IMO News Final
MSC 110

One hundred-tenth session of the Maritime Safety Committee (hereinafter referred to as MSC 110) was convened in London from 18 to 27 June 2025 to discuss a wide range of safety issues under the purview of the Committee. In addition to News Flash issued soon after MSC 110, this News Final briefs on the finalized outcomes of MSC 110 on major technical issues.

Key Outcomes of MSC 110

The Maritime Safety Committee (MSC), at its 110th session, adopted significant amounts of amendments to SOLAS Convention and other mandatory IMO instruments, which are set to enter into force on 1 January 2028. These amendments address a broad range of maritime safety issues, reflecting the Committee's ongoing commitment to enhancing ship safety in a rapidly evolving maritime environment. Major amendments include:

- Minor corrections to SOLAS regulation II-2/11 on fire integrity and insulation
- Enhancements to pilot transfer arrangements
- Lifejacket carriage requirements for high-speed craft
- The amendments to the IMSBC Code (08-25)

However, due to the extensive comments made during the session, the Committee decided to defer the adoption of the draft amendments to the IGC Code, which had been approved at MSC 109, and referred them back to the CCC Sub-Committee for further consideration.

In addition to the mandatory instruments, the Committee approved a number of non-mandatory instruments, including technical guidelines and unified interpretations. These cover a diverse range of topics such as:

- Interim guidelines for emergency towing arrangements on ships other than tankers
- Revised guidance on shipboard towing and mooring equipment
- Revised guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation
- The Code on Alerts and Indicators, 2025
- Revised Code of Practice for Atmospheric Oil Mist Detectors
- Several unified interpretations of life-saving appliances and fire protection systems, including launching of dedicated rescue boats, fire-extinguishing media containing PFOS, spacings of combined smoke and heat detectors, and documentation of load test and thorough examination for existing non-certified lifting appliances
- Amendments to resolution MSC.81(70) and MSC.1/Circ.1628/Rev.3 relating to the procedure for lifejacket buoyancy test; and
- Revised recommendations for entering enclosed spaces aboard ships

Additionally, draft amendments to key instruments such as SOLAS Chapters IV and V, 1988 Load Line Protocol, IP Code, 2011 ESP Code, LSA Code, and resolution MSC.402(96) were approved, pending formal adoption at future sessions.

MSC 110 also advanced discussions on forward-looking themes, including safe decarbonization and safe digitalization. Key focus areas include the development of a non-mandatory Code for autonomous ships, establishing safe regulatory frameworks to support GHG reduction through alternative fuels and emerging technologies, and identifying solutions to enhance maritime cyber security.

In summary, MSC 110 delivered substantial outcomes on a wide array of safety matters. We hope this KR News Final supports your understanding and implementation of the latest IMO decisions.

Please note that any changes from MSC 110 News Flash issued on last June have been marked by underlining.

Adoption of Amendments to Mandatory IMO Instruments

MSC 110 has formally adopted the amendments to various mandatory IMO instruments that were approved at MSC 109 in December 2024. These amendments relate to SOLAS, the IGC Code, the 1994 and 2000 HSC Codes, and the IMSBC Code, and reflect the Committee's continued efforts to address emerging safety and operational issues in shipping. The main amendments are summarized as follows.

Minor Corrections to SOLAS regulation II-2/11 on Fire Integrity and Insulation

Background

The references to the tables under SOLAS regulation II-2/9 were inaccurate within SOLAS regulations II-2/11.2 and II-2/11.4.1 concerning fire integrity standards for bulkheads and decks. Currently, SOLAS regulation II-2/11.2 references only the tables applicable to passenger ships, while SOLAS regulation II-2/11.4.1 refers solely to those for cargo ships. Those references should have been made to all relevant tables to ensure proper application regardless of ship types.

Application

- Concerned parties: Ship owners and shipyards
- Implementation date: 1 January 2028
- Application: All ships (retroactive)
- Adopted by: Resolution MSC.572(110)

Amendments to SOLAS regulations II-2/11.2 and 11.4.1

To correct the editorial errors, SOLAS regulations II-2/11.2 and 11.4.2 have been amended to reference all relevant tables under SOLAS regulation II-2/9, thereby providing comprehensive guidance without omissions for both passenger ships and cargo ships.

Implication

This correction aims to ensure clarity and consistency in the application of fire safety standards. Therefore, its implication is considered negligible.

Source: MSC 110/21/Annex 1

Enhancements to Pilot Transfer Arrangements

Background

Despite the requirements under SOLAS regulation V/23, the minimum standards set out in resolution A.1045(27), and the guidance in MSC.1/Circ.1428, accidents involving pilot transfer arrangements, including fatalities of pilots, have continued to occur due to safety deficiencies. In many cases, pilot ladders have not been properly maintained or regularly inspected, and have been used in unsafe or improper ways.

Application

- Concerned parties: Ship owners, shipyards, and equipment manufacturers
- Implementation date: 1 January 2028
- Application: These amendments apply to all ships, on which pilots may be employed, and to pilot transfer arrangements installed on or after 1 January 2028.

