



# IMO News Final

## MSC 108



**One hundred-eighth session of the Maritime Safety Committee (hereinafter referred to as MSC 108) was convened in London from 15 to 24 May 2024 to discuss a wide range of issues under the purview of the Committee. This news final briefs on the outcomes of MSC 108 and provides impact analysis on major technical issues.**

### Executive Summary

The Committee adopted the amendments to various Conventions and mandatory IMO instruments, which enter into force on 1 January 2026 or 1 January 2028. The major amendments may be as listed below, and the details of all revisions can be found in this IMO News Final.

- Emergency towing arrangements for new ships other than tankers;
- Fire detection and fire alarm system for control stations and cargo control rooms;
- Fire safety of new and existing ro-ro passenger ships;
- Reporting of containers lost at sea;
- Amendments to the IGF Code on various safety issues;
- Amendments to the LSA Code on various safety issues;
- New loading condition for the carriage of grains;
- Amendments to the IMDG Code;
- Training of seafarers for prevention of, and response to, violence and harassment; and
- Training, certification and watchkeeping for fishing vessel personnel

In addition, a number of non-mandatory instruments including technical guidelines and unified interpretations were approved at this session. Key issues may be as follows:

- Draft revised guidelines on maritime cyber risk management;
- Revised Performance standards on Electronic Chart Display and Information Systems (ECDIS);
- Interim Guidelines for use of LPG cargo as fuel;
- Revised interim recommendations for carriage of liquefied hydrogen in bulk; and
- Unified interpretations on SOLAS, the Noise Code, and the IP Code

MSC 108 also approved draft amendments to the IGF Code relating to various safety issues and the IGC Code relating to the use of toxic cargoes (e.g. Ammonia) as fuel. However, these draft amendments need to go through the formal adoption process at the next session of MSC to become legally binding.

As part of discussions on safe decarbonization and safe digitalization, MSC 108 kept on developing the non-mandatory Code for autonomous ships and commenced discussing on the safe regulatory frameworks to support the GHG reduction using alternative fuels and new technologies.

Overall, MSC 108 could achieve fruitful outcomes on various safety issues.

Hope KR News Final may assist you to take a close look at and implement appropriately the outcome of MSC 108.

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## 1. Adoption of amendments to Conventions and mandatory IMO instruments (Agenda 3)

### 1.1 Emergency towing arrangements on ships other than tankers (SOLAS regulation II-1/3-4)



Since 1996, every tankers of not less than 20,000 DWT, including oil tankers, gas carriers and chemical tankers, have been required to have emergency towing arrangements fitted at their bow and stern to allow rapid emergency towing and reduce environmental consequence in the event of ship's failure or stranding.

Taking into account the increase in ship's size and the risks incurred by ship's failure or stranding, concern was raised that the emergency towing arrangements should be equally installed on all ship types. After the discussion of SDC Sub-Committee, MSC 108 adopted the amendments to SOLAS regulation II-1/3-4 to expand the installation of emergency towing arrangements to ship types other than tankers.

According to the amendments, emergency towing arrangements shall be fitted on ships, other than tankers, of not less than 20,000 gross tonnage, constructed<sup>1</sup> on or after 1 January 2028. However, these amendments bring design flexibility compared to the one required for tankers and do not require emergency towing arrangements to be installed on both ship's bow and stern.

A new set of technical guidelines is under development by SDC Sub-Committee until early 2025 to supplement the amendments to SOLAS regulation II-1/3-4 and provide detailed guidance on design, construction, and prototype testing of emergency towing arrangements for ship types other than tankers.



Source: resolution MSC.549(108) / MSC 108/20, Annex 1

#### Impact Analysis

#### Owners / Shipyards / Equipment / New constructions

All types of new ships, other than tankers, of not less than 20,000 GT, constructed on or after 1 January 2028 will be required of design modifications compared to the current bow or stern arrangements. Particularly for series ships or sister ships, such design changes should not be overlooked to subsequent vessels in a series where their keel-laying dates are on or after 1 January 2028 unlike their lead vessels.

According to the draft guidelines currently under development by the SDC Sub-Committee (See SDC 10/WP.6, Annex), chafing gear and pick-up gear/towing pennant, which are respectively required at tankers' bow and stern, are categorized as optional for ship types other than tankers. Additionally, the arrangements are not required to both of ship's bow and stern, and bollards or bitts may be accepted as strong points that primarily support the load induced by emergency towing.

Therefore, while tankers' emergency towing arrangements may be still used, the towing and mooring equipment installed in accordance with SOLAS regulation II-1/3-8 may be also utilized as emergency towing arrangements for ship types other than tankers, where they meet the strength requirements in the draft new guidelines to be developed.

<sup>1</sup> The term "ships constructed" hereby means ships the keels of which are laid, or which are at a similar stage of construction in accordance with SOLAS regulation II-1/1.3.1. Please see paragraph 6.1 of MSC 108/WP.6.



### 1.2 Oil fuel quality (SOLAS regulation II-2/4)

Since 2020, MSC has discussed safety issues arising from the use of non-compliant oil fuels. As part of such efforts and following the approval of MSC 107, MSC 108 adopted the amendments to SOLAS regulation II-2/4 to ensure oil fuel quality so as not to jeopardize the safety of ships and personnel or adversely affect the performance of ship's machineries.

These amendments, which are almost identical to MARPOL Annex VI regulation 18.3.1.1.3, establish a legal ground of SOLAS Convention to regulate oil fuel quality, which affects ship's safe operation.

Lastly, these amendments will be implemented on 1 January 2026 to all ships.

Source: resolution MSC.550(108) / MSC 108/20, Annex 2

#### Impact Analysis

Owners / Bunker suppliers / All ships / Retroactive

Given the nature of these amendments, they do not have significant implication to ship's design or operation.

### 1.3 Fire detection and fire alarm system for control stations and cargo control rooms (SOLAS regulation II-2/7)

Given the need to early detect any fires within control stations and cargo control rooms, MSC 108 adopted the amendments to SOLAS regulation II-2/7.5.5. Accordingly, on cargo ships constructed on or after 1 January 2026, their fixed fire detection and fire alarm systems are required to cover all control stations<sup>2</sup> and cargo control rooms under all fire protection methods (IC, IIC, and IIIC).

As a consequence of these amendments, one of existing unified interpretations of SOLAS regulation II-2 contained in MSC.1/Circ.1456 was updated through MSC.1/Circ.1456/Rev.1 to clarify that control stations and cargo control rooms on cargo ships constructed before 1 January 2026 do not need to be covered by a fixed fire detection and fire alarm system.



Source: resolution MSC.550(108) / MSC 108/20, Annex 2

#### Impact Analysis

Owners / Shipyards / New cargo ships

Numerous cargo ships have voluntarily installed fixed fire detection and alarm systems in control stations and cargo control rooms. However, with the amendments mandating such installations, it is imperative to ensure that they are not omitted at the design stage of cargo ship constructions.

### 1.4 Fires safety of new and existing ro-ro passenger ships (SOLAS regulation II-2/20, etc.)

A series of casualties occurred on ro-ro passenger ships in mid-2010 demonstrated the vulnerability of such a ship type to their vehicle deck's fire and led to the discussion of SSE Sub-Committee from 2017 to 2023, which

<sup>2</sup> CO<sub>2</sub> rooms are not generally deemed as control stations defined in SOLAS regulation II-2/3.18. Further, SSE 8 did not agree that fixed fire detection and fire alarm system was necessary for CO<sub>2</sub> rooms and similar spaces (please see page 112 of SSE 9/20)

were mainly based on FIRESAFE I and II studies<sup>3</sup>.



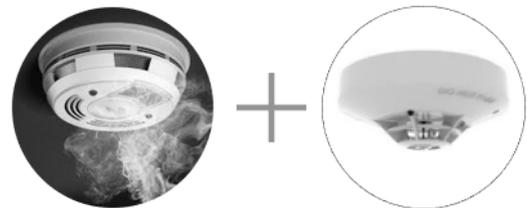
After the longstanding work of SSE Sub-Committee, MSC 108 finally adopted amendments to SOLAS chapter II-2 and the FSS Code to minimize the incidence and consequences of fires in vehicle spaces, special category spaces and ro-ro spaces of new and existing ro-ro passenger ships.

The amendments to SOLAS chapter II-2 mainly focus on reinforcing regulation II-2/20 both for new and existing ro-ro passenger ships.

