC.535(107)).

The amendments to Paragraph 6.2.3 stipulate that Lifeboats, including free-fall lifeboats, rescue boats, and fast rescue boats, are to have their ventilation systems thoroughly examined and checked for satisfactory condition and operation.

Implications:

- Shipbuilders: Must incorporate compliant ventilation systems in lifeboat designs.
- Ship Owners: Need to ensure regular maintenance and checks of ventilation systems in lifeboats, enhancing safety and operational reliability.

The amendments will enter into force from **1 January 2026**.

k. FSS Code:

The Committee adopted vide resolution MSC.555(108) amendments to the FSS Code. The amendments include the following:

- Chapters 7 and 9 of the FSS Code, including specification of fixed water-based fire-extinguishing on ro-ro passenger ships having weather decks intended for the carriage of vehicles, and
- applicable test standards for heat detectors and linear heat detectors

The amendments will enter into force from **1 January 2026**.

l. IMDG Code:

The MSC 108 adopted amendments to the IMDG Code, known as Amendment 42-24, through resolution MSC.556(108). These changes will be incorporated into the 2024 Edition of the IMDG Code, updating requirements for both new and existing substances.

Key Amendments include following:

- New Definitions and Modifications to definitions introduced.
- Substance Lists updated.
- Chapters updated. In chapter 2.9.2, a new part for assigning "Sodium ion batteries" to class 9 added. In Chapters 3, 4, 5, and 6, various amendments made to improve safety and clarity.
- Revised emergency schedules (EMS) Guide. Amendments made to MSC.1/Circ.1588/Rev.2, resulting in the preparation of a revised consolidated version of the EMS Guide (MSC.1/Circ.1588/Rev.3).

Implications

- Shipbuilders: Design and denote ships according to the updated definitions and classifications in the IMDG Code.
- Ship Owners: Need to update operational procedures, training, and documentation to comply with new requirements, impacting safety and compliance standards.

Amendments are effective from **1 January 2026**. Applicable to all ships, including cargo ships of less than 500 GT, that carry dangerous goods in packaged form.

Member States are encouraged to disseminate the revised EMS guide, with voluntary application from **1 January 2025**.

m. STCW Code:

The amendments (Res. MSC.560(108)) to Part A of the STCW Code include the requirements to prevent and respond to bullying and harassment in the minimum standard of competence in personal safety and social responsibilities (Table A-VI/4).

The amendments will enter into force from **1 January 2026**.

n. 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(85) as amended):

The Committee adopted vide resolution MSC.557(108) amendments to the performance standards for protective coatings of dedicated sea water ballast tanks in all types of ships and double side-skin spaces of bulk carriers. Specifically, the amendments are made to Section 6.1 – the coating inspector should be certified now to AMPP Certified Coatings Inspector instead of the NACE Coating Inspector Level 2.

The amendments will enter into force from **1 January 2026**. As a consequence, revision was also made to MSC.1/Circ.1330 and this is issued as MSC.1/Circ.1330/Rev.1

o. Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (MSC.288(87) as amended):

The Committee approved vide resolution MSC.558(108) amendments to the performance standards for protective coatings of cargo oil tanks of crude oil tankers. Specifically, the amendments are made to Section 6.1 – the coating inspector should be certified now to AMPP Certified Coatings Inspector instead of the NACE Coating Inspector Level 2.

The amendments will enter into force from **1 January 2026**. As a consequence, revision was also made to MSC.1/Circ.1399 and this is issued as MSC.1/Circ.1399/Rev.1

ii. Development of a goal-based instrument for Maritime Autonomous Surface Ships (MASS):

The Committee progressed on the development of the draft non-mandatory MASS Code which is expected to be adopted at MSC 110 in 2025 followed by an experience building phase. The consolidated draft text was produced capturing inputs from the Intersessional Correspondence Group and Intersessional Working Group.

The draft Code, applicable to cargo ships with the exclusion of cargo high speed craft, consists of three Parts:

Part 1 “Introduction”, Part 2 “Main principles for MASS and MASS functions”, and Part 3 “Goals, functional requirements and provisions”.

Given the significant volume of work to be completed by 2025, intersessional working and correspondence groups have been established to progress on several aspects such as – but not limited to – approval process, management of safe operations, connectivity, software principles, alert management, role of human element, safety of navigation.

It was noted that achieving the 2026 adoption deadline for a mandatory Code would not be possible, and the earliest possible entry into force would now be **1 January 2032**.

iii. Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels:

The following key points to be noted:

- The Committee noted the views of the Group concerning requirements for ship-specific training and agreed to inform the HTW Sub-Committee accordingly.
- MSC noted the need to clarify whether or not the IGF Code applies to ships using gas as fuel irrespective of flashpoint and take action, as appropriate.
- The Committee noted the views of the Group regarding the mechanism for the allocation of work to subcommittees for coordination of tasks under this new output and invited interested parties to submit proposals to MSC 109 containing elements that should be taken into consideration while assigning priority, if necessary, to the tasks to be allocated.
- The Committee endorsed the view of the Group that when preparing emergency response plans, the port community should be informed about the challenges posed by the use of alternative fuels.
- The Committee re-established the Correspondence Group on Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels and tasked it to submit its report to MSC 110 (and making an oral report to MSC 109).
- The Committee agreed to establish a GHG Safety Working Group at MSC 109.

iv. Revision of the Guidelines on Maritime Cyber Risk Management (MSCFAL.1/Circ.3/Rev.2) and Identification of next steps to enhance Maritime Cyber Security:

The Committee approved the draft revised Guidelines on maritime cyber risk management (MSCFAL.1/Circ.3/Rev.3) and agreed to forward them to the Facilitation Committee for its concurrent approval.