  For the arrangements installed prior to this date, the amendments will apply retroactively as follows:

	1. For SOLAS ships, by the first survey on or after 1 January 2029; and 2. For non-SOLAS ships, by 1 January 2030 However, flag Administrations may choose to implement these amendments earlier than the above dates, in accordance with MSC.1/Circ.1690.
• Adopted by:	Resolutions MSC.572(110), MSC.573(110), MSC.574(110), MSC.576(110), and MSC.577(110); and MSC.1/Circ.1428/Rev.1

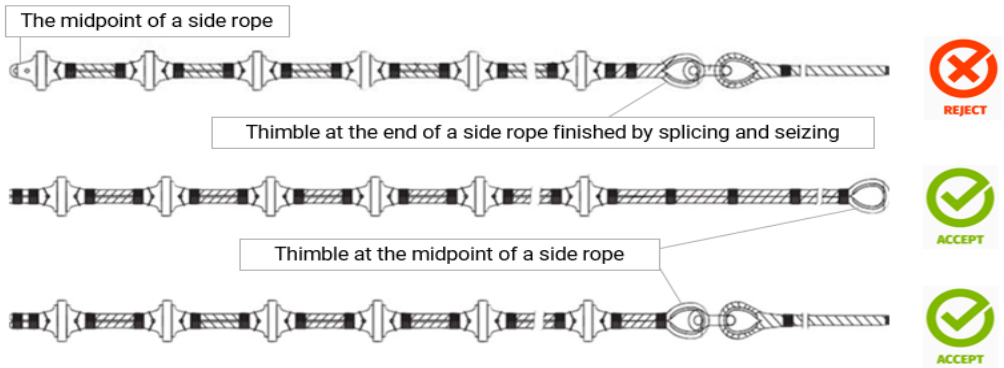
Amendments to SOLAS regulation V/23 and new mandatory performance standards on pilot transfer arrangements

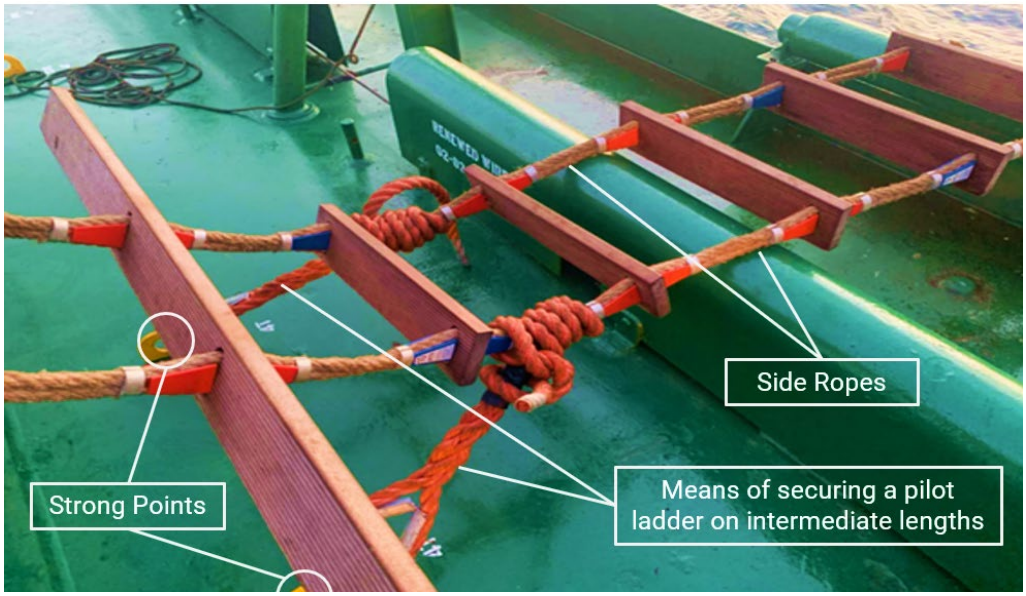
To enhance the safety and standardization of pilot transfer arrangements, SOLAS Regulation V/23 has been comprehensively revised alongside the adoption of mandatory performance standards.

Most notably, pilot transfer arrangements installed on or after 1 January 2028 shall be designed, constructed, secured and installed in accordance with the introduction and parts A, B, and C of the new mandatory performance standards. These requirements will also apply retroactively to existing arrangements installed before 1 January 2028, following the period of graces outlined above, and may entail physical modifications. In both cases, the arrangements must be approved as specified in part F of the performance standards.

Effective from 1 January 2028, all pilot transfer arrangements, regardless of their installation date, must be stowed, maintained, inspected, and operated in accordance with parts D and E of the same performance standards.

The new mandatory performance standards, as adopted by resolution MSC.576(110), consolidate the previous requirements set out in SOLAS regulation V/23 and resolution A.1047(27), with various enhancements and clarifications. The major updates and deviations from the previous requirements are summarized below. For more details, please refer to the original text of the performance standards.

