## Amendments taking effect in 2026 SOLAS and related mandatory Codes





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## Summary

This document outlines the SOLAS amendments and related mandatory Codes to be implemented in 2026 as part of an ad hoc mid-term amendment, in addition to the regular four-year entry-into-force cycle.

## The four-year entry-into-force cycle of SOLAS and related mandatory Codes

The SOLAS Convention and related mandatory Codes are regularly updated through amendments adopted by the IMO's Maritime Safety Committee (MSC). In this context, the four-year entry-into-force cycle refers to the process by which amendments to the SOLAS Convention and related mandatory Codes are implemented every four years, in accordance with MSC.1/Circ.1481.

The four-year entry-into-force cycle covers a wide range of SOLAS requirements related to maritime safety, including fire safety, life-saving appliances, navigation equipment, and structural design for ships, as well as mandatory instruments under the SOLAS Convention. However, the 2011 ESP, IMDG, and IMSBC Codes, which are continuously amended, along with Chapter 17 of the IBC Code and Chapter 19 of the IGC Code (which contain lists of relevant cargoes), are excluded from this scheme.

## The ad hoc mid-term amendment for entry into force on 1 January 2026

Due to delays caused by COVID-19, the MSC, at its 104th session, decided to introduce an ad-hoc implementation date of 1 January 2026, in addition to the existing four-year entry-into-force cycle, to ensure the timely implementation of amendments to SOLAS and related mandatory Codes.

Therefore, amendments to SOLAS and related mandatory Codes adopted between 1 July 2022 and 30 June 2024 will take effect on 1 January 2026.

#### The amendments to SOLAS and related mandatory instruments entering into force in 2026

This document mainly aims to introduce the amendments to the SOLAS Convention and related mandatory instruments adopted between 1 July 2022 and 30 June 2024, i.e., during the 106th to 108th sessions of the MSC, with a view to their entry into force on 1 January 2026.

However, it also includes the amendments implemented on 1 July 2026 outside the four-year entry-into-force cycle due to their urgency as separately assessed by the Maritime Safety Committee.

Other amendments to safety-related IMO Conventions and mandatory instruments entering into force in 2026, but not subject to the four-year entry-into-force cycle, are not included in this document.





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## Part 1 - SOLAS et al

Part 1 primarily covers the amendments to the SOLAS Convention that will come into force on 1 January 2026. It also addresses amendments to mandatory Codes (i.e., FSS Code, Polar Code, etc.) linked to those of the SOLAS Convention.

## Lifting appliances and anchor handling winches<sup>1</sup>

#### Background

Safety issues related to lifting appliances and anchor handling winches have been discussed under a longstanding agenda item of the SDC Sub-Committee since New Zealand et al proposed a relevant output in document MSC 89/22/12 in 2011.

#### **Application**

- · Concerned parties: Ship owners, shipyard, and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Lifting appliances and anchor handling winches installed on or after 1 January 2026. Some requirements will also apply retroactively to those installed before 1 January 2026.

Amendments to SOLAS regulations II-1/2.30 to 2.33 and II-1/3-13 adopted by resolution MSC.532(107)

The amendments establish IMO's convention requirements on lifting appliances and anchor handling winches, which have been regulated by classification societies rules and/or ILO Convention No.152. As part of these amendments, definitions for various terms such as "lifting appliance", "anchor handling winch", "loose gear" were added to regulation II-1/2, and safety provisions for lifting appliances and anchor handling winches were established as new regulation 3-13 under SOLAS chapter II-1.

The new SOLAS regulation II-1/3-13 will be complemented by the Guidelines for anchor handling winches and the Guidelines for lifting appliances, which were approved by MSC 107 as MSC.1/Circ.1662 and MSC.1/Circ.1663, respectively.



Lifting appliances

**Anchor Handling Winches** 

<sup>&</sup>lt;sup>1</sup> Anchor handling winch means any winch used for the purpose of deploying, recovering and repositioning anchors and mooring lines of other ships or MODUs in subsea operation (NB: As per paragraph 9 of SSE 4/WP.4, it does not mean the traditional anchor windlass onboard for ship's own anchor)



Appliances	Applicable requirements
Lifting appliances in- stalled on or after 1 Janu- ary 2026	<ul> <li>To be designed, constructed, and installed in accordance with class rules or standards acceptable to the Administration</li> <li>To be load tested and thoroughly examined after installation and after repair or alteration</li> <li>To be permanently marked with safe working load (SWL) with documentary evidence</li> </ul>
Lifting appliances in- stalled before 1 January 2026	<ul> <li>To be tested and thoroughly examined, based on the Guidelines for lifting appliances (MSC.1/Circ.1663) no later than the first renewal survey on or after 1 January 2026</li> <li>To be permanently marked with safe working load (SWL) with documentary evidence</li> </ul>
Anchor handling winches installed on or after 1 Jan- uary 2026	• To be designed, constructed, installed, and tested, based on the Guidelines for anchor handling winches (MSC.1/Circ.1662)
Anchor handling winches installed before 1 January 2026	• To be tested and thoroughly examined, based on the Guidelines for anchor handling winches (MSC.1/Circ.1662) no later than the first renewal survey on or after 1 January 2026

In this context, it is worth noting that MSC 106 endorsed the mutual understanding regarding the certification of existing lifting appliances, as summarized below. For further details, please refer to paragraph 11.52 of MSC 106/19.

- Existing lifting appliances with valid certificates issued under other international instruments, e.g., ILO Convention No.152, should be considered compliant with SOLAS regulation II-1/3-13.2.4; and
- Existing lifting appliances without valid certificates issued under other international instruments should be documented as compliant with SOLAS regulation II-1/3-13.2.4 by a factual statement issued by the Administration or a classification society recognized by the Administration.

#### Implication

Unless instructed otherwise by flag Administrations (e.g., through their own certification scheme), KR will continue to certify the following categories of lifting appliances through the Certificates of Test and Thorough Examination, as well as the Register of Ship's Lifting Appliances including Cargo Handling Gear, issued in accordance with the relevant KR class rules, to ensure compliance with SOLAS regulation II-1/3-13.