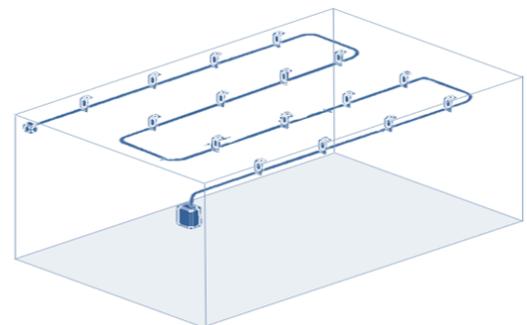
For new passenger ships constructed on or after 1 January 2026, the amendments enhance the fire safety of vehicle spaces, special category spaces and ro-ro spaces and

introduce new requirements for weather decks intended for carriage of vehicles. Key points of the amendments may be summarized as follows:

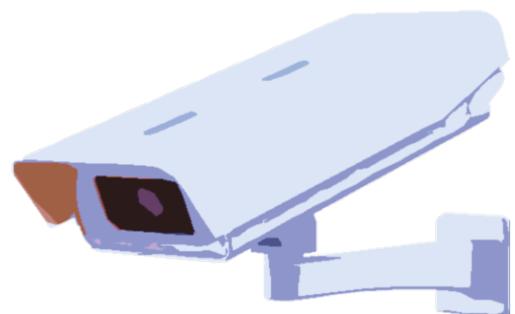
- Individually identifiable fixed fire detection and fire alarm system shall be provided as smoke and heat detectors throughout vehicle spaces, special category spaces and ro-ro spaces. Alternatively, linear heat detectors may be considered in lieu of heat detectors. (SOLAS regulations II-2/20.4.1.1 to 20.4.1.4)
- In special category spaces where a continuous fire watch is always maintained during voyages, a fixed fire detection and fire alarm system is no longer exempted. (SOLAS regulation II-2/20.4.3.1)
- In vehicle spaces, special category spaces and ro-ro spaces, an effective video monitoring system shall be arranged with immediate playback capability and at least 7-day data storage. (SOLAS regulation II-2/20.4.4)
- Fixed water-based fire extinguishing system with water monitor(s) shall be installed to extinguish the fire on weather decks intended for the carriage of vehicle. These water monitors shall comply with the newly established provisions of the FSS Code, i.e. paragraph 2.5 of chapter 7. In this regard, the drainage of 125% capacity shall be provided to effectively remove the fire water accumulated on the weather deck. (SOLAS regulations II-2/20.6.2.1 and 20.6.2.2)
- The detailed requirements have been established for openings in ro-ro spaces. The following illustration may generally explain the allowable arrangements of the openings. Nonetheless, openings with closing arrangements of steel or A-0 class, such as ramps and doors, may be permitted regardless of locations. (SOLAS regulation II-2/20.5.2)



**Combined smoke and heat detectors**

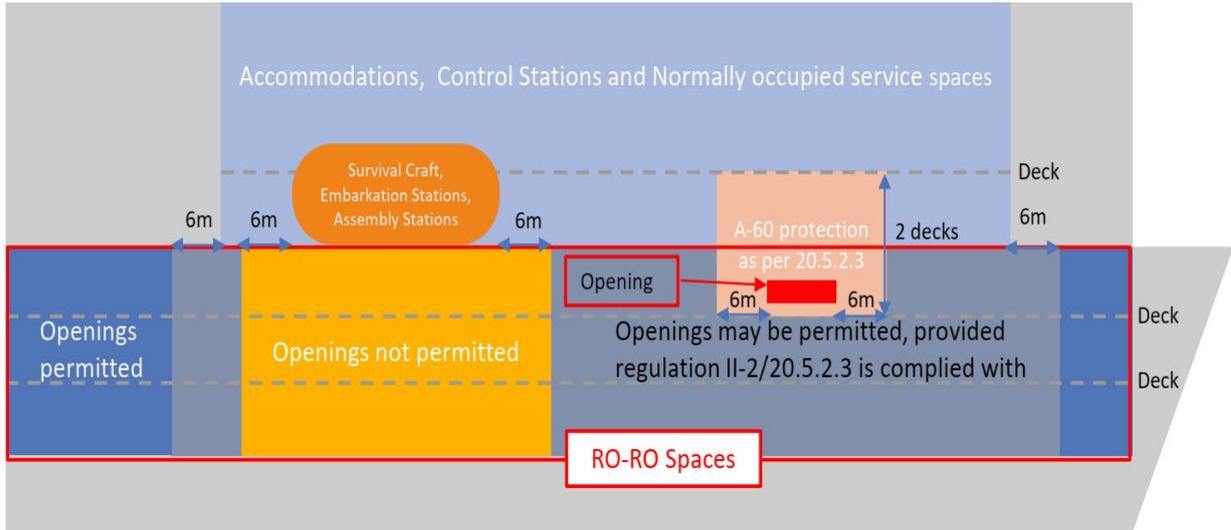


**Linear Heat Detectors**



**Video monitoring system**

<sup>3</sup> Please refer to EMSA's FIRESAFE studies uploaded on <https://www.emsa.europa.eu/firesafe.html>



**Allowable opening arrangements in ro-ro passenger ships**

- Where fixed pressure water-spraying systems are fitted, vehicle spaces, special category spaces and ro-ro spaces shall be provided with suitable signage and marking on deckhead and bulkhead and on the vertical boundaries allowing easy identification of the sections of the fixed fire-extinguishing system. (SOLAS regulation II-2/20.7)

For existing passenger ships constructed before 1 January 2026, the amendments reinforce the functions of existing fire safety arrangements installed onboard and add new requirements for weather decks intended for carriage of vehicles. These retroactive requirements are to be generally implemented on existing passenger ships and confirmed by attending surveyor(s) no later than the first survey coming on or after 1 January 2028. The details are as follows:

- Fixed water-based fire extinguishing system with water monitor(s) shall be installed on ro-ro passenger ships to cover weather decks intended for the carriage of vehicle. However, the capacity shall comply with the provisions in SOLAS, not the new one in the FSS Code. (SOLAS regulation II-2/20.6.2.3)
- Fixed fire detection and fire alarm system in vehicle spaces, special category spaces and ro-ro spaces shall be provided with smoke and heat detectors. In doing so, the heat detectors shall comply with the spacing and coverage requirements of smoke detectors, i.e. 5.5 meters and 74 m<sup>2</sup>. (SOLAS regulation II-2/20.4.1.6)
- In vehicle spaces, special category spaces and ro-ro spaces, an effective video monitoring system shall be arranged with immediate playback capability and at least 24-hour data storage. (SOLAS regulation II-2/20.4.4)



**Water monitors**

Consequently, the FSS Code was also amended to supplement the enhanced design features of fixed fire detection and fire alarm systems and the new requirements of fixed water-based fire extinguishing system with water monitors, as shown below.

Ch.	Para.	Amendments
7	2.5	Engineering specifications were established to address fixed water-based fire-extinguishing system using water monitors to be installed on weather decks intended for the carriage of vehicles of ro-ro passenger ships constructed(K/L) on or after 1 January 2026.

Ch.	Para.	Amendments																
9	2.3.1 2.4.2.2 2.5.1	<ul style="list-style-type: none"> <li>Combined smoke and heat detectors and linear heat detectors are now included in the engineer specifications of fixed fire detection and fire alarm systems. These amendments apply to ships constructed(K/L) on or after 1 January 2026.</li> </ul> <table border="1"> <thead> <tr> <th>Type of detector</th> <th>Maximum floor area per detector (m<sup>2</sup>)</th> <th>Maximum distance apart between centres (m)</th> <th>Maximum distance away from bulkheads (m)</th> </tr> </thead> <tbody> <tr> <td>Heat</td> <td>37</td> <td>9</td> <td>4.5</td> </tr> <tr> <td>Smoke</td> <td>74</td> <td>11</td> <td>5.5</td> </tr> <tr> <td><b>Combined smoke and heat</b></td> <td><b>74</b></td> <td><b>9</b></td> <td><b>4.5</b></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>For ro-ro passenger ships constructed(K/L) on or after 1 January 2026, the requirements of visual and audible fire signals of fixed fire detection and fire alarm system have been added.</li> </ul>	Type of detector	Maximum floor area per detector (m <sup>2</sup> )	Maximum distance apart between centres (m)	Maximum distance away from bulkheads (m)	Heat	37	9	4.5	Smoke	74	11	5.5	<b>Combined smoke and heat</b>	<b>74</b>	<b>9</b>	<b>4.5</b>
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Source: resolutions MSC.550(108) and MSC.555(108) / MSC 108/20, Annexes 2 and 7

Impact Analysis	Owners / Shipyards / Equipment / Passenger ships / Retroactive
<ul style="list-style-type: none"> <li>According to the definition in SOLAS regulation II-2/3.42, 'ro-ro passenger ship' means a passenger ship with ro-ro spaces or special category spaces. Strictly speaking, ro-ro passenger ships are not same with passenger ships with vehicle, special category or ro-ro spaces. For instance, passenger ships only with vehicle spaces are not deemed as ro-ro passenger ships. Accordingly, it should be noted that the kind of passenger ships may be different in applying each provision of these amendments.</li> <li>Combined smoke and heat detectors are already available on the market. Although it may vary by manufacturers, replacing existing detectors in vehicle, special category or ro-ro spaces with combined smoke and heat detectors may be achievable through relatively simple methods (e.g. replacing detectors and updating control panel, etc.). Therefore, it is recommended that pertinent ship owners or operators consult with manufacturers beforehand to assess the extent of upgrading fire detector and fire alarm system.</li> <li>Fixed water-based fire extinguishing system using water monitors are required only for the weather decks intended for carriage of vehicles. As such, if such areas are not designated onboard, the implication may be negligible.</li> <li>Existing provisions in SOLAS chapter II-2 do not require the installation of combined smoke and heat detectors or linear heat detectors on cargo ships. Nonetheless, even if such fire detectors are installed on cargo ships voluntarily to address ship's own fire risk, the revised requirements in paragraphs 2.3.1 and 2.4.2.2 of chapter 9 of the FSS Code should be in principle adhered to, due to the revised paragraph 1.1 of chapter 9 of the Code. This implies that, in case of the spaces where a fixed fire detection and fire alarm system complying with the FSS Code is required under the provisions of SOLAS chapter II-2, the distance between combined smoke and heat detectors should not be more than 9 meters in accordance with the new provision in the FSS Code. Accordingly, where combined smoke and heat detectors are voluntarily installed in ro-ro spaces of PCTC constructed(K/L) on or after 1 January 2026, the number of required detectors may dramatically increase compared to the existing arrangements.</li> </ul>	



### 1.5 Reporting of containers lost at sea (SOLAS regulations V/31 and V/32)

A series of recent container loss have posed navigational threats and revealed that comprehensive regulatory actions should be urgently pursued at the IMO level.