Components	Major updates and deviations from the previous requirements
Part A Pilot ladders	• **The diameter of a side rope**, which consists of pilot ladder, shall be between **20 mm and 22 mm**. Under the previous requirements, only the minimum diameter of 18 mm was defined. (paragraph 4.6) • The midpoint of a side rope consisting of a double length shall be located on a thimble. As of 1 January 2028, the arrangements illustrated in ISO 799-1:1999, where a thimble is located at the end of a side rope finished by splicing and seizing, rather than at the midpoint, will no longer be acceptable. This provision is generally consistent with paragraph 2.2.1 of resolution A.1045(27), however, it differs in that the performance standards are now legally mandatory, and neither SOLAS regulation V/23 nor the performance standards require full compliance with ISO 799-1:2019. Acceptable and non-acceptable configurations are illustrated below. (paragraph 4.6) 

Components	Major updates and deviations from the previous requirements
Part A Securing arrangements	• The minimum **breaking strength** of all strong points, shackles, and securing ropes has been increased from 24 kN to **48 kN**. (paragraph 6.1) • **Strong points** and **shackles** shall have **breaking strength** or equivalent **safe working load (SWL)** clearly and **permanently marked**. Documentation of the conformance of the strong points, shackles and securing ropes shall be maintained on board and available for inspection purposes. Nonetheless, no provision has been clearly established to define SWL based on breaking strength. (paragraph 6.1) • When a removable means is used to secure a pilot ladder or embarkation platform to the ship's side, it shall be capable of being applied and removed by a single person, and shall provide the following holding force (paragraph 6.2) 1. Securing the lower platform of an accommodation ladder: minimum 4 kN 2. Securing a pilot ladder or manropes: minimum 3 kN • There shall be **a means of securing a pilot ladder at intermediate lengths**, which is capable of securing the ladder to strong points on decks by gripping each set of side ropes without any slippage. The means of securing need to be type-approved, and recorded in ship's SOLAS safety certificates. (paragraphs 6.3, 36, etc.) 
Parts A Side openings and doors	• In consideration of Load Line regulation 21(1) and SOLAS regulation II-1/15.10, which require side openings below the bulkhead deck or the freeboard deck to open outwards, the existing provision prohibiting side doors used for pilot transfer from opening outwards has been amended to apply only to those located above the freeboard deck.[1] (paragraph 7.1)
Part A Manropes	• Manropes shall be made of mildew-resistant manila rope in accordance with ISO 1181:2004[2] or of other equivalent materials. (paragraph 11.1)

[1] This revision does not prevent side doors below the bulkhead deck or freeboard deck to open inwards.
[2] ISO 1181:2004 – Fibre ropes – Manila ropes

Components	Major updates and deviations from the previous requirements
	• Manropes shall be tagged or permanently marked by manufacturers with information regarding their manufacturer, manufacture date, and approval. (paragraph 11.3) • **Manropes** must be **type-approved**, and recorded in ship's safety certificates. (paragraph 36, etc.)
Part C pilot ladders on winch reels	• If a pilot ladder is to be stowed on a winch drum, **the drum shall have a minimum diameter of 0.16m and be fitted with sunken securing points**. (paragraph 16) 
Part D Maintenance and onboard inspection	• **Instructions** for care, maintenance, inspection, and stowage of pilot ladders, manropes, and associated equipment shall be provided and kept on board. (paragraph 24) • Pilot transfer arrangements shall be **inspected by a responsible shipboard** officer **before and after each use**, and thoroughly **every three months**. (paragraph 25) • A **maintenance plan** shall be developed and made available on board. The plan shall include, among other elements, a checklist, a schedule for periodic inspection and maintenance, maintenance and repair instructions, a list of sources for spare parts or replacement items, and documentation for recording inspections and maintenance activities. (paragraph 27) • **Repair or replacement of pilot ladder steps** or spreader steps is **prohibited**. (paragraph 28) • At least **one spare set** of a pilot ladder and manropes shall be provided onboard. The spare set will be also recorded in relevant SOLAS safety certificates. (paragraph 29, etc.) • Pilot ladders and manropes, including spares, shall be **replaced** with new ones under the following conditions 1. When not complying with the performance standards; and 2. Upon reaching the earlier of **30 months** from the date of being put into service[3] or **36 months** from the date of manufacture.
Part E Familiarization	• Shipboard personnel involved in the inspection, maintenance, installation, or operation of pilot transfer arrangements shall receive **familiarization** training appropriate to their assigned duties. (paragraph 31)

[3] The date of being put into service refers to the actual date the equipment is first used on board, not the date it was supplied to the ship. This date shall be recorded and maintained in accordance with paragraph 27.6 of the performance standards.