The revised Guidelines provide high-level recommendations to safeguard ships from cyberthreats and include among the others, the following amendments:

- functional/technical cybersecurity controls that represent minimum controls that should be implemented;
- identification that Computer Based Systems (CBS) onboard, to be protected, include information technologies (IT) and operational technologies (OT), but OT should be segmented from IT and protected from internet facing systems;
- update of the list of potentially vulnerable systems, including ship-port interfaces; and ship to shore systems (e.g. remote-control systems/ MASS);
- designation of a person or entity accountable for planning, resourcing and execution of cybersecurity activities;
- an inventory of digital systems onboard should be established and maintained;
- implementation of security measures (such as firewall or antivirus) for ship digital systems that have access to the internet or interaction with third party or ashore networks;

- controls to protect systems from the use of unauthorized removable media should be established;
- annual basic cybersecurity training for all employees, OT-specific cybersecurity training for OT users, and cybersecurity familiarization to all crew members;
- measures to minimize the effect of detected cyber incidents to other ship systems should be implemented;
- reporting of cyber incidents to required parties within required timeframes as defined by the Administration; and
- request for equipment and systems to be designed and tested as per international standards (among referenced standards and best practice IACS UR E26 and UR E27 have been included).

v. Navigation, communications and search and rescue:

MSC did not agree that the IMO needs to develop a formal recognition framework for new terrestrial GMDSS services, such as NAVDAT, concluding that NAVDAT should not replace NAXTEX and should not be made mandatory.

The Committee adopted resolution MSC.530(106)/Rev.1 on Performance Standards for Electronic Chart Display and Information Systems (ECDIS). The revised resolution is applicable for ECDIS equipment installed on or after **1 January 2029**.

The Committee approved MSC.1/Circ.1313/Rev.2 on Joint IMO/IHO/WMO Manual on Maritime Safety Information to be implemented from **1 January 2025**.

vi. Carriage of Cargoes and Containers:

The Committee adopted vide resolution MSC.565(108) the Revised Interim Recommendations for Carriage of Liquefied Hydrogen in Bulk. Additionally, the Committee also agreed to include the output on "Revision of the Interim recommendations for carriage of liquefied hydrogen in bulk" in the provisional agenda for CCC 10 and to extend the target completion year to 2026.

The Committee approved the following circulars:

- MSC.1/Circ.1599/Rev.3 - Revised Guidelines on the application of high manganese austenitic steel for cryogenic service
- MSC.1/Circ.1622/Rev.1 - Revised Guidelines for the acceptance of alternative metallic materials for cryogenic service in ships carrying liquefied gases in bulk and ships using gases or other low-flashpoint fuels
- MSC.1/Circ.1679 – Interim Guidelines for use of LPG Cargo as Fuel

The Committee also approved the draft amendments proposed in annex to MSC 108/14/1 regarding use of ammonia cargo as fuel with view to adoption at MSC 109 and entry into force on **1 January 2026**.

vii. Ammonia Cargo as fuel:

The draft amendments to the IGC Code should be finalised at CCC 10, with a view to approval at MSC 109 (December 2024) and subsequent adoption at MSC 110, with an expected entry into force of **1 January 2028**. In this regard, MSC 108 considered proposals to move forward the timeline for entry into force of the draft amendment to paragraph 16.9.2 of the IGC Code through approval of the draft amendment at this session and adoption at MSC 109; for earlier entry into force of the amendment, i.e. **1 July 2026**. The proposals aim to address the current ban in the IGC Code on the use of ammonia cargo as fuel.

MSC 108 approved draft amendments to the IGC Code, with a view to adoption at MSC 109, and entry into force on **1 July 2026**, together with an MSC circular on the early implementation of the draft amendments to be issued at MSC 109.

viii. Ship Design & Construction:

The Committee approved the following circulars:

- 1) MSC.1/Circ.1212/Rev.2 - Revised guidelines on alternative design and arrangements for SOLAS chapters II-1 and III
- 2) MSC.1/Circ.1572/Rev.2 - Unified interpretations of SOLAS chapters II-1 and XII, of the technical provisions for means of access for inspections (resolution MSC.158(78)) and of the Performance standards for water level detectors on ships subject to SOLAS regulations II-1/25 and 25 1, and XII/12 (resolution MSC.188(79)/Rev.2).
- 3) MSC.1/Circ.1509/Rev.1 - Unified interpretations of the Code on Noise Levels on Board Ships (resolution MSC.337(91))
- 4) MSC.1/Circ.1511/Rev.1 on Unified interpretations of SOLAS regulations II-2/9 and 13.
- 5) MSC.1/Circ.1680 - Unified interpretations of SOLAS regulation XV/5.1 and paragraph 3.5 of part 1 of the International Code of Safety for Ships Carrying Industrial Personnel (IP Code) on the harmonization of the Industrial Personnel Safety Certificate with SOLAS safety certificates.

Enclosure: Nil