- New lifting appliances installed on or after 1 Jan 2026; and
- Existing lifting appliances installed before 1 Jan 2026, holding a valid certificate under ILO Convention No.152, including KR's own certificates/register

Therefore, for new ships, KR's own certificates/register scheme, which used to be optionally required under its class rules (i.e., where KR's class notation *LG* is assigned), de facto becomes mandatory to comply with SOLAS regulation II-1/3-13].

For existing lifting appliances installed before 1 Jan 2026 without a valid certificate, a factual statement shall be issued no later than the date of the first renewal survey on or after 1 Jan 2026, upon satisfactory completion of verification including load test, thorough examination, SWL marking, etc.

Regardless of installation date, lifting appliance shall be tested, thoroughly examined, inspected, operated, and maintained based on MSC.1/Circ.1663 and, if applicable, class rules.

Unless the flag Administration explicitly excludes lifting appliances with a SWL below 1,000 kg, they shall be subject to the new SOLAS regulation II-1/3-13.



## Oil fuel safety relating to the flashpoint

#### Background

Since 2020, the Maritime Safety Committee has discussed oil fuel safety issues, focusing on the risks arising from the use of non-compliant oil fuels. The flashpoint of oil fuel was one of the safety issues requiring appropriate regulatory action.

#### Application

- Concerned parties: Ship owners and bunker suppliers
- Implementation date: 1 January 2026
- Application: All ships including those constructed before 1 July 2012

Amendments to SOLAS regulations II-2/3.59, 3.60, 3.61, 4.2.1.6, 4.2.1.7 and 4.2.1.8 as adopted by resolution MSC.520(106)

The amendments aim to regulate the supply of oil fuel that does not meet the flashpoint requirements in SOLAS regulation II-2/4.2.1 (i.e., the prohibition of using oil fuel with a flashpoint of less than 60°C). As such, oil fuel suppliers shall provide ships with a declaration BEFORE bunkering, certifying that the oil fuel complies with SOLAS regulation II-2/4.2.1 and specifying the test method used. Additionally, a bunker delivery note for the oil fuel DELIVERED to the ship shall contain either the flashpoint measured or a statement confirming that the flashpoint has been measured at or above 70°C.

If a non-compliant case is confirmed upon analyzing a representative sample<sup>2</sup>, the Administration shall report the case to the IMO and take appropriate action against the oil fuel suppliers found to have delivered the non-compliant oil fuel.

#### Implication

These amendments provide a legal basis for regulating bunker suppliers who supply vessels with oil fuel not meeting the minimum flashpoint requirement of 60°C.

However, other stakeholders, beyond bunker suppliers, may also be impacted, as outlined in the following points:

- Ship owners and operators are advised to ensure that their fleet obtains the necessary documentation confirming compliance with the flashpoint requirements (i.e., the oil fuel supplier's preliminary declaration certifying compliance with SOLAS II-2/4.2.1, BDN indicating the oil fuel's flashpoint, etc.), before and after bunkering.
- Administrations are invited to recognize their rights and obligations arising from these amendments; and consider enacting their own national legislation to properly implement them, including taking appropriate action against confirmed non-compliant cases.

## **Oil fuel quality**

#### Background

Since 2020, the Maritime Safety Committee has discussed oil fuel safety issues, focusing on the risks arising from the use of non-compliant oil fuels. It was concerned that SOLAS lacked requirements to ensure oil fuel quality from a safety perspective.

<sup>&</sup>lt;sup>2</sup> The oil fuel sample needs to be analyzed in accordance with ISO 2719:2016 by the laboratory accredited to ISO/IEC 17025:2017, etc.



#### Application

- Concerned parties: Ship owners and bunker suppliers
- Implementation date: 1 January 2026
- Application: All ships including those constructed before 1 July 2012

Amendments to SOLAS regulations II-2/4.2.1.9 as adopted by resolution MSC.550(108)

These amendments aim to ensure oil fuel quality so as not to jeopardize the safety of ships and personnel or adversely affect the performance of ship's machinery. They are almost identical to MARPOL Annex VI regulation 18.3.1.1.3 and establish a legal ground of SOLAS Convention to regulate oil fuel quality, which affects ship's safe operation.

#### Implication

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

# Fire detection and fire alarm system for control stations and cargo control rooms

#### Background

Concerns were raised about the absence of fire detection and alarm systems in control stations, such as the wheelhouse, which could hinder early fire detection, especially when personnel are not present.

#### Application

- · Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: new cargo ships constructed on or after 1 January 2026

#### Amendments to SOLAS regulations II-2/7.5.5 as adopted by resolution MSC.550(108)

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 (e.g. navigation bridge and fire control stations) and cargo control rooms regardless of ship's 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.



#### Implication

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



While  $CO_2$  rooms are deemed as control stations limited to the application of fire divisions and insulations in accordance with SOLAS regulation II-2/10.4.3, they may not be classified as control stations in generally applying these amendments due to the definition of "control stations" in SOLAS regulation II-2/3.18. Further, SSE 8 did not agree that fixed fire detection and fire alarm system was necessary for  $CO_2$  rooms and similar spaces. Please refer to page 112 of SSE 9/20.

## Prohibition on the use and storage of fire-extinguishing media containing PFOS

#### Background

Perfluoro-Octane Sulfonic Acid (hereinafter referred to as PFOS') is known to be harmful to humans, other creatures and the environment. Therefore, the use of PFOS has been widely banned by the Stockholm Convention on Persistent Organic Pollutants since 2009. It was proposed that a similar restriction should be placed under SOLAS chapter II-2.

#### Application

- Concerned parties: Ship owners, shipyards, equipment manufacturers
- Implementation date: 1 January 2026
- Application: All ships, including high-speed crafts (NB: Ships constructed before 1 January 2026 shall retroactively meet these requirements no later than the first survey on or after 1 January 2026.)

Amendments to SOLAS regulations II-2/1.2.10 and II-2/10.11 as adopted by resolution MSC.532(107); paragraph 7.9.4 of chapter 7 of 1994 HSC Code as adopted by resolution MSC.536(107); and paragraph 7.9.4 of chapter 7 of 2000 HSC Codes as adopted by resolution MSC.537(107)

These amendments prohibit the use and storage of fire-extinguishing media (i.e. foam liquid) containing PFOS. Where fire-extinguishing media used or stored on ships are confirmed to contain PFOS, they need to be disposed to appropriate shore-based reception facilities no later than the first survey on or after 1 January 2026.