Components	Major updates and deviations from the previous requirements
Part F Approval	• Pilot transfer arrangements installed on or after 1 January 2028 shall be approved by the Administration in accordance with the performance standards, prior to their installation. (paragraph 34) • Regardless of the installation date, pilot transfer arrangements shall be (re)approved by the Administration following any repair, alteration, or modification limited to paragraph 5 (combination arrangements), paragraph 6 (securing arrangements), paragraph 7 (side openings, doors, and platforms), paragraph 8 (access to ship's deck), and paragraph 10 (safe approach of pilot boats) of Part A, or in Part C (pilot ladder winch reels) of the performance standards. This means that **if the arrangements installed before 1 January 2028 require any alternation or modification due to the retroactive application of these amendments, they must be re-approved by KR**, and that any repair shall be treated in the same manner. (paragraphs 34 and 35) • Pilot ladders, including the means of securing at intermediate lengths, and manropes must be type-approved by the Administration in accordance with these performance standards. (paragraph 36)

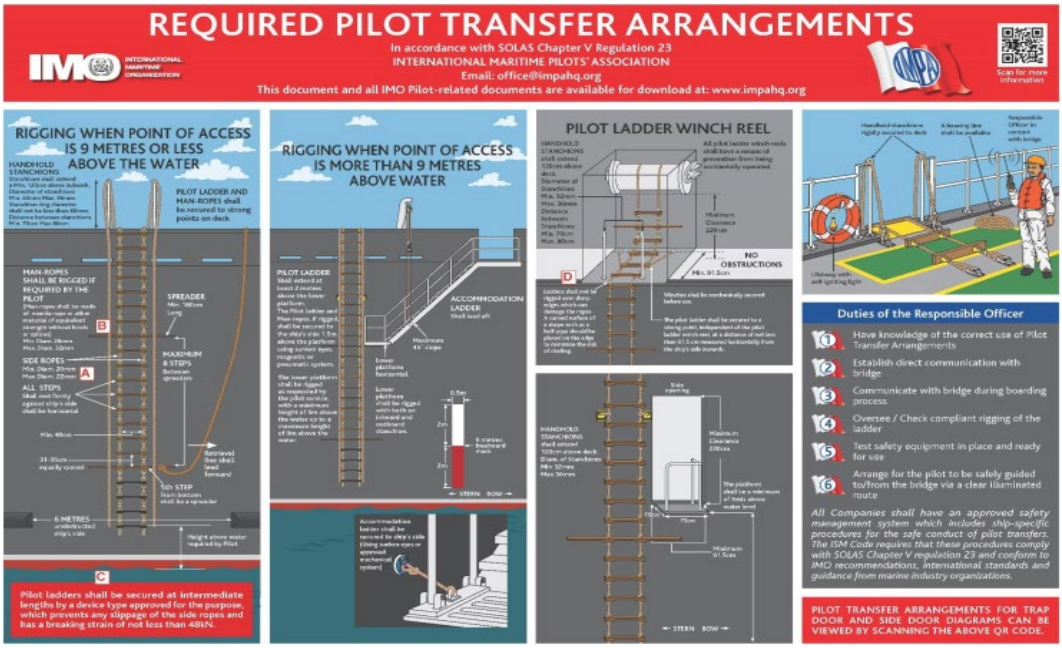
Consequential amendments to the forms of safety certificates appended to SOLAS, 1994/2000 HSC Code, and SPS Code

Based on the amendments to SOLAS regulation V/23 and new mandatory performance standards, the forms of records of equipment annexed to various safety certificates in SOLAS, 1994 HSC Code, 2000 HSC Code and 2008 SPS Code have been revised to include the entries of pilot transfer arrangements, namely:

- Pilot ladder and manropes
- Spare pilot ladder and manropes
- Means of securing a pilot ladder at intermediate length

Revised illustration of pilot transfer arrangements (MSC.1/Circ.1428/Rev.1)

To reflect the amendments to SOLAS regulation V/23 and the new mandatory performance standards, the illustration of pilot transfer arrangements has been updated, as contained in MSC.1/Circ.1428/Rev.1.



Voluntary early implementation

Finally, MSC 110 encouraged voluntary early implementation of these amendments by flag Administrations, prior to their entry-into-force date, through the issuance of MSC.1/Circ.1690.

Implication

These amendments bring significant changes to the design and operational requirements for pilot transfer arrangements, including those already installed prior to the entry-into-force date. Therefore, concerned parties should take careful and appropriate actions not only for new ships but also for existing ships.

Source: MSC 110/21/Annexes 1, 2, 3, 5, and 6, MSC.1/Circ.1428/Rev.1 and MSC.1/Circ.1690

Lifejacket carriage requirements for high-speed craft

Background

The lifejacket carriage requirements in the 1994 and 2000 HSC Codes had not reflected the amendments to SOLAS regulation III/7.2.1 adopted by resolution MSC.201(81), resulting in discrepancies with the SOLAS requirements. As a result, regulatory gaps have existed regarding personal lifesaving appliances for infants and persons of large size boarding high-speed craft.

