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### MAIN DECISIONS OF MSC 108

The scope of the Marine Information Notice publication is to provide the Shipping Sector with information relevant to RINA, its organization, initiatives and services as well as to disseminate information of a general nature which in RINA view may be of interest. The information provided does not intend to be exhaustive and is given for reference only.

The 108<sup>th</sup> session of the IMO Maritime Safety Committee (MSC 108) was held from 15 to 24 May 2024. The main decisions taken are summarized below on the basis of the information obtained while following the debate.

#### **AMENDMENTS TO MANDATORY INSTRUMENTS**

## Amendments to SOLAS and FSS Code for fire safety of ro-ro passenger ships entering into force on 1 January 2026

The amendments to SOLAS Reg. II-2/20 (Res. MSC.550(108)) include fire protection requirements for ro-ro passenger ships constructed on or after 1 January 2026, requiring – inter alia – to have:

- individually identifiable fixed fire detection and fire alarm system in vehicle, special category and ro-ro spaces (open and close), capable to detect smore and heat throughout the spaces. Linear heat detectors may be accepted by the Administration:
- a fixed fire detection and fire alarm system and a fixed water-based fireextinguishing system for the area on the weather deck intended for the carriage of vehicle. The type of detectors, their spacing and location shall be to the satisfaction of the Administration, on the basis of the effects of several factors, including weather conditions and cargo obstruction;
- an effective video monitoring in vehicle, special category and ro-ro spaces for continuous monitoring, making the replay available for 7 days;
- "A-30" fire integrity deck if it subdivides a special category space or ro-ro space and the fixed water-based fire-extinguishing system cannot simultaneously cover the applicable area above and below such a deck;
- arrangement of openings (e.g. distance and fire integrity) in ro-ro spaces and special category spaces and arrangement (e.g. safety distance from the designated vehicle lanes) of weather deck intended for the carriage of vehicles so that a fire in these spaces does not endanger accommodation spaces, control stations and normally occupied service spaces in superstructures and deckhouse above the ro-ro space; embarkation and assembly stations; and stowage areas for survival craft;
- fixed water-based fire-extinguishing system based on monitor(s) and relevant drainage to cover the weather decks intended for the carriage of vehicles; and
- suitable signage and marking on deckhead and bulkhead in vehicle, special category and ro-ro spaces where fixed pressure water-spraying systems are fitted.

Existing ro-ro passenger ships are required not later than the first survey after 1 January 2028 to have:

- individually identifiable fixed fire detection and fire alarm system in vehicle, special category and ro-ro spaces, capable to detect smoke and heat throughout the spaces;
- video monitoring system, different from the one required for new ships only for

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the replay which shall be available for 24h; and

 a fixed water-based fire-extinguishing system based on monitor(s) on weather decks intended for carriage of vehicles. Administration may permit different arrangements, such as lower flow rate than the required one (1,250 L/min ) when it is not practical given the size and arrangement of the ship.

In line with the above, the amendments to the FSS Code (Res. MSC.555(108)) include new requirements for fixed water-based fire-extinguishing on ro-ro passenger ships' weather decks intended for the carriage of vehicles; linear heat detectors; and visual and audible fire signals.

### Other amendments to SOLAS entering into force on 1 January 2026

The adopted SOLAS amendments (Res. MSC.550(108)) modify:

- Reg. II-2/4, specifying that oil fuel delivered to and used on board ships shall not jeopardize the safety of ships or adversely affect the performance of the machinery or be harmful to personnel; and
- Reg. II-2/7, requiring all control stations and cargo control rooms of cargo ships constructed on or after 1 January 2026 to be fitted with a fire detection and fire alarm system according to the applicable method (i.e. IC; IIC; IIIC). The relevant unified interpretation has been revised accordingly (MSC.1/Circ.1456/Rev.1); and
- Ch. V, introducing mandatory reporting of lost/observed freight container(s).

### Amendments to SOLAS entering into force on 1 January 2028

The adopted SOLAS amendments (Res. MSC.549(108)) modify Reg. II-1/3-4, requiring also ships other than tankers of 20.000 GT and above constructed on or after 1 January 2028, to be fitted with emergency towing arrangements approved by the Administration, based on the guidelines, expected to be finalized in 2025.