#### Implication

Fire-extinguishing media (e.g., foam liquid) containing PFOS shall not be used for fire extinguishing systems and equipment, as listed below but not limited to, or stored onboard.

- Fixed foam fire-extinguishing system
- Deck foam system
- Portable foam fire-extinguishers; and



• Portable foam applicators

To verify the compliance on or after 1 Jan 2026, documented evidence confirming the non-inclusion of PFOS (e.g., manufacturer's declarations, test reports, etc.) should be provided and kept onboard. Ship owners should be mindful that failure to provide the documented evidence may be considered non-compliance, which may lead to the circumstance that such a medium onboard should be disposed to shore-based reception facilities.

## Fire safety of new and existing ro-ro passenger ships

#### Background

A series of casualties that 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 IMO's discussion from 2017 to 2023, which were mainly based on FIRESAFE I and II studies<sup>3</sup>.

#### Application

- Concerned parties: Ship owners, shipyards and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Ro-ro passenger ships or passenger ships with vehicle spaces, special category spaces and/or ro-ro spaces, which are constructed on or after 1 January 2026 (NB: Some provisions shall retroactively apply to those constructed before 1 January 2024 no later than the first survey coming on or after 1 January 2028.)

Amendments to SOLAS regulations II-2/20 et al as adopted by resolution MSC.550(108)

**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:

• An 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)



Combined smoke and heat detectors

**Linear Heat Detectors** 

- 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)
- 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

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

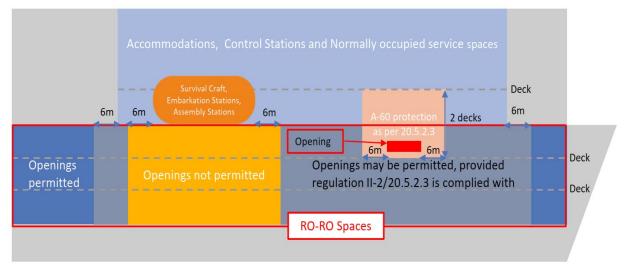
established provisions of the FSS Code, i.e. paragraph 2.5 of chapter 7. In this regard, the drainage of 125% capacity shall be provided to effectively remove the fire water accumulated on the weather deck. (SOLAS regulations II-2/20.6.2.1 and 20.6.2.2)

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)



Video monitoring system

 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 location. (SOLAS regulation II-2/20.5.2)



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 implemented on existing passenger ships and confirmed by attending surveyors 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 relevant new 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 m2. (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)

Amendments to paragraph 2.5 of chapter 7 and paragraphs 2.3.1, 2.4.2.2 and 2.5.1 of chapter 9 of the FSS Code as adopted by resolution MSC.555(108)

As a consequence of the above amendments to SOLAS regulation II-2/20, the FSS Code was 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.

In this regard, 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. (FSS Code, chapter 7, paragraph 2.5)

Further, combined smoke and heat detectors and linear heat detectors are now included in the engineering specifications of fixed fire detection and fire alarm systems. These amendments apply to ships constructed(K/L) on or after 1 January 2026. (FSS Code, chapter 9, paragraphs 2.3.1 and 2.4.2.2)

Type of detector	Maximum floor area per detector	Maximum distance apart between centres	Maximum distance away from bulkheads
Combined smoke and heat	74 m <sup>2</sup>	9 m	4.5 m

For ro-ro passenger ships constructed(K/L) on or after 1 January 2026, the requirements of visual and audible fire detection alarm signals for the fixed fire detection and fire alarm system have been added. (FSS Code, chapter 9 paragraph 2.5.1)

#### Implication

According to the definition in SOLAS regulation II-2/3.42, *'ro-ro passenger ship'* means a passenger ship with roro spaces or special category spaces. Strictly speaking, ro-ro passenger ships are not the same as passenger ships with vehicle, special category or ro-ro spaces. For instance, passenger ships that only have vehicle spaces are not considered ro-ro passenger ships. Accordingly, it should be noted that the type of passenger ship may vary when applying each provision of these amendments.

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 detection and fire alarm systems.

Fixed water-based fire extinguishing systems 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.

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 the 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.

## Installation of electronic inclinometer

#### Background

While Performance standards for electronic inclinometers (resolution MSC.363(92)) have been in place since 2013, the installation of electronic inclinometers has not been mandatory under the SOLAS Convention. However, continued accidents, such as capsizing of bulk carriers or loss of containers at sea, have revealed the need for electronic inclinometers on wheelhouses to enable the provision of ship's heeling information to crew and VDR.

#### Application

- · Concerned parties: Ship owners, shipyards, and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Containerships and bulk carriers of 3,000 GT and upwards constructed on or after 1 Jan 2026

Amendments to SOLAS regulations V/2.8, 2.9, 18 and 19.2.12 as adopted by resolution MSC.532(107)

These amendments enforce the installation of electronic inclinometer on containerships and bulk carriers of 3,000 GT and upwards constructed on or after 1 Jan 2026. In this regard, the definitions of the terms "bulk carrier" and "container ship" were newly established for application to SOLAS chapter V, and Performance standards for electronic inclinometers (resolution MSC.363(92)) were listed as a footnote under SOLAS regulation V/18.

#### Implication

Electronic inclinometers are not required for cargo ships occasionally carrying dry bulk cargo and general cargo ships carrying containers on deck, and any backup systems for an electronic inclinometer would not be needed. (Refer to paragraph 13.47 of document MSC 106/19)

An electronic inclinometer, if fitted, should be connected to shipboard VDR in accordance with the performance standards on VDR (resolution MSC.333(90), as amended), such that ship's rolling motion can be reconstructed during playback.

### **Reporting containers lost at sea**

#### Background

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

#### Application

- Concerned parties: Ship owners and flag Administrations
- Implementation date: 1 January 2026
- Application: All ships





Amendments to SOLAS regulations V/31 and 32 as adopted by resolution MSC.550(108)

SOLAS regulations V/31.2 and V/32.3 were amended to establish the reporting procedures 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 shipboard containers or observing containers lost at sea, and new regulation V/32.3 scopes the information to be reported.

#### Implication

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.