Application

• Concerned parties:	Ship owners, shipyards, and equipment manufacturers
• Implementation date:	1 January 2028
• Application:	1. High-speed craft constructed on or after 1 January 2028 2. High-speed craft constructed before 1 January 2028 (Period of grace: Until the date of the first renewal survey on or after 1 January 2028)
• Adopted by:	Resolutions MSC.573(110) and MSC.574(110)

Amendments to paragraph 8.3.5 and annex 1 of the 1994 and 2000 HSC Codes

To harmonize with the lifejacket carriage requirements in the 1994 and 2000 HSC Codes with those in SOLAS chapter III, paragraph 8.3.5 of each HSC Code was amended to require additional lifejackets for infants and suitable accessories for oversize persons, as listed below:

- for passenger craft on voyages less than 24h, a number of infant lifejackets equal to at least 2.5% of the number of passengers on board
- for passenger craft on voyages 24h or greater, infant lifejackets for each infant on board
- on all craft, a sufficient number of suitable accessories for securing oversized persons, if the adult lifejackets provided are not designed to fit persons weighing up to 140kg and with a chest girth of up to 1,750mm

As a result, the forms of safety certificate for high-speed craft in annex 1 of each HSC Code were also amended to record the number of lifejackets suitable for infants.

Implication

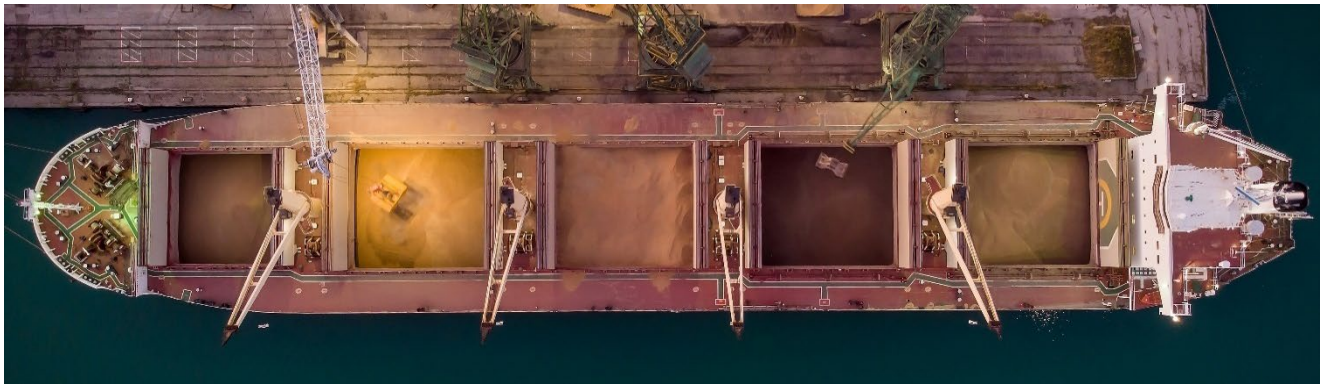
Parties engaging in the construction or operation of high-speed craft should take appropriate measures to ensure compliance with the revised lifejacket carriage requirements.

Source: MSC 110/21/Annexes 2 and 3

Amendments to the IMSBC Code (08-25): Carriage of Dry Bulk Cargoes

Background

As part of its ongoing updates and improvements, the IMSBC Code is amended every two years. Accordingly, MSC 110 adopted the amendments to the IMSBC Code (08-25), following their finalization by E&T 41.



Application

- Concerned parties: Ship owners, shipyards, and cargo consignees
- Implementation date: 1 January 2027 (Voluntary early implementation date: 1 January 2026)
- Application: Ships carrying dry bulk cargoes (e.g. bulk carriers, general cargo ships occasionally carrying dry bulk cargoes, etc.)
- Adopted by: Resolution MSC.575(110)

Amendments to the IMSBC Code (08-25)

The amendments (08-25) update the individual schedule of solid bulk cargoes in the IMSBC Code Appendix 1, as listed below:

Status	Bulk Cargo Shipping Name (BCSN)	Group	Hazard	Technical Review[4]
Modified	ALUMINIUM FERROSILICON POWDER UN 1395	B	UN 1395	Not required
Modified	ALUMINIUM SILICON POWDER, UNCOATED UN 1398	B	UN 1398	Not required
Modified	ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM RE-MELTING BY-PRODUCTS UN 3170	B	UN 3170	Not required
New	ALUMINIUM SULPHATE GRANULAR	B	MHB	Required
New	APATITE CONCENTRATE	A	-	Required
New	ASPHALT GRANULATES	C	-	Required
Modified	CASTOR BEANS UN 2969[5]	B	UN 2969 MHB	Not required
New	CRUSHED GRANODIORITE, COARSE	C	-	Required

[4] For cargoes with the status “modified”, this column indicates whether a technical review is needed for ships to continue transporting them. In cases where a cargo is to be newly transported, regardless of its status “modified” or “new”, technical review is always required.

[5] This BCSN was modified from “CASTOR BEANS or CASTOR MEAL or CASTOR POMACE or CASTOR FLAKE UN 2969”.