In this regard, MSC 108 adopted the amendments of SOLAS regulations V/31.2 and V/32.3 to establish the reporting procedure relating to the detection, positioning, tracking, and recovery of containers lost at sea. New regulation V/31.2 specifies the role and

responsibility of concerned parties, i.e. master, shipping company, and flag Administrations, in case of losing onboard containers or observing lost containers at sea, and new regulation V/32.3 scopes the information to be reported. These amendments will enter into force on 1 January 2026 for all ships.

Source: resolution MSC.550(108) / MSC 108/20, Annex 2

Impact Analysis

Owners / Flag Administrations

These requirements establish new reporting obligations of ship's masters, operators and flag Administrations. It is recommended that ship's masters and officers of watch are properly educated on the new reporting obligations required by SOLAS regulations V/31.2 and V/32.3, and that these be specified in ship's operating procedures.

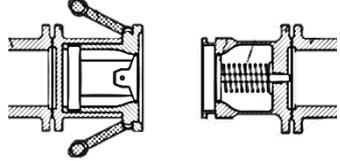
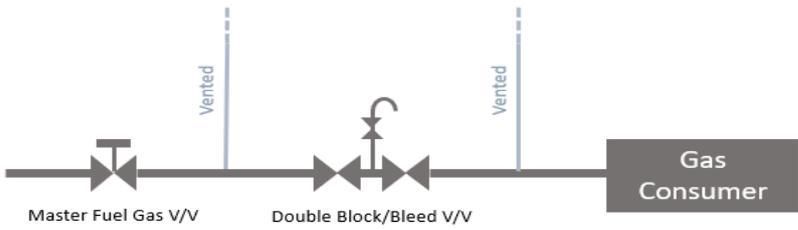
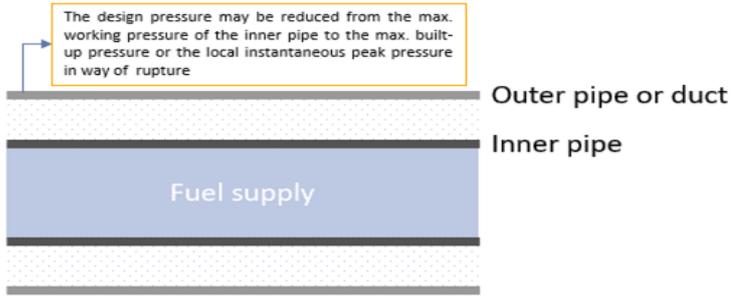
### 1.6 Amendments to the IGF Code on various safety issues

The amendments to the IGF Code were adopted by MSC 108 to address various safety issues and correct editorial errors. These amendments enter into force on 1 January 2026. While they generally apply to **new ships** constructed on or after 1 January 2026<sup>4</sup> but some provisions retroactively apply to **all ships**.

All 27 provisions were amended at this session and key amendments, which may have substantive implications, are summarized in the table below. Nonetheless, it is recommended that concerned parties go through thorough review on all revised provisions in the original IMO paper to correctly assess any implication to their business and works.

Issues (Amended provision)	Application	Amendments
Air locks (5.12.1)	New ships	The requirement on the seal height of air lock's door (i.e. at least 300 mm) only applies to the door leading to the hazardous area.
Pressure relief valves (6.7.3.1.1)	New ships	<p>The pressure relief system for each liquefied gas fuel tank shall be designed to ensure that, in the event of closing any one PRV due to its failure, the capacity of remaining PRVs meets the combined relieving capacity requirements of the system.</p> <div style="text-align: center;"> <p>Examples of allowable combined capacity of PRV</p> </div>

<sup>4</sup> The term “ships constructed on or after 1 January 2026” means ships for the **building contract** is placed on or after **1 Jan 2026** or the **delivery** of which is on or after **1 Jan 2030**. For more detail, please see the revised paragraph 2.2.4.4 of the IGF Code.

Issues (Amended provision)	Application	Amendments
Bunkering manifolds (4.2.2, 8.4.1, 8.4.2 and 8.4.3)	All ships (Retroactive)	<p>According to the amendments, the connection of the bunkering manifolds may be arranged either through Dry-Disconnect/Connect Couplings<sup>5</sup>, manual or hydraulic connect couplers, or bolted flange to flange assembly.</p>  <p style="text-align: center;"><b>Dry-Disconnect/Connect Coupling</b></p> <p>Where manual or hydraulic connect couplers or bolted flange to flange assembly are utilized for connecting bunkering manifolds, such arrangements shall be supplemented by operating procedures and risk assessment conducted at design stage.</p> <p>Unless installed on the bunkering supply side, an Emergency Release Coupler (ERC)/Emergency Release System (ERS) shall be provided to enable a quick physical disconnection in an emergency.</p>
Venting fuel supply pipes (9.4.7)	New ships	<p>Where the master gas fuel valve is automatically shut down, the complete gas supply pipe downstream of the master gas fuel valve shall be automatically vented. Originally, only the downstream of double block and bleed valve used to be ventilated.</p> 
Design pressure of outer pipes or ducts (9.8.1, 9.8.2, 9.8.4)	New ships	<p>The design pressure of the outer pipe or duct of fuel supply systems in principle shall not be less than the maximum working pressure of the inner pipe. For fuel piping system with a working pressure greater than 1.0 MPa, however, the design pressure of the outer pipe or duct could be alternatively reduced to the maximum built-up pressure.</p>  <p>With the amendments, however, regardless of the maximum working pressure of the inner pipe, i.e. more or less than 1 MPa, the design pressure of the outer pipe or duct may be reduced to either the maximum built-up pressure or the local instantaneous peak pressure in way of rupture, whichever is greater.</p>

<sup>5</sup> Dry Disconnect/Connect Coupling: Mechanical device, consisting of a nozzle and a receptacle, which permits quick connection and disconnection of a hose bunkering system without employing bolts to minimize the leakage of LNG or gas.

Issues (Amended provision)	Application	Amendments
Fire extinguisher in fuel preparation room (11.6.2)	All ships (Retroactive)	In addition to any other portable fire extinguishers that may be required elsewhere in the IMO instruments, one portable dry powder extinguisher of at least 5 kg shall be placed in the fuel preparation rooms. Ships constructed before 1 January 2026 shall meet this requirement no later than the first survey on or after 1 January 2026. 
Hazardous zones (12.5)	New ships	To be consistent with the classification of hazardous areas in IEC 60092, the inter-barrier space of fuel tank was categorized from hazardous area zone 1 to zone 0.
Fuel tank's level gauges (15.4.1.3)	New ships	As permitted under the IGC Code, the closed devices which penetrate the liquefied gas fuel tank as part of a closed system may be used as liquid level gauges.
Bunkering operation (18.4.1.1)	All ships (Retroactive)	Min. and max. bunker transfer pressure/temperature and bunkering line's pressure relief valve setting shall be included in the written agreement made between ship's master and bunker suppliers before bunkering operation commences. 

To facilitate voluntary early implementation of revised paragraphs 4.2.2, and 8.4.1 to 8.4.3 of the Code, MSC.1/Circ.1677 was also approved at this session in conjunction with the adoption of the amendments to the IGF Code.

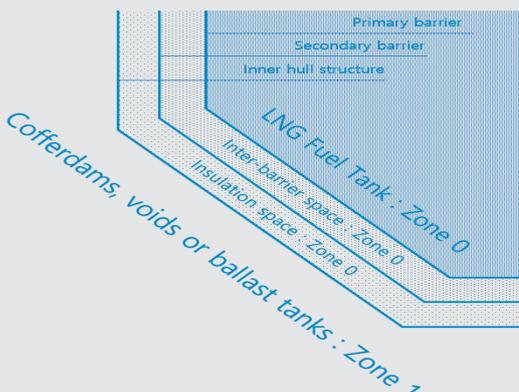
Source: resolution MSC.551(108) / MSC 108/20, Annex 3

**Impact Analysis**

**Owners / Shipyards / LNG fuel suppliers**

- For ships constructed on or after 1 January 2026 and subject to the IGF Code, ship's designs and arrangements shall comply with the amendments of various provisions in the IGF Code, as adopted by MSC 108. Therefore, design modifications are inevitable for new constructions.
- It is assessed that, for ships constructed on or after 1 January 2026, the re-categorization of an inter-barrier space of a fuel tank from hazardous area zone 1 to zone 0, as per the revised paragraph 12.5 of the IGF Code, may re-group the adjacent spaces, as follows, in terms of hazardous areas:

Spaces	Pre-2026 Constructed	After-2026 Constructed
Inter-barrier spaces	Zone 1	Zone 0
Insulation spaces	Zone 1	Zone 0
Adjacent spaces (e.g. cofferdams, voids or ballast tanks)	Non-hazardous zone	Zone 1



- In implementing paragraph 9.4.7 of the Code relating to the venting of fuel supply pipes, forced ventilation such as N2 purging may no longer be required owing to the expression “vented” modified from “ventilated”.
- There are some retroactive provisions that should be followed up by ship owners or operators having ships subject to the IGF Code. Ship owners or operators are encouraged to ensure that their fleet, if applicable, comply with such provisions as follows:
  - (a) In implementing paragraphs 8.4.1 and 8.4.2 of the Code, as amended by MSC 108, a bunker arrangement risk assessment should be conducted and related operational procedures should be subsequently established for inclusion in ship’s fuel handling manual, unless dry disconnect/connect couplings, as required by paragraph 8.4.1.1 of the Code, are the only method used for ship’s bunkering operations. As the new requirements do not have a period of grace for their implementation, the requirements need to be immediately met during the bunkering of LNG fuel from 1 January 2026.
  - (b) Regarding paragraph 11.6.2 of the Code, if a portable dry powder fire extinguisher is not provided in ship’s fuel preparation room, it shall be provided there by the first survey on or after 1 January 2026. As per SOLAS regulation II-2/10.3.3, its spare shall be also available onboard. Such arrangements need to be reflected in ship’s fire control plan. The first survey hereby means ship’s annual, intermediate, periodical or renewal survey, whichever comes first.
  - (c) For the implementation of paragraph 18.4.1.1 of the Code, please make sure that an agreement or safety checklist between ships and bunker supplier include the newly added components from 1 January 2026.

### 1.7 In-water performance of life jackets (LSA Code, Chapter 2)

Paragraph 2.2.1.6.2 of the LSA Code was amended at this session to improve, and ensure consistency of, the in-water performance of life jackets. Life jackets installed onboard on or after 1 January 2026 shall have buoyancy and stability to turn an unconscious wearer to a face-up position where both the nose and mouth are clear of the water.

These amendments were also reflected into pertinent IMO instruments to facilitate the testing as per the enhanced criteria, as follows:

- ‘Revised recommendation on testing of life-saving appliances’ (resolution MSC.81(70)) was amended through resolution MSC.563(108); and
- ‘Revised standardized life-saving evaluation and test report forms (personal life-saving appliances)’ was amended by MSC.1/Circ.1628/Rev.2.



Source: resolutions MSC.554(108) and MSC 563(108) / MSC 108/20, Annexes 6 and 15

Impact Analysis	Owners / Shipyards / Equipment
<ul style="list-style-type: none"> <li>• Equipment manufacturers need to conduct the in-water performance test of lifejackets in accordance with the amendments of the LSA Code, resolution MSC.563(108) and MSC.1/Circ.1628/Rev.2 and obtain or renew the type-approval of lifejackets to be provided onboard on or after 1 January 2026.</li> <li>• When purchasing lifejackets for provision onboard on or after 1 January 2026, ship owners/operators and shipyards are encouraged to ensure that such lifejackets comply with the revised requirements by confirming their equipment certificates and/or appended test reports.</li> </ul>	

### 1.8 Single fall and hook system for launching lifeboats or rescue boats (LSA Code, Chapter 4)

In accordance with paragraph 4.4.7.6.17 of the LSA Code, a single fall and hook system may be exempted from some provisions under paragraph 4.4.7.6 of the Code. However, the provision may not be sufficiently clear if such

exemption could be also applicable to the single fall and hook system with on-load release capability. To address the ambiguity, MSC 108 adopted the amendments to paragraphs 4.4.7.6.8 and 4.4.7.6.17 of the LSA Code.

In this regard, the revised paragraph 4.4.7.6.17 clarifies that where a single fall and hook system does not have on-load release capability, such a system need not comply with the provisions relating to on-load release mechanism. Further, paragraph 4.4.7.6.8 is no longer identified as one of exempted provisions in the revised paragraph 4.4.7.6.17.



During such amendments, paragraph 4.4.7.6.8 was also amended to ensure that, unless reset, hooks are not capable of supporting any load regardless of their types to prevent accidental release during recovery of the boat.

These amendments apply to the release mechanism of lifeboats or rescue boats installed on or after 1 January 2026, and were also incorporated in the amendments to 'Revised recommendation on testing of life-saving appliances' (resolution MSC.81(70)), which was adopted as resolution MSC.563(108).

Source: resolutions MSC.554(108) and MSC.563(108) / MSC 108/20, Annexes 6 and 15

### Impact Analysis

### Owners / Shipyards / Equipment

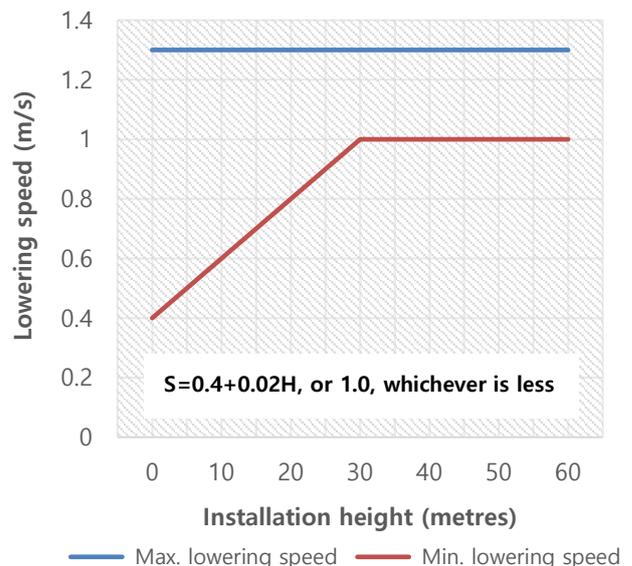
- Equipment manufacturers need to assess if their products meet the amendments of the LSA Code and resolution MSC.563(108); take actions as necessary; and obtain or renew the type-approval for the products to be installed onboard on or after 1 January 2026.
- When purchasing a release mechanism of a single fall and hook system for provision onboard on or after 1 January 2026, ship owners/operators and shipyards are encouraged to ensure that such equipment comply with the revised requirements by confirming their equipment certificates and/or appended test reports.

### 1.9 Lowering speed of survival crafts and rescue boats (LSA Code, Chapter 6)

In the existing paragraph 6.1.2.8 of the LSA Code, the minimum lowering speed of survival boats and rescue boats is determined by a formula proportional to their installation height. Accordingly, it was concerned that the increase of ship's size and freeboard may lead to excessively high lowering speed, which may endanger the safety of persons onboard.

To address the concern, MSC 108 adopted the amendments to paragraphs 6.1.2.8 and 6.1.2.10 of the LSA Code to set the upper limit of the minimum lowering speed as 1.0 m/s and restrict the maximum lowering speed to 1.3 m/s, as illustrated.

Source: resolution MSC.554(108) / MSC 108/20, Annex 6



### Impact Analysis

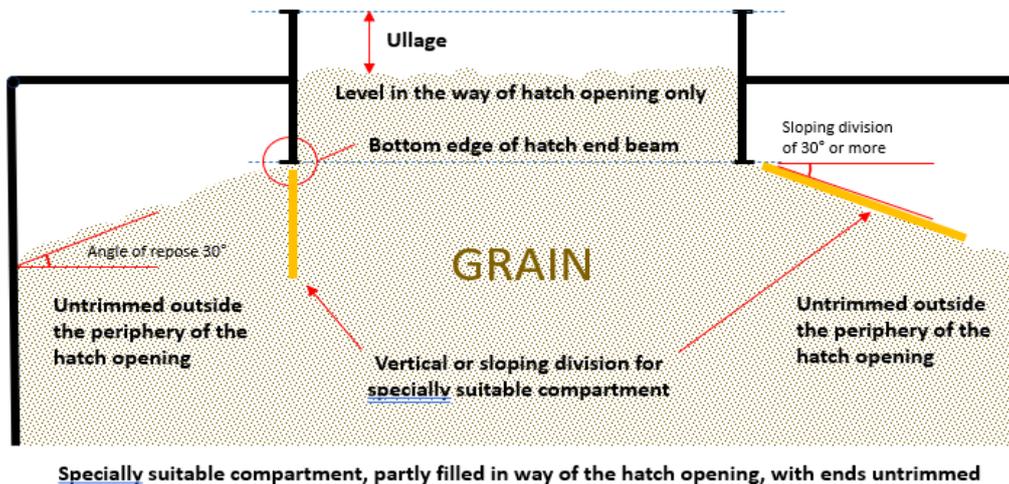
### Owners / Shipyards / Equipment

Attending surveyor(s) will confirm the lowering speed of survival crafts or rescue boats during the installation test of launching appliance that is provided onboard on or after 1 January 2026.

### 1.10 New loading condition for the carriage of grains (Grain Code)

Since its adoption as resolution MSC.23(59) in 1991, the Grain Code has been mandatorily implemented under SOLAS Chapter VI Part C without any amendments for more than 30 years.

MSC 108 adopted the amendments to the Grain Code to introduce a new class of loading condition 'specially suitable compartment partly filled in way of the hatch opening, with ends untrimmed' and establish pertinent requirements by which grains could be carried. These amendments apply to all cargo ships intended for the carriage of grains under the new loading condition from 1 January 2026.