# Safety measures for non-SOLAS ships operating in the polar waters

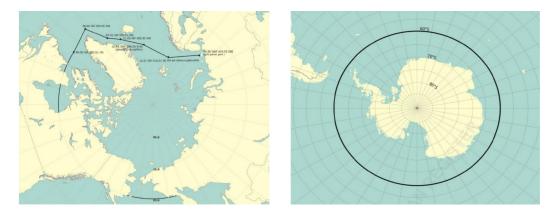
#### Background

Since the introduction of the Polar Code, concerns have been raised about non-SOLAS ships, such as fishing vessels, which constitute a significant portion of ships operating in polar waters, being excluded from the international safety framework. To address this regulatory gap, the IMO has taken steps to develop interim safety guidelines specifically for pleasure yachts and fishing vessels. As part of these efforts, mandatory requirements in SOLAS Chapter XIV and the Polar Code have been amended.

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Non-SOLAS ships as detailed in the ensuing paragraph (NB: These amendments shall retroactively apply to the existing non-SOLAS ships by 1 January 2027 for navigation in polar waters.)

Amendments to SOLAS chapter XIV as adopted by resolution MSC.532(107) and chapters 9-1 and 11-1 of part I-A of the Polar Code as adopted by resolution MSC.538(107)



The scope of polar waters (Arctic and Antarctic areas)

The amendments to SOLAS chapter XIV, in conjunction with new chapters 9-1 (safety of navigation) and 11-1 (voyage planning) of the Polar Code Part I-A, provide safety requirements applicable to the following categories of non-SOLAS ships when navigating in polar waters.



- fishing vessels of 24 m in length overall and above;
- pleasure yachts of 300 GT and upwards not engaged in trade; and
- cargo ships of 300 GT and upwards but below 500 GT

Based on MSC 106's decision, the certification proving compliance with the requirements of chapters 9-1 and 11-1 of part I-A of the Polar Code will be left to the discretion of the flag Administration.

#### Implication

It is anticipated that, amongst non-SOLAS vessels, fishing vessels operating in the polar water may be the most likely to be affected by the amendments. While fishing vessels of 24 meters in length overall and above shall in principle comply with chapters 9-1 and 11-1 of the Polar Code Part I-A for operation in the polar waters, the application of chapter 9-1 may be alleviated by the policy of flag Administrations.

As the certification and the applicable requirements may be determined by national laws, additional guidance is awaited from flag Administrations.

In the meantime, KR may issue a related Statement of Compliance (SOC) upon the request from ship owners/operators and the satisfactory completion of relevant survey.



## Part 2 - IGF Code

The amendments to the IGF Code were adopted by MSC 108 through resolution MSC.551(108) to address various safety issues relating to the use of natural gas fuel onboard and correct editorial errors therein. These amendments enter into force on 1 January 2026. While they generally apply to new ships constructed on or after 1 January 2026, some provisions retroactively apply to all ships.

## Definition: Ship constructed on or after 1 January 2026

#### Background

The definition of the expression 'ship constructed on or after 1 January 2026' is essential to clarify the application date of the IGF Code amendments adopted by resolution MSC.551(108).

#### Application

- Concerned parties: All parties
- Implementation date: 1 January 2026
- Application: To all provisions of the IGF Code using the expression "ships constructed on or after 1 January 2026"

Amendments to paragraph 2.2.43 of part A of the IGF Code as adopted by resolution MSC.551(108)

Throughout the IGF Code, the expression "ship constructed on or after 1 January 2026" means ships:

- for which the building contract is placed on or after 1 January 2026; or
- in the absence of a building contract, the keels of which are laid on or after 1 July 2026; or
- the delivery of which is on or after 1 January 2030

#### Implication

All stakeholders are invited to note the above definition to clearly comprehend the scope of application of the IGF Code amendments adopted by resolution MSC.551(108).

## Air locks: Door's seal height

#### Background

In accordance with IGF Code Part A-1, paragraph 5.11.1, direct access from non-hazardous areas to hazardous areas is not permitted. If access is required for operational purposes, an air lock must be installed.

Under the previous paragraph 5.12.1, the air lock must be equipped with gas-tight doors interfacing both hazardous and non-hazardous areas, and the door sills must have a minimum height of 300 mm. However, concerns have been raised about whether this sill height requirement should apply only to the outer door leading to the hazardous area, given the risk of flooding.

#### **Application**

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026



• Application: ship constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 5.12.1 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

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.

#### Implication

These amendments provide a regulatory relaxation concerning the application of the air lock door sill heights, potentially leading to design modifications for air lock doors. Consequently, the shipbuilding industry is encouraged to pay attention to the fact that these changes may be incorporated into air lock design.

## **Pressure relief valves**

#### Background

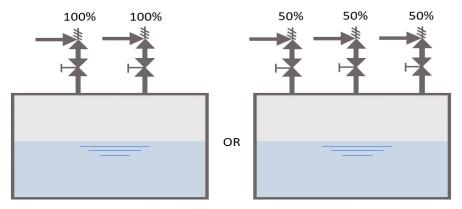
In accordance with IGF Code Part A-1, paragraph 6.7.2.2, LNG fuel tanks must be fitted with at least two pressure relief valves, with a means to isolate one in the event of failure or leakage. However, concerns have been raised that the capacity of remaining pressure relief valves may not be sufficient to fully manage the pressure increase in the fuel tank if one valve is isolated.

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 6.7.3.1.1 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

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.



Examples of allowable combined capacity of PRV





#### Implication

Under the existing requirements, it is common practice to install two pressure relief valves, each with 50% of the combined pressure relieving capacity. For ships constructed on or after 1 January 2026 and subject to the IGF Code, design modifications are inevitable as outlined above.

## Control of tank pressure and temperature

#### Background

IGF Code Part A-1, paragraph 6.9.1.1, requires that, except for tanks designed to withstand the vapor pressure of the fuel, the pressure and temperature of liquefied gas fuel tanks must be continuously maintained using **one** of the following four methods.

- Re-liquefaction of vapors;
- Thermal oxidation of vapors;
- Pressure accumulation; or
- Liquefied gas fuel cooling

This requirement was based on paragraph 7.1.1 of the IGC Code, which, however, allowed the use of **one or more** of the four methods.

#### Application

- · Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 6.9.1.1 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

These amendments clarifies that the pressure and temperature of liquefied gas fuel tanks shall be always maintained using **one or more** of the following methods.