### Amendments to 2011 ESP Code entering into force on 1 January 2026

The amendments (Res. MSC.553(108)) modify the "Procedures for approval and certification of a firm engaged in thickness measurement of hull structures", permitting Administrations – and not only Recognized Organizations - to exercise the right to audit a firm conducting thickness measurement of hull structures.

### Amendments to the IGF Code entering into force on 1 January 2026

The amendments (Res. MSC.551(108)) include – inter alia – the following which will be applicable to new ships (i.e. constructed on or after 1 January 2026):

- design requirements for pressure relief system;
- corrections to the minimum wall thickness formula, in relation to parameter "a" (i.e. negative manufacturing tolerance for thickness);
- arrangements for the connection at the bunkering station to achieve a dry-disconnect operation. If the dry-disconnect operation is achieved by using either a manual or hydraulic connect coupler; or bolted flange, the arrangement shall be subject to special consideration informed by a bunkering arrangement risk assessment conducted at the design stage. This requirement can be voluntarily applied earlier than the entry into force of the amendments (MSC.1/Circ.1677);
- redundancy and segregation requirements for fuel supply system of single fuel installations:
- ventilation requirements for the gas supply pipe, when the master gas fuel valve is automatically shut down;

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- requirements for the design pressure of the outer pipe or duct of fuel system;
- clarification of application of SOLAS Reg. II-2/9 for fuel preparation rooms which are to be considered as a machinery space of category A; and
- modifications to the list of spaces/equipment/ducts/tank included in the hazardous area zones 0 and 1, including interbarrier spaces in hazardous area zone 0 and excluding them from hazardous area zone 1.

### Amendments to the IMDG Code entering into force on 1 January 2026

The amendments (Res. MSC.556(108)) include the – inter alia – the following:

- additional requirements for "devices containing dangerous goods, which are in use or intended for use during transport";
- new entries, such as "VEHICLE, LITHIUM ION BATTERY POWERED" (UN 3556), "VEHICLE, LITHIUM METAL BATTERY POWERED" (UN 3557) and "VEHICLE, SODIUM ION BATTERY POWERED" (UN 3558);
- new Special Provisions (SP), such as those for sodium batteries; carbon of animal or vegetable origin; carbon activated;
- modifications to SP961, adding the case of vehicles solely powered by a sodium ion battery, and the battery is short-circuited in a way that the battery does not contain electrical energy;
- modifications to SP962, requiring installed batteries to meet the provisions of SP388 or SP977, as applicable, and be protected from damage, short circuit, and accidental activation during transport;
- clarification on necessary documentation for goods not subject to the IMDG Code (i.e. a certificate exempting a substance, material or article from the provisions of the IMDG Code and referred to in a special provision assigned to an individual entry in the Dangerous Goods List shall be submitted together with the cargo information required by SOLAS Reg.VI/2).

Consequential amendments to the Revised Emergency Response Procedures for Ships Carrying Dangerous Goods (MSC.1/Circ.1588/Rev.3) are approved.

### Amendments to the LSA Code entering into force on 1 January 2026

The amendments (Res. MSC.554(108)) include the revision of:

- lifejackets' in-water performance,
- single fall and hook systems requirements, and
- minimum and maximum lowering speed of fully loaded survival craft or rescue boats (para. 6.1.2.8 and 6.1.2.10).

Consequent amendments to the "Revised recommendation on testing of life-saving appliances" (Res. MSC.81(70)) and the "Revised standardized life-saving appliance evaluation and test report forms (personal life-saving appliances)" (MSC.1/Circ.1628/Rev.2) were adopted.

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)), entering into force on 1 January 2026

In line with the amendments to the LSA Code relevant to ventilation requirements adopted by MSC 107 (see MNO No.200), Res. MSC.402(96) is modified to include ventilation systems, when fitted, in the items to be thoroughly examined and checked for lifeboats (including free-fall lifeboats), rescue boats and fast rescue boats.