Source: resolution MSC.552(108) / MSC 108/20, Annex 4

Impact Analysis	Owners / Cargo consignee
<p>Where a ship intends to carry grain cargoes under the new loading condition on or after 1 January 2026, ship's grain load manual, which meet the amendments to the Grain Code, needs to be prepared by ship owners/operators and approved by ship's class society. Where a ship already has an approved grain load manual and add the new condition, the manual needs to be re-approved.</p> <p>For such approvals or re-approvals, please contact KR Stability &amp; Tonnage Team (<a href="mailto:stability@krs.co.kr">stability@krs.co.kr</a>)</p>	

### 1.11 Approval of thickness measurement firms (2011 ESP Code)

The amendments to the 2011 ESP Code clarify that the Administrations (not their recognized organizations) may directly exercise the right to audit thickness measurement firms, by modifying 'Procedures for approval and certification of a firm engaged in thickness measurement of hull structures', which is contained in each part of the Code. However, these amendments do not prevent the Administration to delegate to its recognized organization the authority to approve thickness measurement firms in implementing the 2011 ESP Code.

Source: resolution MSC.553(108) / MSC 108/20, Annex 5

### 1.12 Minor corrections to the Performance Standards for Protective Coatings

'NACE<sup>6</sup> Coating Inspector Level 2' has been recognized as one of the qualifications for coating inspectors by paragraph 6.1.1 of the two (2) Performance Standards for Protective Coatings (PSPC), as adopted by resolutions MSC.215(82) and MSC.288(87). NACE International recently changed its name to AMPP<sup>7</sup>, and its qualification scheme 'NACE Coating Inspector Level 2' subsequently became 'AMPP Certified Coating Inspector'. To reflect

<sup>6</sup> NACE: National Association of Corrosion Engineers

<sup>7</sup> AMPP: Association for Materials Protection and Performance



the change, MSC 108 adopted the minor corrections to the two (2) PSPC.

In line with these amendments, 'Guidelines for maintenance and repair of protective coatings' and 'Guidelines on procedures for in-service maintenance and repair of coating systems for cargo oil tanks of crude oil tankers' were respectively amended as MSC.1/Circ.1330/Rev.1 and MSC.1/Circ.1399/Rev.1.

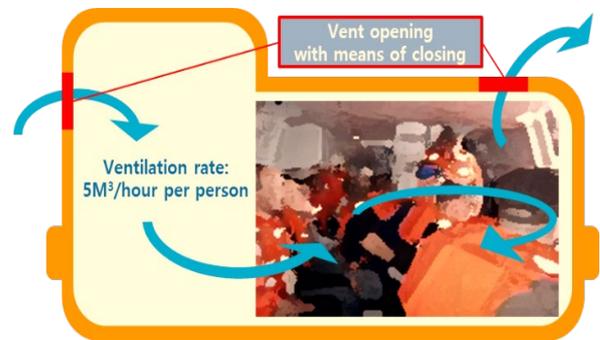
Source: resolutions MSC.557(108) and MSC.558(108) / MSC 108/20, Annexes 9 and 10

### 1.13 Annual thorough examination of totally enclosed lifeboats fitted with ventilation system

Resolution MSC.402(96) is a mandatory IMO instrument which supports SOLAS regulation III/20.11 and provides detailed requirements on the approval and activities of firms servicing lifeboats, rescue boats, launching appliance and release gear.

In this regard, MSC 107, in June 2023, adopted the amendments to chapter IV of the LSA Code to establish new requirements relating to ventilation means for totally enclosed lifeboats.

Consequently, MSC 108 adopted the amendments to resolution MSC.402(96) to identify the ventilation system of totally enclosed lifeboats as a new component which shall be checked during an annual thorough examination and operational test performed by an approved service supplier. These amendments will be implemented on 1 January 2026.



Source: resolution MSC.559(108) / MSC 108/20, Annex 11

Impact Analysis	Owners / LSA service suppliers
<p>Service suppliers servicing lifeboats, as per SOLAS regulation III/20.11 and resolution MSC.402(96), shall ensure that their technicians properly inspect and service ventilation system, if fitted, on totally enclosed lifeboats. Accordingly, service suppliers should consider updating their checklist.</p> <p>Ship owners/operators are encouraged to confirm if the annual thorough examination and operational text performed by an approved service supplier on or after 1 January 2026 cover ventilation system, if fitted, on their enclosed lifeboats.</p>	

### 1.14 Amendments to the IMDG Code (42-24)

As instructed by CCC 9, E&T 39 finalized the draft amendments to the IMDG Code and directly submitted them to MSC 108. Accordingly, MSC 108 adopted a consolidated version of the IMDG Code, which includes the amendments 42-24. Amongst various amendments that were adopted at this session, attentions may be paid to the following matters.

- Eleven (11) dangerous goods were newly added in the dangerous goods list under chapter 3.2 of the Code.
- Special Provisions 388, 400, 401, 961, 962, and 977 relating to the transport of engine- or battery-powered vehicles were revised or established in chapter 3.3 of the Code.
- The requirements on stowage and segregation of UN 3536 (i.e. lithium batteries installed in cargo transport unit) were amended to address its unique safety risk.

	Before the amendments	After the amendments
Stowage	Category A (On deck or under deck)	Category D (Cargo ship / On deck only)
Segregation	-	SW1 (Protected from source of heat) SW2 (Clear of living quarters)

- Data loggers, sensors and cargo tracking devices, attached directly to the interior or exterior of cargo transport units, such as freight containers, shall comply with explosion-, dust- and water-proof requirements in the revised paragraph 5.5.4.4 of the Code from 1 January 2028. Fixed devices on or in reefer containers shall comply with these requirements ASAP but not later than 1 January 2032.

The amendments 42-24 will enter into force on 1 January 2026 and may be applied voluntarily from 1 January 2025.

In conjunction with the amendments 42-24, 'Revised emergency response procedures for ships carrying dangerous goods (EmS Guide)' was approved as MSC.1/Circ.1588/Rev.3 at this session.

Source: resolution MSC.556(108) / MSC 108/20, Annex 8

Impact Analysis	Owners / Cargo consignee
Ship owners/operators and cargo consignees shall ensure the compliance with the IMDG Code in transporting packaged dangerous cargo, such as freight containers.	

### 1.15 Training of seafarers for prevention of, and response to, violence and harassment (STCW Code)



Table A-VI/1-4 in part A of the STCW Code provides the specification of the minimum standard of competence in seafarer's personal safety and social responsibilities.

In this regard, MSC 108 adopted the amendments of the STCW Code to include, in the table A-VI/1-4, new competence for training all seafarers to prevent, and response to, violence and harassment, including sexual harassment, bullying and sexual assault. These amendments enter into force on 1 January 2026.

Source: resolution MSC.560(108) / MSC 108/20, Annex 12

### 1.16 Training, certification and watchkeeping for fishing vessel personnel (1994 STCW-F Convention and the STCW-F Code)

The comprehensive revision of the 1994 STCW-F Convention was adopted by MSC 108, together with the new STCW-F Code. These amendments enter into force on 1 January 2026. To ensure the effective implementation of the 1994 STCW-F Convention and the new STCW-F Code, the Guidelines on the medical examination of fishing vessel personnel were also approved as MSC.1/Circ.1678.

Source: resolutions MSC.561(108) and MSC.562(108) / MSC 108/20, Annexes 13 and 14

## 2. Non-mandatory IMO instruments adopted or approved by MSC 108 (Agenda 2, 6, 7, 9, 12, 13, 14, and 15)

After discussion under relevant agenda items, MSC 108 adopted or approved non-mandatory IMO instruments, as shown in the ensuing paragraphs.

2.1 MSC 108, after its consideration under agenda items 2 and 6, approved IMO instruments as follows:

### 2.1.1 Guidelines for the sampling of oil fuel for determination of compliance with the revised MARPOL Annex VI and SOLAS Chapter II-2

With regard to regulation 18.5 of Annex VI to MARPOL, resolution MEPC.182(59) has provided an agreed method to obtain a representative sample of the oil fuel delivered for use onboard ships. As part of the work done until MSC 107 to enhance oil fuel safety, an MSC-MEPC joint circular was developed by MSC based on resolution MEPC.182(59) to supplement both SOLAS regulation II-2/4.2.1 and the MARPOL provision. MEPC 81 approved the joint circular together with some modifications to the one already approved by MSC 107. At this session, MSC 108 reapproved it to confirm the changes made by MEPC 81. Accordingly, this joint circular is to be formally released after this session as MSC-MEPC.2/Circ.18.

Source: MSC-MEPC.2/Circ.18



### 2.1.2 Draft revised guidelines on maritime cyber risk management



Cyber technologies have become essential to the operation and management of numerous systems critical to the safety and security of shipping and protection of the marine environment. In this regard, MSC-FAL.1/Circ.3 and its revisions, since 2017, have provided high-level recommendations for cyber risk management to maritime sectors.

Increased digitalization and connectivity, which may be inevitable, are concerned to have increased vulnerability of the maritime industry to cyberattacks. Therefore, draft revised guidelines have been developed and approved by MSC 108 to elaborate the risk assessment aspects, enhance the elements of cyber risk management, provide an updated list of industry guidance or standards, etc. These draft guidelines need to be also approved by FAL Committee for official publication.