- · Re-liquefaction of vapors;
- Thermal oxidation of vapors;
- Pressure accumulation; or
- Liquefied gas fuel cooling

#### Implication

Under previous paragraph 6.9.1.1, more than one method (e.g., Type C independent tanks utilizing both thermal oxidation and pressure accumulation) has been widely in use. Therefore, these amendments may not have a substantive impact on ship's design and arrangements.

## LNG bunkering manifolds

#### Background

Under the previous IGF Code Part A-1, paragraph 8.4.1, the connection of bunkering manifolds has been required to be of dry-disconnect type equipped with additional safety dry break-away coupling/self-sealing quick release.



However, concerns have been raised about the lack of clarity in the previous paragraph 8.4.1 regarding the specific requirements or standards that should apply to the connection of bunkering manifolds.

#### Application

- · Concerned parties: Ship owners, shipyards, and bunker suppliers
- Implementation date: 1 January 2026
- Application: All ships subject to the IGF Code when bunkering LNG fuel on or after 1 January 2026 (retroactive)

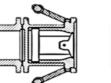
Amendments to paragraph 4.2.2 of part A and paragraphs 8.4.1 to 8.4.3 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

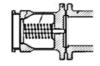
According to the amendments, the connection of the bunkering manifolds may be arranged either through drydisconnect/connect couplings<sup>4, 5</sup>, manual or hydraulic connect couplers<sup>6</sup>, or bolted flange to flange assembly<sup>5</sup>. (paragraph 8.4.1)

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<sup>5</sup> conducted at design stage to mitigate the risk of LNG or gas leakage. (paragraph 8.4.2)

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. (paragraph 8.4.3)







Dry-Disconnect/Connect Coupling



#### Implication

In implementing the new paragraphs 8.4.1 and 8.4.2 of the Code, 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.

<sup>&</sup>lt;sup>4</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.

<sup>&</sup>lt;sup>5</sup> ISO 21593:2019, Ships and marine technology – Technical requirements for dry-disconnect/connect couplings for bunkering liquefied natural gas

<sup>&</sup>lt;sup>6</sup> ISO 20519:2021 - Ships and Marine Technology - Specification for Bunkering of Liquefied Natural Gas Fuelled Vessels



## Mitigation to redundancy and segregation of LNG fuel supply

#### Background

In cases where a single fuel is used (i.e., when a gas-only engine is installed), the fuel supply system must ensure that a leak in one system does not lead to a loss of power. To achieve this, full redundancy and segregation of the fuel supply system between the fuel tank and the consumer have been required as per previous paragraph 9.3.1 of part A-1 of the IGF Code.

However, in addressing practical challenges encountered while applying this provision, it was found that, unlike dual-fuel systems capable of achieving full redundancy and segregation by utilizing different types of fuel, a single LNG fuel system can mitigate the risk of power loss through the installation of two or more engines or auxiliary propulsion devices as an alternative solution.

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 9.3.1 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

These amendments no longer require redundancy and segregation of fuel supply systems to the full extent from fuel tanks to consumers for single fuel installations. Instead, they alternatively allow flag Administrations to accept a partial reduction in propulsion performance in the event of a fuel supply system leak or failure, in accordance with SOLAS regulation II-1/26.3.

#### Implication

In the case of a gas-only engine, the installation of two or more engines or an auxiliary propulsion device can satisfy the requirements in the revised paragraph 9.3.1. However, it is considered that separate gas fuel supply systems, each capable of supplying fuel to distinct engines or engine groups, are still necessary to meet the redundancy and segregation requirements for the fuel supply system.

Gas-only engines may have been used in a limited number of European domestic projects. While gas-only engines suitable for larger vessels have already been developed, their commercial demands were negligible. As a result, these amendments are unlikely to have a significant impact on the shipbuilding industry at this stage.

## Venting fuel supply pipes

#### Background

Previous paragraph 9.4.7 of the IGF Code Part A-1 requires that, in the event of automatic closure of the master fuel gas valve, only the fuel supply line between the double block and bleed valve and the consumer is automatically ventilated to reduce the risk of fire or explosion caused by fuel gas backflow.

However, it has been suggested that all parts of fuel supply lines between the master fuel gas valve and the consumer should be ventilated, regardless of the design and arrangement of the consumer.

#### Application

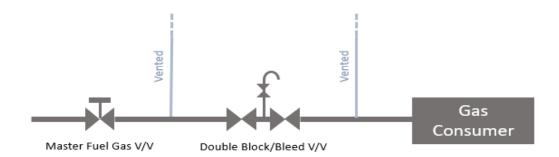
• Concerned parties: Ship owners and shipyards



- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 9.4.7 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

Where the master gas fuel valve is automatically shut down, the complete gas supply pipe on its downstream shall be automatically vented.



#### Implication

Considering that design changes may occur, actions from the shipbuilding industry are required.

In implementing the revised 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'.

# Installation of a manually operated shutdown valve for the maintenance of a gas consumer

#### Background

The previous paragraph 9.4.8 of the IGF Code Part A-1 requires a manually operated shutdown valve to be installed at the upstream of the double block and bleed valve in the fuel supply line leading to the "engine". This manually operated shutdown valve is intended to provide sufficient isolation when components in the fuel supply line need to be repaired. In this context, the need for the manually operated shutdown valve (for repair purposes) is likely to be the same for both engines and other consumers.

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 9.4.8 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

These amendments modify the term "engine" to "gas consumer" used in paragraph 9.4.8 to require a manually operated shutdown value at the upstream of the double block and bleed value in the fuel supply line leading to all types of gas consumers, not just engines.

Implication



The existing paragraph 9.4.2 of the IGF Code Part A-1 already requires a manually operated stop valve in the fuel supply line to the consumer coupled in series with master gas fuel valve. However, it cannot be ruled out that, depending on the existing design, an additional manually operated shutdown valve may need to be installed. Overall, it is assessed that these amendments will have a minimal impact on the arrangement of the fuel supply lines.