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## Amendments to the International Code for the Safe Carriage of Grain in Bulk entering into force on 1 January 2026

The amendments (Res. MSC.552(108)) 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.

### Amendments to the STCW Code entering into force on 1 January 2026

The amendments (Res. MSC.560(108)) 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).

## Revised 1995 STCW for fishing vessel personnel (STCW-F) Convention and new STCW-F Code, entering into force on 1 January 2026

The comprehensive revision of the STCW-F Convention (Res. MSC.561(108)) includes – inter alia – the necessary modifications due to the GMDSS modernization. A new edition of the STCW-F Code has consequently also been adopted (Res. MSC.562(108)).

# Amendments to Performance standard for protective coatings for dedicated seawater ballast tanks in all types of ships and double side skin spaces of bulk carriers, entering into force on 1 January 2026

The amendments (Res. MSC.557(108)) update the name of the coating inspector certification (i.e. AMPP Certified Coatings Inspector instead of NACE Coating Inspector Level 2). Similar modification is introduced in the Guidelines for maintenance and repair of protective coatings (MSC.1/Circ.1330/Rev.1).

## Amendments to Performance standard for protective coatings for cargo oil tanks of crude oil tankers entering into force on 1 January 2026

The amendments (Res. MSC.558(108)) update the name of the coating inspector certification (i.e. AMPP Certified Coatings Inspector instead of NACE Coating Inspector Level 2). Similar modification is introduced in the Guidelines for maintenance and repair of protective coatings for cargo oil tanks of crude oil tankers (MSC.1/Circ.1399/Rev.1).

## DRAFT AMENDMENTS APPROVED IN VIEW OF THEIR ADOPTION AT MSC 109

#### Draft amendments to the IGC Code

The draft amendments to IGC Code introduce modifications to Ch. 16 "use of cargo as fuel" permitting the use as fuel of toxic products in column "f" of Ch.19 (e.g. ammonia), provided that the same level of safety as natural gas is ensured in accordance with IGC Code and taking into account the guidelines (still to be finalized), after special consideration has been given by the Administration.

### Draft amendments to the IGF Code

The draft amendments to the IGF Code introduce requirements for new ships (i.e. constructed on or after 1 January 2028), in relation – inter alia – to:

- design of suction wells installed in fuel tanks;
- piping design, providing clarification of pressure relief valves discharging liquid

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or gas from the piping system into the fuel tanks;

- fitting of non-return valves on fuel tank inlets from safety relief valve discharge lines;
- fire protection of any boundary facing the fuel tank on the open deck;
- areas to be considered as "hazardous area zone 1" (i.e. open deck or semienclosed spaces on open deck above and in the vicinity of fuel tank vent mast outlet within a vertical cylinder of unlimited height and 6m radius centred upon the outlet, and within a hemisphere of 6m radius below the outlet);
- areas to be considered as "hazardous area zone 2" (i.e. spaces 4m beyond the cylinder and 4m beyond the hemisphere);
- gas-tightness and pressure of ventilation ducts serving non-hazardous spaces and passing through a hazardous space; and
- gas-tightness and pressure of ventilation ducts serving hazardous spaces and passing through less hazardous spaces.

### RECOMMENDATORY INSTRUMENTS ADOPTED/APPROVED

Revised interim recommendations for carriage of liquefied hydrogen in bulk The revised interim recommendations for the carriage of liquefied hydrogen in bulk consist of the following parts:

- 1. Part A, applicable to ships with any type of cargo containment system;
- 2. Part B, applicable to cargo containment systems of independent cargo tanks using vacuum insulation; and
- 3. Part C, applicable to cargo containment systems of independent cargo tanks using insulation materials and hydrogen gas in the inner insulation spaces.

As agreed by MSC 108, these recommendations will be further considered in view of incorporating emerging technologies in liquefied hydrogen cargo containment systems.

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

Pending the inclusion of mandatory requirements in the IGC Code, the interim Guidelines (MSC.1/Circ.1679) provide unified specific guidance for gas carriers using LPG cargoes as fuel, as a supplement to the existing provisions of Chapter 16 of the IGC Code. The issues covered by the Guidelines include the risk assessment; the arrangements of spaces containing gas fuel consumers; the fuel supply; the fuel plant ventilation and gas detection; and combustion equipment.