Status	Bulk Cargo Shipping Name (BCSN)	Group	Hazard	Technical Review[4]
Modified	DIRECT REDUCED IRON (A), Briquettes, hot-moulded	B	MHB	Not required
Modified	DIRECT REDUCED IRON (B), Lumps, pellets, cold-moulded briquettes	B	MHB	Not required
New	FERRIC SULPHATE GRANULAR	B	MHB	Required
Modified	FERROSILICON UN 1408 with 30% or more but less than 90% silicon (including briquettes)	B	UN 1408	Not required
Modified	FERROSILICON with at least 25% but less than 30% silicon, or 90% or more silicon	B	MHB	Not required
Modified	FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS UN 2793 in a form liable to self-heating	B	UN 2793	Not required
Modified	FISH MEAL (FISH SCRAP), STABILIZED UN 2216 Anti-oxidant treated. Moisture content greater than 5% but not exceeding 12%, by mass. Fat content not more than 15%[6]	B	UN2216	Not required
New	FISH MEAL (FISH SCRAP), STABILIZED	C	-	Required
New	IRON ORE BRIQUETTES	C	-	Required
Modified	IRON ORE PELLETS	C	-	Not required
New	PEA PROTEIN CONCENTRATE PELLETS	C	-	Required
New	PHOSPHATE ROCK FINES (uncalcined)	A	-	Required
New	TUFF, COARSE	C	-	Required
New	ZINC SLAG (coarse)	C	-	Required

Revisions of pertinent IMO instruments

In conjunction with the amendments (08-25), non-mandatory IMO instruments were approved at this session, as follows:

- MSC.1/Circ.1395/Rev.7: The revised circular added the BCSN “ALUMINIUM SULPHATE GRANULAR”, “CASTOR BEANS UN 2969”, and “FERRIC SULPHATE GRANULAR” in the list of solid bulk cargoes for which a fixed gas fire-extinguishing system may be exempted.
- MSC.1/Circ.1264/Rev.1: The revised circular provides Revised Recommendations on the safe use of pesticides in ships applicable to the fumigation of cargo holds. It recommends against the use of gas-generating fumigation agents in the form of loose tablets, as they may pose a serious risk of leaving unreacted residues within the cargo. The circular also incorporates previous amendments introduced through MSC.1/Circ.1396.
- MSC.1/Circ.1358/Rev.1: The revised circular was approved as a consequential amendment following the approval of MSC.1/Circ.1264/Rev.1, in order to update the reference from MSC.1/Circ.1264 to MSC.1/Circ.1264/Rev.1.
- MSC.1/Circ.1266/Rev.1: The standard format of the CDG Document of Compliance, as required under SOLAS regulation II-2/19.4, has been amended to replace the outdated reference to the BC Code with a reference to the IMSBC Code.

Consequently, it was also decided that the footnotes under SOLAS regulations II-2/19.4 and VI/4 referencing the previous versions of the aforementioned MSC circulars will be updated in the next consolidated version of the SOLAS publication.

Implication

To transport newly introduced dry bulk cargo under the IMSBC Code amendments (08-25), shipowners may request KR, starting from 1 January 2026 (i.e. from the voluntary early implementation date), to carry out the technical review and subsequently apply for a survey to update the IMSBC certificates (and other affected certificates if any) for their vessels.

[6] This BCSN was previously titled as “FISH MEAL (FISH SCRAP), STABILIZED UN 2216 Anti-oxidant treated” prior to the IMSBC Code amendments (07-23), and as “FISH MEAL (FISH SCRAP), STABILIZED Anti-oxidant treated” after the IMSBC Code amendments (07-23).

Dry bulk cargoes with the status “Modified” above may continue to be transported without conducting an additional technical review, provided they are already listed in ship’s IMSBC Certificate. However, even if previously listed in ship’s IMSBC certificate and/or CDG certificate, ship’s IMSBC certificate and CDG certificate will need to be reissued during any surveys conducted on or after 1 January 2027 for the following dry bulk cargoes, due to changes to their BCSN and associated information.

Previous BCSN	BCSN modified by the IMSBC Code amendments (08-25)	Technical Review
CASTOR BEANS or CASTOR MEAL or CASTOR POMACE or CASTOR FLAKE UN 2969	CASTOR BEANS UN 2969	Not required
FISH MEAL (FISH SCRAP), STABILIZED UN 2216 Anti-oxidant treated	FISH MEAL (FISH SCRAP), STABILIZED UN 2216 Anti-oxidant treated. Moisture content greater than 5% but not exceeding 12%, by mass. Fat content not more than 15%[7]	Not required
FISH MEAL (FISH SCRAP), STABILIZED Anti-oxidant treated		Not required[8]