# Revised conditions for the ventilation of double wall gas fuel piping

#### Background

Paragraph 9.6.1 of the IGF Code Part A-1 stipulates that fuel pipes located within gas-safe machinery spaces must be completely enclosed by a double pipe or duct, and that the double piping arrangement must satisfy one of three ventilation methods, namely, 1) pressurizing with inert gas, 2) mechanical under-pressure ventilation, and 3) other equivalent solutions. Amongst the three options, the method of pressurizing with inert gas is numbered as paragraph 9.6.1.1, which may be rephrased as shown below:

- The space between the concentric pipes to be pressurized with inert gas at a pressure greater than the gas fuel's;
- Suitable alarms against the loss of inert gas pressure; and
- When the inner pipe contains high pressure gas, the system shall be so arranged that the pipe between the master gas valve and the engine is automatically purged with inert gas when the master gas valve is close

It was raised that the last bullet point above lacks technical justification and could lead to unnecessary misunderstandings.

#### Application

- · Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: All ships subject to the IGF Code (retroactive)

Amendments to paragraph 9.6.1 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

The last sentence of paragraph 9.6.1.1 of the Code, i.e. the third bullet point above, was deleted from paragraph 9.6.1.1 of the Code.

#### Implication

Given that this revision could impact ship design and arrangement, it warrants the attention of the shipbuilding industry. However, considering that the revision primarily relaxes existing requirements and that the arrangements satisfying paragraph 9.6.1.1 is seldomly employed, it is assessed that the impact on the industry is expected to be minimal.

## Design pressure of outer pipes or ducts of LNG fuel supply system

Background



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.

Application

- · Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraphs 9.8.1, 9.8.2 and 9.8.4 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

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.

The design pressure may be reduced from the max. working pressure of the inner pipe to the max. built- up pressure or the local instantaneous peak pressure in way of rupture		
	Outer pipe or duct	
	Inner pipe	
Fuel supply		

#### Implication

These amendments also give an alleviation to the design pressure of the fuel piping system's outer pipes or ducts where their inner fuel pipe's maximum working pressure is 1 MPa or less. Therefore, this relaxation can be applied when designing the fuel supply lines.

## Fire protection for fuel preparation rooms

#### Background

Previous paragraph 11.3.1 of the IGF Code Part A-1 scopes that any space containing equipment for fuel preparation such as pumps, compressors, heat exchangers, vaporizers and pressure vessels shall be regarded as a machinery space of category A for fire protection purposes. Such a space is generally classified as a fuel preparation room based on paragraph 2.2.17 of the Code.

In this context, the expression "fire protection" used in the paragraph 11.3.1 was not clear in terms of its application scope, i.e. as to whether the protection should include escape routes.

Since 2019, IACS UI GF 13 has provided a unified interpretation clarifying that the expression "fire protection" used in paragraph 11.3.1 of the Code means structural fire protection, not including means of escape. It is noted that structural fire protection is detailed in SOLAS regulation II-2/9.



#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 11.3.1 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

To clarify the issue in paragraph 11.3.1 of the Code, these amendments specify that fuel preparation rooms shall, for the purpose of the application of SOLAS regulation II-2/9, be regarded as a machinery space of category A.

#### Implication

Through the interpretation provided in IACS UI GF 13, IACS member classification societies have already been implementing similar requirements since 2019. Therefore, the impact of this revision on the industry is expected to be minimal.

### Portable fire extinguishers in fuel preparation rooms

#### Background

There was a proposal that, in addition to a fixed fire-extinguishing system as required by paragraph 11.8 of the IGF Code, portable measures should be required to fully protect a fuel preparation room, as prompt action with a portable fire extinguisher often leads to a fast extinguishment of the fire without the need to activate the fixed system.

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: All ships subject to the IGF Code (NB: ships constructed before 1 January 2026 shall meet this requirement no later than the first survey on or after 1 January 2026.)

Amendments to paragraph 11.6.2 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

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.

#### Implication

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.





# Categorization of hazardous areas: Inter-barrier space of LNG fuel tank

#### Background

There was a proposal that the categorization of hazardous areas in the IGF Code should be in line with the one in IEC 60092 and the IGC Code.

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

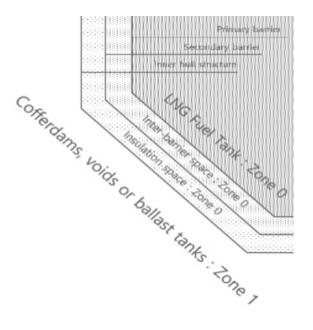
Amendments to paragraph 12.5 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

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.

#### Implication

For ships constructed on or after 1 January 2026, the recategorization of an inter-barrier space 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



## Fuel tank's level gauges

#### Background

Under the previous paragraph 15.4.1.3 of the IGF Code Part A-1, two types of LNG fuel tank liquid level gauges were permitted: indirect devices (e.g. weighing or in-line follow meters), and closed devices that do not pene-trate the tank.

While the use and installation of closed devices that penetrate the tank are not explicitly permitted under the IGF Code, they have been allowed under the IGC Code, with their reliability proven through decades of use.



#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Ships constructed on or after 1 January 2026 and subject to the IGF Code

Amendments to paragraph 15.4.1.3 of part A-1 of the IGF Code as adopted by resolution MSC.551(108)

As permitted under the IGC Code, the closed devices which penetrate the liquefied gas fuel tank are now included as allowable liquid level gauges for LNG fuel tanks under the IGF Code. Such devices, however, shall be considered as tank connections. Further, unless mounted directly on the tank top, a shut-off valve shall be fitted as close as possible to the tank.

#### Implication

Notwithstanding the lack of relevant provision, the newly added level gauge type has been already widely used for the LNG fuel tank subject to the IGF Code. As such, while the addition introduces a new provision to the IGF Code, its impact on ship's design and arrangement is expected to be minimal.

## **Bunkering operation**

#### Background

Incidents of LNG leakage occurred during bunkering with pressure above 1.0 MPa. There have been recurring situations where pumping against a closed valve in the bunkering line has resulted in the opening of the pressure relief valves installed for venting trapped cryogenic liquid. This has resulted in massive amounts of LNG being pumped into the vent mast and dispersed onto the ship and port, resulting in dangerous situations for crew and shore personnel.