Source: MSC 108/WP.10, Annex 1

2.2 After discussing the report of NCSR 10, MSC 108 adopted or approved IMO Instruments as follows:

#### 2.2.1 Revised Performance standards on Electronic Chart Display and Information Systems (ECDIS)

In 2022, the performance standards on ECDIS were extensively revised as resolution MSC.530(106) to introduce the next technical generation of IHO standards of S-100 series, which are still under development. As the extension of such efforts, the performance standards were further amended by NCSR 10 and approved by MSC 108 to enable the exchange of ECDIS's route plan, including route schedule (e.g. ETA, ETD, etc.), between ships and shore-based maritime service providers.

The revised performance standards revoke resolution MSC.530(106) as its revision 1 and apply to ECDIS installed on or after 1 January 2029. In addition, ECDIS installed on or after 1 January 2026 before 1 January 2029 may conform either to the revised performance standards in resolution MSC.530(106)/Rev.1 or the previous version in resolution MSC.232(82).

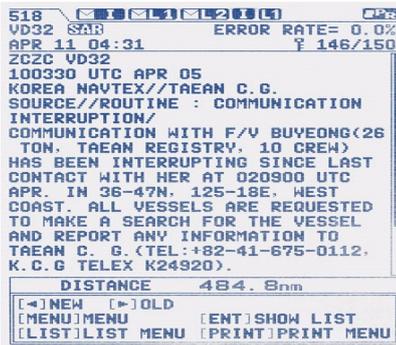
Source: resolution MSC.530(106)/Rev.1 / MSC 108/20, Annex 18



### Impact Analysis

### Owners / Shipyards / Equipment

- ECDIS manufacturers are encouraged to take needful actions for their ECDIS to comply with the revised Performance standards (resolution MSC.530(106)/Rev.1) and obtain or renew the type-approval of the equipment to be provided onboard on or after 1 January 2029 (or voluntarily from 1 January 2026).
- When purchasing ECDIS for installation onboard on or after 1 January 2029, ship owners/operators and shipyards are encouraged to ensure that such ECDIS comply with the revised Performance standards by confirming their equipment certificates and/or appended test reports.



### 2.2.2 Joint IMO/IHO/WHO Manual on Maritime Safety Information (MSI)

The joint Manual on Maritime Safety Information has provided extensive guidance and examples on the structure and text to be used in navigational warnings and meteorological warnings and forecasts messages. After thorough review, the joint Manual was revised to incorporate changes arising from various IMO instruments and update message examples. This revision is to be released as MSC.1/Circ.1310/Rev.2 for the implementation from 1 January 2025.

Source: MSC.1/Circ.1310/Rev.2

2.3 After discussing the report of III 9, MSC 108 approved IMO Instruments as follows:

### 2.3.1 Guidance in relation to the IMO Member State Audit Scheme (IMSAS) to assist in the implementation of the III Code by Member State

This guidance contains common understanding and practices to assist IMO Member States in the implementation of the III Code and provides a manual for IMO Member State to prepare for future audits under IMSAS. With the concurrent approval of MEPC 81 and MSC 108, this guidance is to be released as MSC-MEPC.2/Circ.19 after this session.

Source: MSC-MEPC.2/Circ.19



### Impact Analysis

### Administrations

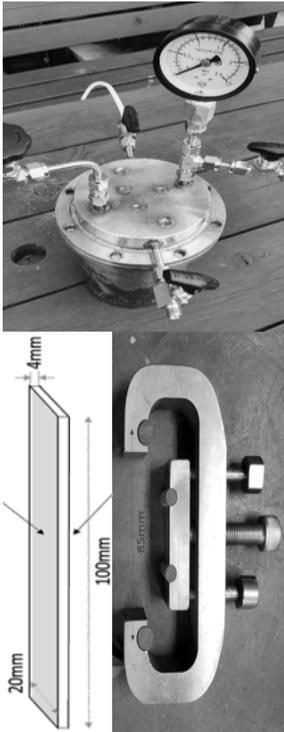
Administrations, as IMO member States, may refer to the guidance in MSC-MEPC.2/Circ.19, as appropriate, in their preparation for IMO Member State Audit.

2.4 After discussing the report of CCC 9, MSC 108 adopted or approved IMO Instruments as follows:

### 2.4.1 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

Since 2020, MSC.1/Circ.1622 and its amendments, i.e. MSC.1/Circ.1648, have provided detailed guidelines on documentation, evaluation, and approval of alternative metallic materials for use in cryogenic service. The guidelines in MSC.1/Circ.1622 was revised to incorporate the additional compatibility test requirements for Ammonia service, in line with MSC.1/Circ.1599/Rev.3, and reflect the previous amendments made through MSC.1/Circ.1648.

Source: MSC.1/Circ.1622/Rev.1



### 2.4.2 Revised guidelines on the application of high manganese austenitic steel for cryogenic service

Under the IGC Code and the IGF Code, high-manganese austenitic steel is recognized as a cryogenic material of plates, sections and forgings having minimum design temperature -165°C and its use should have been approved based on MSC.1/Circ.1599. In addition to Butane, Butane-propane mixture, Carbon Dioxide, Ethane, Ethylene, Methane, Pentane, and Propane, these revised guidelines include Ammonia as one of the cargoes or fuels, for which the use of high manganese austenitic steel is suitable, and enhance compatibility test requirements for Ammonia service.

Source: MSC.1/Circ.1599/Rev.3

#### Impact Analysis

#### Material manufacturers / Shipyards

- Material manufacturers are invited to note the revised Guidelines and take actions as necessary.
- Shipyards are invited to note that high manganese austenitic steel tested and approved based on MSC.1/Circ.1599/Rev.3 may be accepted as a cryogenic material compatible with Ammonia for the implementation of the IGC and IGF Codes.

### 2.4.3 Interim Guidelines for use of LPG cargo as fuel

In 2023, MSC 107 approved 'Interim Guidelines for the safety of ships using LPG fuel' as MSC.1/Circ.1666, which may be utilized as an alternative to the IGF Code subject to the authorization of ship's flag Administration.

In addition, efforts have continued to permit the safe use of LPG cargo as ship's fuel. As part of such developments, the interim guidelines for use of LPG cargo as fuel was developed by CCC 9 and approved by MSC 108 as MSC.1/Circ.1679.

The new interim guidelines aim to ensure safe and reliable operation of fuel supply systems and gas consumers for use of LPG cargo as fuel until related provisions are incorporated in the IGC Code. Accordingly, the interim guidelines may apply to gas carriers as a supplement to section 16.9 of chapter 16 of the IGC Code, i.e. alternative fuels and technologies.

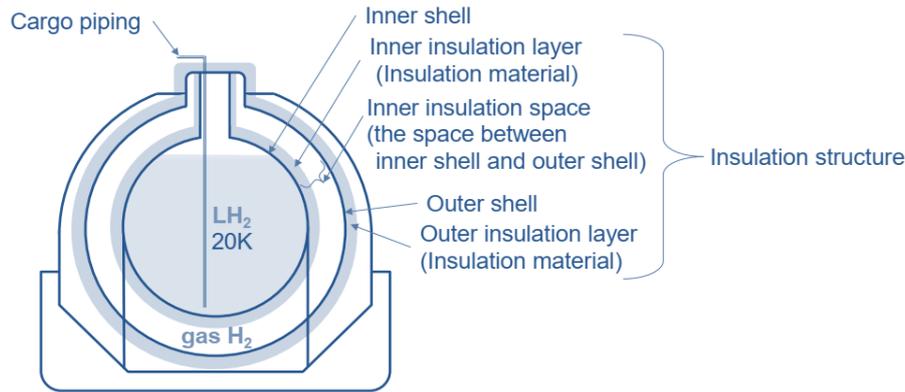
Source: MSC.1/Circ.1679



### 2.4.4 Revised interim recommendations for carriage of liquefied hydrogen in bulk

The IGC Code does not specifically provide requirements for carriage of liquefied hydrogen in bulk by sea. Since 2017, resolution MSC.420(97) has provided interim recommendations intended for a pilot ship to research and demonstrate safe long-distance overseas carriage of liquefied hydrogen in bulk.

The interim recommendation was revised by CCC 9 and subsequently adopted by MSC 108 as resolution MSC.565(108) to incorporate the practical experience gathered through the operation of a pilot ship and establish the requirements on a new type of cargo containment system, i.e. independent cargo tanks using insulation materials and hydrogen gas in the inner insulation space.



The revised interim recommendation is consisted of three parts, namely:

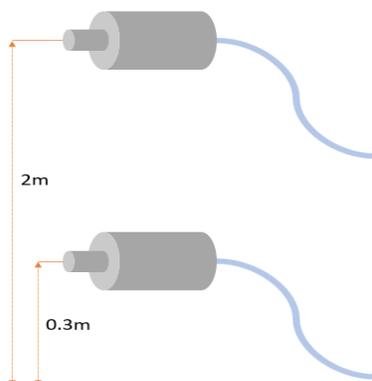
- General (applicable to any type of cargo containment)
- Independent cargo tanks using vacuum installation; and
- Independent cargo tanks using insulation materials and hydrogen gas in the inner insulation space

In this regard, MSC 108 discussed document MSC 108/14/2 submitted by Republic of Korea and instructed CCC Sub-Committee to continue to discuss the revised interim recommendation to incorporate other types of LH<sub>2</sub> containment system, such as a membrane type.