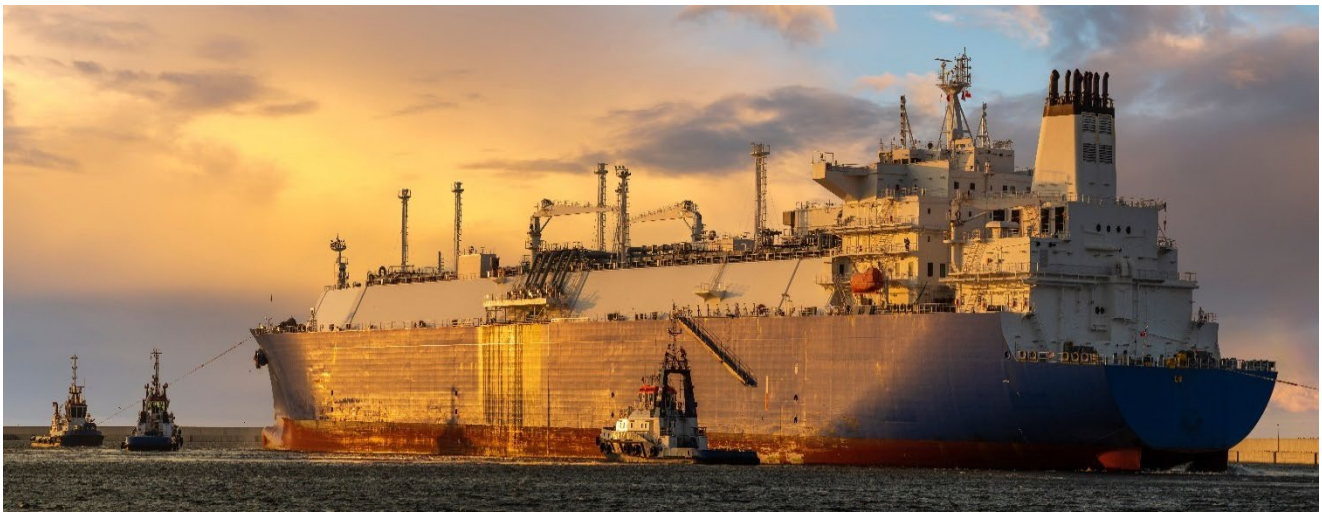
In this regard, for the transport of “CASTOR BEANS UN 2969”, the installation of fixed gas fire extinguishing systems required for cargo spaces by SOLAS regulation II-2/10.7 may be exempted.

Source: MSC 110/21/Annex 4, MSC.1/Circ.1264/Rev.1, MSC.1/Circ.1266/Rev.1, MSC.1/Circ.1358/Rev.1, and MSC.1/Circ.1395/Rev.7

Postponement of Adoption: A Wide Range of Safety Updates to the IGC Code

Since the entry into force of the so-called “new” IGC Code, adopted by resolution MSC.370(93) in 2016, industry stakeholders have consistently requested clearer guidance on various provisions of the Code. This has resulted in the development of multiple unified interpretations. At the same time, there has been increasing demand to incorporate emerging technologies and concepts aimed at environmental protection and the reduction of greenhouse gas emissions.

In response, a comprehensive review of the IGC Code was initiated in 2022, through which the CCC Sub-Committee developed a set of draft amendments addressing a wide range of safety-related issues covered by the Code. These amendments were subsequently approved by MSC 109 for adoption at the current session and were intended to be issued as a consolidated version of the IGC Code, incorporating all amendments adopted since 2016.



[7] This BCSN was previously titled as “FISH MEAL (FISH SCRAP), STABILIZED UN 2216 Anti-oxidant treated” prior to the IMSBC Code amendments (07-23), and as “FISH MEAL (FISH SCRAP), STABILIZED Anti-oxidant treated” after the IMSBC Code amendments (07-23).

[8] While a technical review for compliance with the IMSBC Code may not be required, a technical review for compliance with CDG requirements, i.e. SOLAS regulation II-2/19, may be necessary if the ship has never been issued a CDG certificate covering Class 9 cargoes.

However, due to the extensive number of comments raised during the session, the Committee decided to defer the adoption of the draft amendments and refer them back to the CCC Sub-Committee for further consideration and refinement, only based on MSC 110/WP.7/Annexes 14 and 15. It is currently anticipated that, after finalization by the CCC Sub-Committee, the draft amendments will be re-approved at MSC 111 and adopted at MSC 112, with a view to their entry into force on 1 July 2028.

Source: MSC 110/WP.7/Annexes 14 and 15

Non-mandatory IMO instruments

MSC 110 adopted or approved non-mandatory IMO instruments, developed by the Sub-Committees, as summarized in the following paragraphs.

Interim Guidelines for Emergency Towing Arrangements on Ships other than Tankers

To address the risks associated with the failure or stranding of large non-tanker ships, SOLAS regulation II-1/3-4.2 was amended by resolution MSC.549(108) in 2024 to require the installation of emergency towing arrangements on ships other than tankers of 20,000 gross tonnage and above, constructed on or after 1 January 2028.