#### **Application**

- · Concerned parties: Ship owners and bunker suppliers
- Implementation date: 1 January 2026
- · Application: All ships subject to the IGF Code with immediate effect

Amendments to paragraph 18.4.1.1 of part C-1 of the IGF Code as adopted by resolution MSC.551(108)

To address the risk of such incidents, paragraph 18.4.1.1 of the IGF Code Part C-1 was amended to require that minimum and maximum bunker transfer pressure/temperature and bunkering line's pressure relief valve setting are included in the written agreement made between ship's master and bunker suppliers before bunkering operation commences.

#### Implication

To implement these amendments, ship owners are reminded to ensure that an agreement or safety checklist between ships and bunker supplier includes the newly added components from 1 January 2026. If such agreements or checklists forms are incorporated as part of ships' safety management system, they need to be updated.



## **Minor editorials**

#### Background

Various typos or errors have been identified in the IGF Code.

#### Application

- Concerned parties: All parties
- Implementation date: 1 January 2026
- Application: With immediate effect on or after 1 January 2026

Corrections to various provisions under the IGF Code as adopted by resolution MSC.551(108)

Errors in the IGF Code were corrected as identified in grey shades below.

Provisions in the IGF Code	Minor editorials
Paragraphs 5.3.3.3 and 5.3.4.4	Tank Fuel containment system
Paragraph 6.4.15.3.1.2	the relative density of the cargo fuel
Paragraph 6.7.3.1.1.2	gas fuel tank type
Paragraph 7.3.2.1	$t = (t_0 + b + c)/(1 -  a /100) \text{ (mm)}$
Paragraph 16.3.5.1	primary <del>tank</del> barrier

Implication

The amendments are no more than the correction of simple oversight or mistakes. Therefore, there should not be any substantive implication arising from the amendments.



## Part 3 - Other Codes

Part 3 deals with the amendments to mandatory Codes not addressed in parts 1 and 2.

# High-manganese austenitic steel as a material for cryogenic service

#### Background

High-manganese austenitic steel was developed by industry as a material for cryogenic service with minimum design temperature of -165°C.

#### Application

- · Concerned parties: Ship owners, shipyards, equipment manufacturers
- Implementation date: 1 January 2026
- Application: Plates, sections and forgings for cargo tanks, secondary barriers and process pressure vessels for use at a design temperature down to -165°C

Amendments to table 6.3 of chapter 6 of the IGC as adopted by resolution MSC.523(106) and table 7.3 of chapter 7 of part A-1 of the IGF Code as adopted by resolution MSC.524(106)

The amendments now permit the use of high-manganese austenitic steel as a material for cryogenic service for plates, sections and forgings having minimum design temperature of -165°C. The use of high-manganese austenitic steel should be done based on MSC.1/Circ.1599(Rev.3), unless the flag Administration provides any other equivalent standards.

#### Implication

MSC.1/Circ.1599/Rev.2, which provided the revised guidelines on the application of high manganese austenitic steel for cryogenic service, and which is footnoted under the IGC and IGF Codes for now, has been amended and superseded by MSC.1/Circ.1599/Rev.3. According to MSC.1/Circ.1599/Rev.3, the following products are identified as compatible with high-manganese austenitic steel: Ammonia, Butane, Butane-propane mixture, Carbon Dioxide (CO<sub>2</sub>), Ethane, Ethylene, Methane (LNG), Pentane, and Propane. Ship designers may consider using the material for the transportation of these products as cargoes or fuels.

## Use of toxic cargoes as fuel on gas carriers

#### Background

Amongst the toxic cargoes listed in chapter 19 of the IGC Code, ammonia stands out as an eco-friendly fuel option due to its lack of CO2 emission, i.e. a major contributor to greenhouse gases. However, under the current IGC Code, the use of ammonia cargo as a ship's fuel is legally prohibited because of its toxicity.

As part of the comprehensive review of the IGC Code, the CCC Sub-Committee explored allowing the use of toxic cargoes, including Ammonia, as fuel for gas carriers from 2022 to 2023. These efforts align with global initiatives to reduce greenhouse gas emissions.

#### Application

• Concerned parties: Ship owners, shipyards, and equipment manufacturers



- Implementation date: 1 July 2026
- Voluntary early implementation: See MSC.1/Circ.1681
- Application: Gas carriers subject to the IGC Code and constructed(K/L) on or after 1 July 2026 (NB: Applicable when using toxic cargo as fuel)

Amendments to paragraph 16.9.2 of the IGC Code as adopted by resolution MSC.566(109)

Paragraph 16.9.2 of the IGC Code was amended as follows:

- The prohibition on using cargoes as fuel now applies only to the one (i.e. toxic cargoes) that require the carriage in type 1G ship, which have the highest safety containment requirements; and
- Toxic cargoes required to be carried on type 2G/2PG ships, such as Ammonia, may be used as ship's fuel with the approval from the Administration, provided that the same level of safety as natural gas is maintained.



#### Implication

To support these amendments, the Guidelines on the use of ammonia cargo as fuel are to be developed by the IMO until 2026, for inclusion as a footnote to the revised paragraph 16.9.2 of the IGC Code.

Unlike the use of LNG cargo as fuel, for which chapter 16 of the IGC Code provides detailed requirements, the use of Ammonia cargo as ship's fuel requires flag Administration's authorization as an equivalent based on the guidelines to be developed.

Flag Administrations may voluntarily early-implement the amendments before 1 July 2026, in accordance with MSC.1/Circ.1681.

Given that these amendments are retroactively applied, any new construction using Ammonia cargo as ship's fuel may be considered in consultation with ship's flag Administration even before the amendments are implemented.

### Ventilation of totally enclosed lifeboats

#### Background

The accident investigation on the sinkage of MOL Comfort identified the concern that the absence of ventilation may cause overheating, elevate  $CO_2$  levels, and hamper human breathing inside a totally enclosed lifeboat after abandoning the ship.

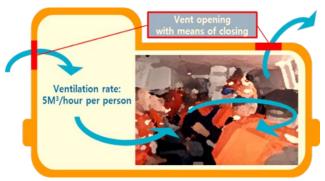
#### Application

- Concerned parties: Shipowners, shipyards, and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Totally enclosed lifeboats installed on or after 1 January 2029

Amendments to paragraphs 4.6.6 and 4.6.7 of chapter IV of the LSA Code as adopted by resolution MSC.535(107)



These amendments establish the ventilation requirements for totally enclosed lifeboats. The ventilation means may be of either a powered or passive type with appropriate means of closing but shall satisfy the ventilation capacity of 5 m<sup>3</sup>/hour per person for the total number of persons the lifeboat is permitted to accommodate.