Source: resolution MSC.565(108) / MSC 108/20, Annex 20

2.5 After discussing the report of SDC 10, MSC 108 adopted or approved IMO Instruments as follows:

### 2.5.1 Unified interpretations on water level detectors as per SOLAS regulations II-1/25, II-1/25-1 and XII/12



High and low water level detectors

It is recalled that new SOLAS regulation II-1/25-1 was adopted through resolution MSC.482(103) in 2021 to require water level detectors on multiple hold cargo ships other than tankers and bulk carriers, from 1 January 2024, and that the performance standards for water level detectors were consequentially revised as resolution MSC188(79)/Rev.2.

In this regard, the existing unified interpretations contained in MSC.1/Circ.1572/Rev.1 relating to the water level detectors were updated by SDC 10 and approved by MSC 108 to reflect any modifications arising from the new requirements. Amongst several changes introduced at this session, interpretation 5 under section 9.2 of MSC.1/Circ.1572/Rev.1 clarifies that, where the characteristic of the dust and/or gases are unknown, temperature class T6, gas group IIC and/or dust group IIIC are used as appropriate depending on the cargo carried.

The modified unified interpretations are included in section 9 of MSC.1/Circ. 1572/Rev.2, which amends and supersedes MSC.1/Circ.1572/Rev.1, and apply to the water level detectors installed on or after 1 January 2025<sup>8</sup>.

Source: MSC.1/Circ. 1572/Rev.2

#### Impact Analysis

#### Shipyards

Shipyards are encouraged to apply the revised unified interpretation in section 9 of MSC.1/Circ.1572/Rev.2 to the water level detectors installed on or after 1 January 2025. (NB: Corresponding IACS UI: UI SC 180)

<sup>8</sup> For more details for new and existing ships, please refer to paragraph 9 of the cover page of MSC.1/Circ.1572/Rev.2.

## 2.5.2 Unified interpretations on permanent means of access (PMA) as per SOLAS regulation II-1/3-6

An accident was reported by IACS to SDC 10 that an access ladder to ship's topside tank had collapsed during ship survey due to substantial corrosion and damage. Based on IACS' proposal, the existing unified interpretations contained in section 1.4 of MSC.1/Circ.1572/Rev.1 relating to the permanent means of access (PMA) were enhanced by SDC 10 to require ship owners as follows:

- The means of access, including portable one, should be annually inspected by ship's crew or competent inspectors. Such inspection should be recorded in Part 2 of the Ship Structural Access Manual<sup>9</sup>.
- Prior to any space examinations that utilize PMA, an inspection to confirm the condition of PMA should be recorded for each space.
- Substantial damage should be recorded in Part 2 of the Ship Structure Access Manual
- Inspection records of PMA should be made available to attending surveyors prior to survey.



After MSC 108's approval, the modified unified interpretations are included in section 1 of MSC.1/Circ.1572/Rev.2, which amends and supersedes MSC.1/Circ.1572/Rev.1. These interpretations apply to the inspections conducted by ship's crew or competent inspectors on or after 1 January 2025 for oil tankers of 500 GT and above and bulk carriers of 20,000 GT and above, the ship types of which the permanent means of access are required in accordance with SOLAS regulation II-1/3-6.

Source: MSC.1/Circ.1572/Rev.2

### Impact Analysis

### Owners

Ship owners and operators operating fleet installed PMA (e.g. oil tankers, bulk carriers, etc.) are encouraged to confirm the condition of PMA annually and before any space examination and to record them in Part 2 of the Ship Structural Access Manual.

## 2.5.3 Unified interpretation of SOLAS regulation XV/5.1 and paragraph 3.5 of Part 1 of the IP Code on the harmonization of the IP Safety Certificate with SOLAS Safety Certificates

The Industrial Personnel (IP)<sup>10</sup> Code addresses a wide range of cargo ship's safety requirements, in addition to SOLAS Convention. As evidence of the compliance with the IP Code, IP Safety Certificate is issued in addition to various SOLAS Safety Certificates, i.e. SC, SE and SR. Accordingly, the validity of various SOLAS Safety Certificates is a precondition to that of the IP Code. However, it was not clear either in SOLAS chapter XV or in the IP Code, which SOLAS Safety Certificates should take the priority over the IP Code in terms of validity, survey dates and endorsements of the IP Safety Certificate.

In this regard, the unified interpretation, which was approved by MSC 108 as MSC.1/Circ.1680, clarifies that the IP Safety Certificate should be endorsed or renewed in harmonization with Cargo Ship Safety Construction Certificate, with a caveat that a valid Cargo Ship Safety Equipment Certificate is maintained onboard.

<sup>9</sup> Ship Structure Access Manual is a document approved by the Administration or its recognized organization to show the means of access installed onboard and provide related safety instruction, an inventory of portable means of access, and records of periodical inspection and maintenance of ship's means of access. For more details, please see SOLAS regulation II-1/3-6.4.

<sup>10</sup> Industrial Personnel (IP) means all persons transported or accommodated on board for the purpose of offshore industrial activities performed on board other ships and/or offshore facilities.

Source: MSC.1/Circ.1680

#### 2.5.4 Unified interpretations of SOLAS regulation II-2/13 on the safe position led from an escape trunk

According to SOLAS regulation II-2/13.4.1 and II-/13.4.2, the escape trunk of a machinery space is required to lead to a safe position outside that space. In this regard, MSC.1/Circ.1511 has provided interpretations on the term 'safe position' in terms of inclusion and exclusion.

Given the low flammability of hydraulic oils compared to oil fuels, the interpretation on the term 'safe position' was revised to include, as the safe position, steering gear spaces where hydraulic oils for the steering gear equipment are stowed, as follows:

Regulations	Ship types	Included as safe position	Excluded from safe position
II-2/13.4.1	Passenger ships	<ul style="list-style-type: none"> <li>Steering gear spaces where hydraulic oils for the steering gear equipment are stowed; and</li> <li>Special category spaces and ro-ro spaces, from which access is provided and maintained clear of obstacles to the embarkation decks</li> </ul>	<ul style="list-style-type: none"> <li>Lockers and storerooms;</li> <li>Cargo spaces; and</li> <li>Spaces where flammable liquids are stowed</li> </ul>
II-2/13.4.2	Cargo ships	<ul style="list-style-type: none"> <li>Steering gear spaces where hydraulic oils for the steering gear equipment are stowed; and</li> <li>Vehicle and ro-ro spaces, from which access is provided and maintained clear of obstacles to the open deck</li> </ul>	<ul style="list-style-type: none"> <li>Cargo spaces;</li> <li>Lockers and storerooms;</li> <li>cargo pump-rooms; and</li> <li>Spaces where flammable liquids are stowed</li> </ul>

The unified interpretations are contained in MSC.1/Circ.1511/Rev.1, which amends and revokes MSC.1/Circ.1511.

Source: MSC.1/Circ.1511/Rev.1

Impact Analysis	Owners / Shipyards
<ul style="list-style-type: none"> <li>In many instances, steering gear spaces have been utilized for the storage of hydraulic oils. However, this practice has occasionally faced scrutiny from a few inspectors (PSC, oil major, etc.) based on their individual perspective and experiences. Where such practice is concerned by inspectors from a perspective of fire safety, ship owners and operators may address them by referencing the interpretation contained in MSC.1/Circ.1511/Rev.1 regarding the term "safe position".</li> <li>Shipyards are invited to note the interpretation in MSC.1/Circ.1511/Rev.1.</li> </ul>	

#### 2.5.5 Unified interpretations of the Noise Code (resolution MSC.337(91)) relating to the calibration of sound level meters

Unified interpretations were developed by SDC 10 and approved by MSC 108 to address how to calibrate sound level meters and field calibrators used in implementing the Noise Code. These interpretations clarify that:

- the calibration of sound level meters and field calibrators should be respectively carried out in accordance with IEC 61672-3<sup>11</sup> and IEC 60942<sup>12</sup> Appendix B;
- the measurement company should provide documentation about the standard which has been met if not clearly marked on the sound level meter or field calibrator; and
- The documentation or marking on the equipment should include a clear statement of the results of the periodic tests and which performance class the instrument meets after calibration.



The unified interpretations are included in chapter 2 of MSC.1/Circ.1509/Rev.1, which amends and revokes MSC.1/Circ.1509, and will apply to sound level meters and field calibrators at their next calibration due date but no later than two years from its approval date, i.e., 20 May 2024.

Source: MSC.1/Circ.1509/Rev.1

Impact Analysis	Shipyards
<p>Shipyards or service suppliers should comply with the unified interpretation included in Chapter 2 of MSC.1/Circ.1509/Rev.1, when sound level meters and field calibrators are periodically calibrated according to the Noise Code. However, where there is no testing facility nearby capable of performing the calibrations according to the unified interpretation, this could lead to increased time and costs. A corresponding IACS UI is expected to be established and enforced accordingly.</p>	

### 2.5.6 Revised guidelines on alternative design and arrangements for SOLAS chapter II-1



There have been recognitions within the IMO that conventional prescriptive regulations are unable to cope with the challenge faced with new ship design. To address such concerns since 1990s, the IMO has brought significant changes in the way it approaches the regulation of ship design and introduced the framework of goal-based standards (GBS). GBS is comprised of goals and functional requirements associated with that goal and supported by rules/regulations of classification societies or national Administrations, as illustrated on the left side.