### Unified interpretations of SOLAS Chapters II-1 and XII

The revised unified interpretations (MSC.1/Circ.1572/Rev.2) are relevant to the technical provisions for means of access for inspection (Reg. II-1/3-6) and the performance standards for water level detectors (Reg.s II-1/25, II-1/25-1 and XII/12) and – inter alia – specifies that:

- inspections conducted by the crew or competent inspectors on or after 1
  January 2025 should be carried out annually and the inspections should be
  recorded in Part 2 of the Ships Structure Access Manual;
- 2. detectors installed on
  - new ships (i.e. contracted or keel laid on or after 1 Jan. 2025) or
  - on other ships with a contractual delivery date for the equipment to the ship on or after 1 Jan. 2025 or in the absence of a contract, actually delivered to the ship on or after 1 Jan. 2025

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#### should be:

- suitable for installation in hazardous area, comparable with Zone 1) and for the explosive gas atmosphere and/or combustible dust that can be present, depending on the cargo carried;
- manufactured, tested, marked and installed in accordance with IEC 60079series or other equivalent recognized international standard; and
- adequately protected against mechanical damage from the cargo, if a certified safe type equipment is installed.

### Unified interpretations of the Code on Noise Levels on Board Ships

The interpretation (MSC.1/Circ1509/Rev.1) provides clarifications on the calibration of the equipment, specifying that:

- the calibration should be carried out in accordance with IEC 61672-3 for sound level meters and IEC 60942 Appendix B for field calibrators;
- the edition of the calibration standard should correspond with the edition of the manufacturing standard for the instruments; and
- 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. The documentation or marking should include a clear statement of the results of the periodic tests and which performance class the instrument meets after calibration.

### Guidelines on maritime cyber risk management (MSC-FAL.1/Circ.3/Rev.3)

The revised Guidelines provide high-level recommendations to safeguard ships from cyberthreats and include – inter alia – the following modifications:

- 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/Maritime Autonomous Surface Ships);
- 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 necessary 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).

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### **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 100 in 2025.

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.

### OTHER RESOLUTIONS AND CIRCULARS ADOPTED/APPROVED

- Res. MSC.564(108) Security situation in the red sea and Gulf of Aden resulting from Houthi attacks on commercial ships and seafarers
- Res. MSC.530(106)/Rev.1– Performance standards for electronic chart display and information systems (ECDIS)
- MSC.1/Circ.797/Rev.40 -List of competent persons maintained by the Secretary-General pursuant to section A-I/7 of the STCW Code
- MSC.1/Circ.1164/Rev.28 Update of the reports of independent evaluation
- MSC.1/Circ.1212/Rev.2 Revised guidelines on alternative design and arrangements for SOLAS Ch.s II-1 and III
- MSC.1/Circ.1310/Rev.2 Joint IMO/IHO/WMO Manual on MSI
- MSC.1/Circ.1500/Rev.3 Revised guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments
- MSC.1/Circ.1511/Rev.1 Unified interpretations of SOLAS Reg.s II-2/9 and 13
- MSC.1/Circ.1599/Rev.3 Revised guidelines on the application of high manganese austenitic steel for cryogenic service
- MSC.1/Circ.1610/Rev.1 Descriptions of Maritime Services in the context of enavigation
- 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.1678 Guidelines on the medical examination of fishing vessel personnel
- MSC.1/Circ.1680 Unified interpretations of SOLAS Reg. XV/5.1 and paragraph 3.5 of part 1 of IP Code on the harmonization of the Industrial Personnel Safety Certificate with SOLAS safety certificates
- MSC-MEPC.2/Circ.18 Guidelines for the sampling of fuel oil for determination of compliance with MARPOL Annex VI and SOLAS Ch. II-2
- MSC-MEPC.2/Circ.19 Guidance in relation to the IMO Member State Audit Scheme (IMSAS) to assist in the implementation of the III Code by Member States
- SN.1/Circ.343 Recognition of ship reporting system in the Pentland Firth (PENTREP)

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