#### Implication

Lifeboat manufacturers are expected to develop the

ventilation system for totally enclosed lifeboats complying with the amendments to LSA Code ASAP, in accordance with resolution MSC.544(107) and MSC.1/Circ.1630/Rev.2). Concurrently, the legal system of flag Administrations for certification of such a lifeboat (e.g., MED) should be in place.

In this regard, please note that the totally enclosed lifeboats complying with the new ventilation requirements should be installed in the following cases (i.e., the installation on or after 1 January 2029)

- Ships contracted for construction on or after 1 January 2029: All totally enclosed lifeboats
- Ships contracted for construction before 1 January 2029 (including existing and new ships): The installation with a contractual delivery date on or after 1 January 2029 (In the absence of a contractual delivery date, the actual delivery date of the lifeboat applies.)

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

#### Background

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 appliances and release gear.

In this regard, it is noted that paragraphs 4.6.6 and 4.6.7 of chapter 4 of the LSA Code were amended by resolution MSC.535(107) to establish new requirements relating to ventilation means for totally enclosed lifeboats.

#### Application

- · Concerned parties: Shipowners, equipment manufacturers, and LSA service suppliers
- Implementation date: 1 January 2026
- Application: Annual thorough examination and operational test of totally enclosed lifeboats, where ventilation system is fitted

Amendments to resolution MSC.402(96) as adopted by resolution MSC.559(108)

The ventilation system of totally enclosed lifeboats was included as a new component which shall be checked during an annual thorough examination and operational test performed by an approved service supplier.

#### Implication

Service suppliers and equipment manufacturers 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.



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 totally enclosed lifeboats.

## In-water performance of life jackets

#### Background

There are concerns that the current requirements for lifejacket testing may not adequately ensure consistent performance, particularly regarding buoyancy and stability.

#### Application

- Concerned parties: Ship owners, shipyards, and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Life jackets newly provided onboard on or after 1 January 2026

Amendments to paragraph 2.2.1.6.2 of chapter II of the LSA Code as adopted by resolution MSC.554(108)

Paragraph 2.2.1.6.2 of the LSA Code was amended 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:

- Resolution MSC.563(108) amending 'Revised recommendation on testing of life-saving appliances' (resolution MSC.81(70)); and
- MSC.1/Circ.1628/Rev.2 containing 'Revised standardized life-saving evaluation and test report forms (personal life-saving appliances)'

#### Implication

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.

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.

## Single fall and hook system for launching lifeboats or rescue boats

#### Background

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.





#### Application

- · Concerned parties: Ship owners, shipyards, and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Release mechanism of lifeboats or rescue boats installed on or after 1 January 2026



Amendments to paragraphs 4.4.7.6.8 and 4.4.7.6.17 of chapter IV of the LSA Code as adopted by resolution MSC.554(108)

To address the above ambiguity, paragraphs 4.4.7.6.8 and 4.4.7.6.17 of the LSA Code were amended.

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.

#### Implication

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.

## Lowering speed of survival crafts and rescue boats

#### Background

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.

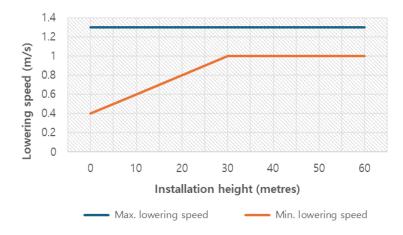
#### Application

- · Concerned parties: Ship owners, shipyards, and equipment manufacturers
- Implementation date: 1 January 2026
- Application: Launching appliances installed onboard on or after 1 January 2026

Amendments to paragraphs 6.1.2.8 and 6.1.2.10 of chapter VI of the LSA Code as adopted by resolution MSC.554(108)

Paragraphs 6.1.2.8 and 6.1.2.10 of the LSA Code were respectively amended 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 below.





#### Implication

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.

## Grain Code: New loading condition for the carriage of grains

#### Background

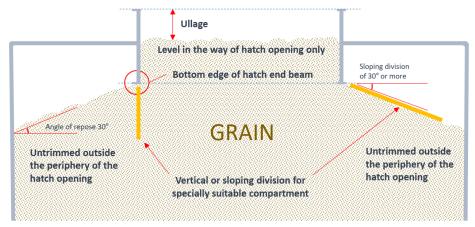
Since its adoption as resolution MSC.23(59) in 1991, the Grain Code has been mandatorily implemented under SOLAS Chapter VI Part C without any amendments for more than 30 years.

#### Application

- · Concerned parties: Ship owners and cargo consignees
- Implementation date: 1 January 2026
- Application: All cargo ships intended for the carriage of grains under the new loading condition from 1 January 2026

#### Amendments to the Grain Code as adopted by resolution MSC.552(108)

The Grain Code was revised 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 under the new loading condition.



Specially suitable compartment, partly filled in way of the hatch opening, with ends untrimmed



#### Implication

Where a ship intends to carry grain cargo 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.

For such approvals or re-approvals, please contact KR Stability & Tonnage Team (stability@krs.co.kr)

## 2011 ESP Code: Approval of thickness measurement firms

#### Background

The 2011 ESP Code was derived from IACS UR Z10 series, which are classification society rules. Consequently, the Code occasionally uses terminology more appropriate for class rules rather than for a mandatory IMO instrument.

#### Application

- Concerned parties: Administrations and thickness measurement firms
- Implementation date: 1 January 2026
- Application: Thickness measurement firms wishing to receive approval from the Administrations on or after 1 January 2026

Amendments to the 2011 ESP Code as adopted by resolution MSC.553(108)

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 from delegating to its recognized organization the authority to approve thickness measurement firms in implementing the 2011 ESP Code.

Implication

None

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

#### Background

'NACE 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).

#### Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2026
- Application: Qualifications for coating inspectors applicable on or after 1 January 2026



Minor corrections to PSPC's as adopted by resolutions MSC.557(108) and MSC.558(108)

NACE International recently changed its name to AMPP, and its qualification scheme 'NACE Coating Inspector Level 2' was subsequently re-named as 'AMPP Certified Coating Inspector'. To reflect 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.

Implication

None. End



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