In this regard, the goals, functional requirements, and expected performances, corresponding to the provisions of SOLAS Chapter II-1, Parts C (machinery installations), D (electrical installations) and E (periodically unattended machinery spaces), were established by the SDC Sub-Committee for use in approving alternative design and arrangements. These goals,

functional requirements and expected performances were approved by MSC 108 and included as appendix 6 of MSC.1/Circ.1212/Rev.2<sup>13</sup>.

SOLAS regulations II-1/28 to 30 under part C relating to ship's propulsion and steering gears are currently under consideration by SDC Sub-Committee for amendments. As such, the alternative goals and functional requirements of these regulations will be reconsidered in future for inclusion in MSC.1/Circ.1212/Rev.2.

Source: MSC.1/Circ.1212/Rev.2

<sup>11</sup> IEC 61672-3: Electroacoustics - Sound level meters - Part 3: Periodic tests

<sup>12</sup> IEC 60942: Electroacoustics - Sound calibrators

<sup>13</sup> Guidelines on alternative design and arrangements for SOLAS chapters II-1 and III

### 3. Approval of draft amendments to mandatory IMO instruments for subsequent adoption by MSC 109 (Agenda 14)

After discussing the report of CCC 9, MSC 108 approved draft amendments to mandatory IMO instruments for subsequent adoptions at MSC 109 in 2024, as listed below. However, these draft amendments are not legally binding until the adoption of MSC in the future.

#### 3.1 Draft amendments to the IGF Code on various safety issues (Expected implementation date: 1 January 2028)

Key draft amendments may be as summarized below. In this regard, **new ships** mean ships constructed on or after 1 January 2028<sup>14</sup>.

Provisions	Application	Draft amendments
5.3.3.5.1 5.3.4.2	All ships	<p>If installed, the suction well of fuel containment system may protrude below the inner bottom plating not exceeding 25% of the depth of the double bottom or 350mm, whichever is less. Initiated by Korean Register through CCC 9/3/5 (Republic of Korea), these draft amendments clarify that a suction well intruding into ship's double bottom may be permissible in the IGF fuel tanks both for existing and new ships.</p>
7.3.1.4 9.4.2	New ships	<p>Pressure relief valves discharging liquid or gas from the piping system shall discharge into the fuel tanks whenever the tank MARVS pressure is lower than the setting of the pressure relief valves. Alternatively, they may discharge to the vent mast, if any liquid in the vent can be detected and disposed. (paragraph 7.3.1.4)</p> <p>Fuel tank inlets from safety relief valve discharge line as per new paragraph 7.3.1.4 shall be provided with non-return valves in lieu of valves automatically closing at the time of emergency shut down. Safe means for tank isolation during maintenance will be also available without affecting proper operation of safety relief valves. (paragraph 9.4.2)</p>

<sup>14</sup> The term "ships constructed on or after 1 January 2028" means ships for the **building contract** is placed on or after **1 Jan 2028** or the **delivery** of which is on or after **1 Jan 2032**.

Provisions	Application	Draft amendments
11.3.2	New ships	<p>Notwithstanding existing paragraph 11.3.2, any boundary facing the fuel tank on the open deck, which is separated by a minimum distance determined through a heat analysis to provide protection equivalent to an A-60 class division, shall be considered acceptable. Intermediate structures providing heat protection to the above spaces may also be considered acceptable. (paragraph 11.3.2)</p> <p>For oil tanker and chemical tankers, A-60 insulation as per SOLAS regulation II-2/9.2.4.2.5 for protection of Accommodation shall be considered to meet paragraph 11.3.2 of the Code, provided the fuel tanks are located in cargo area forward of accommodation spaces, etc. (paragraph 11.3.2.1)</p> <p>Where no source of gas leak is possible from the fuel containment system such as type C tanks, A-60 insulation shielding is not required. (paragraph 11.3.2.3)</p>
11.3.3	New ships	The safe distance to accept the fuel storage hold space as a cofferdam separating a type C fuel tank and a machinery space of category A (i.e. 900 mm) will be calculated from the outer surface of the insulation system of a type C tank. For the vacuum insulated type C tank, the outer surface of the insulation system should mean the outer surface of the outer shell.
12.5.2	New ships	Hazardous area zones 1 and 2 will be adjusted.

Source: MSC 108/20, Annex 19

### 3.2 Draft amendments to the IGC Code on the use of Ammonia fuel (Expected implementation date: 1 July 2026)

The IGC Code is under the comprehensive review of CCC Sub-Committee from 2022 to 2024 to incorporate existing unified interpretations, address new technologies, etc. This work has been done with the understanding that all amendments of the IGC Code arising from the comprehensive review will be finalized by CCC 10 and approved by MSC 109 in the second half of 2024 for the implementation from 1 January 2028.

However, Belgium et al through document MSC 108/14/1 raised that there was an urgent need to permit the use of Ammonia cargo as fuel under the IGC Code. In this regard, MSC 108 agreed to the raised urgency and exceptionally approved the draft amendments to paragraph 16.9.2 of the IGC Code, which will allow the use of toxic cargoes required to be carried in type 2G/2PG ships (i.e. including Ammonia) as fuel. These draft amendments are expected to enter into force on 1 July 2026 after the adoption by MSC 109.

Source: MSC 108/20, Annex 21

## 4. Development of a goal-based MASS Code (Autonomous ships) (Agenda 4)

4.1 MSC 108 established Working Group on MASS and continued to develop the draft non-mandatory MASS Code with a view towards the adoption at MSC 109. The draft MASS Code is structured with three parts, as summarized below. However, it appears that more discussion will be required to finalize the draft Code.

- Part 1 (introduction) addresses purpose, application, code structure, and terms and definitions.
- Part 2 (main principles for MASS and MASS functions) specifies certificate and survey, approval process, risk assessment, operational context, system design, software principles, management of safe operations, connectivity, radiocommunication, alert management, human element, and human centered design.
- Part 3 provides goals, functional requirements and expected performance of all 14 chapters consisted of safety of navigation, remote operations, emergency response, etc.

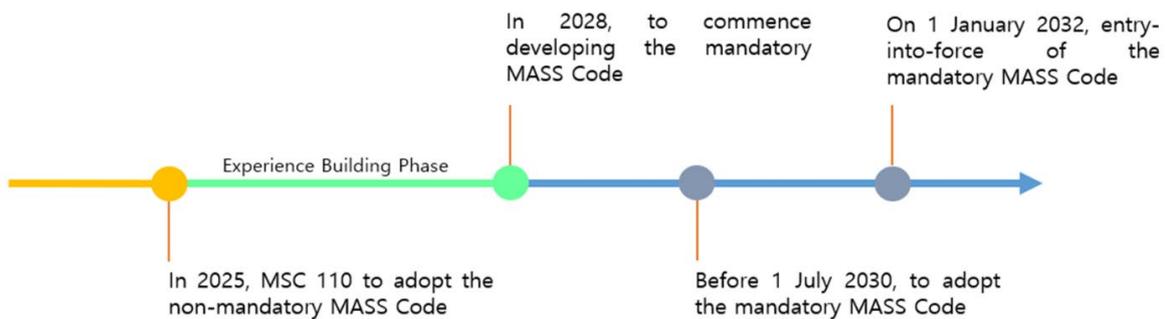
Source: MSC 108/WP.7, Annex 1.

4.2 To expedite the completion of the work on the non-mandatory MASS Code, it was decided that an intersessional MASS working groups will be convened in September of 2024.

4.3 The Committee also updated the road map for developing a goal-based MASS Code, as found in MSC 108/20, Annex 16. The milestones of the road map were substantially postponed as shown below.



- finalization and adoption of the non-mandatory MASS Code at MSC 110 in 2025;
- an experience-building phase from 2026;
- commencement of developing the mandatory MASS Code from 2028; and
- the adoption of the mandatory MASS Code at a future session before 1 July 2030 for entry into force on 1 Jan 2032



## 5. Alternative fuels and new technologies for GHG reduction (Agenda 5)

MSC 108 commenced and continued the discussion on alternative fuel and new technologies for GHG reduction based on the report of correspondence group urgently established by MSC 107. The identified alternative fuel and new technologies are widely arranging but, to name a few, include nuclear, solar and wind powers, energy storage system, energy saving technologies, onboard cargo capture and storage system, etc.

After the discussion through a dedicated working group, MSC 108 further developed and updated the list of alternative fuels and new technologies, which also identifies regulatory gaps and barriers and associated IMO's bodies, to support the reduction of GHG emissions from ships. Further works will be conducted through a correspondence group.

It is noted that the proposal to develop safety guidelines on Onboard Carbon Capture and Storage (OCCS), submitted through MSC 108/5/1 (Republic of Korea), will be kept in abeyance until the Committee establish a Road Map for this agenda.



## 6. New work program (Agenda 18)

Due to the large volume of submission papers proposing new work outputs and the high workload of the Committee increased ever, MSC 107 announced a moratorium in 2023 that no submission paper proposing new