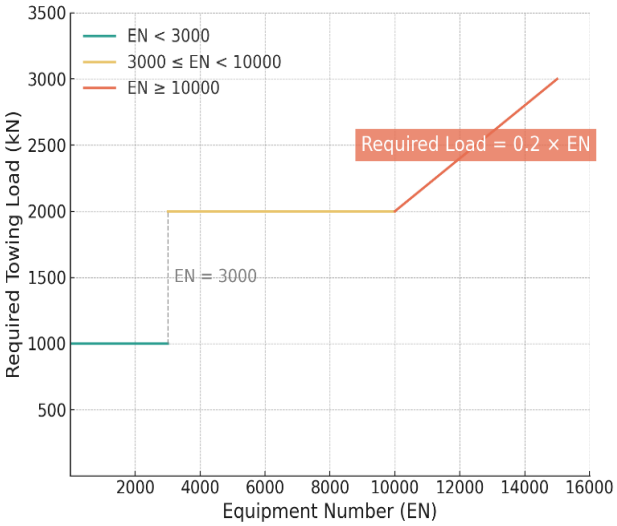
To support the implementation of this revised regulation, Interim guidelines for emergency towing arrangements on ships other than tankers have been developed by the SDC Sub-Committee and approved by MSC 110 as MSC.1/Circ.1691.

These interim guidelines are distinct from the existing Guidelines for emergency towing arrangements on tankers (resolution MSC.35(63), as amended by resolution MSC.132(75)), which apply to tankers of 20,000 DWT and above under SOLAS regulation II-1/3-4.1, and differ in the following aspects:

- While pick-up gear, towing pennants, and chafing gear are considered optional components, strong points utilizing bollards or bitts may be accepted, thereby allowing for greater design flexibility.

- Towing components should have sufficient working strength to withstand the required towing load, which is to be determined based on ship's Equipment Number (EN)[9] as shown in the graph. The required towing load may be achieved by summing the design towing loads of multiple arrangements.

- The strong point and, if provided, closed fairleads, which constitute the main components of emergency towing arrangements, are required at either the bow or the stern.



Source: MSC.1/Circ.1691

[9] When calculating the vessel's equipment number (EN) for the emergency towing arrangement's design towing load, side projected area of deck cargoes should be included.

Revised Guidance on Shipboard Towing and Mooring Equipment

Revised Guidance on shipboard towing and mooring equipment (MSC.1/Circ.1175/Rev.1) provides standards for the design and construction of shipboard fittings and supporting hull structures associated with normal towing and mooring operations. This Guidance supplements SOLAS regulation II-1/3-8 on ship's towing and mooring arrangements.

This circular has been revised as MSC.1/Circ.1175/Rev.2 to clarify its application for emergency towing arrangements, not covered by the revised SOLAS regulation II-1/3-4. The revision also incorporates the latest revisions of IACS UR A1, A2, and Rec.10, including improvements to the Equipment Number (EN) calculation, particularly to account for larger funnel dimensions due to the installation of SOx scrubbers and other equipment.

Source: MSC.1/Circ.1175/Rev.2

Revised Guidelines on Preparing Emergency Towing Procedures

The Guidelines on preparing emergency towing procedures were previously issued as MSC.1/Circ.1255 to support the implementation of previous SOLAS regulation II-1/3-4.2. In consideration of MSC.1/Circ.1691 approved at this session, which specifies that the towing load of emergency towing arrangements is determined based on the ship's Equipment Number (EN), the guidelines have been revised as MSC.1/Circ.1255/Rev.1 to include the Equipment Number (EN) as one of ship-specific data to be included in the emergency towing booklet.

Source: MSC.1/Circ.1255/Rev.1

Revised Guidance on Pressure Testing of Boundaries of Cargo Oil Tanks under Direction of the Master

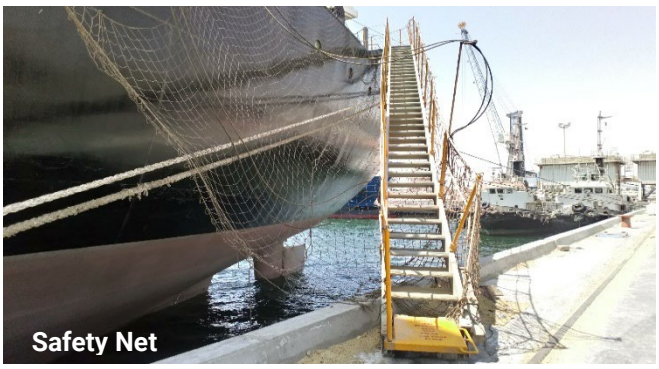
The 2011 ESP Code was amended by resolution MSC.525(106) in 2022 to clarify the procedures and conditions under which cargo tank pressure tests may be conducted by the ship's crew for oil tankers. In line with these amendments, the Guidance on pressure testing of boundaries of cargo oil tanks under direction of the master, as provided in MSC.1/Circ.1502, has been revised to explicitly require the tank testing to be carried out prior to the overall survey or close-up survey. The updated guidance will be issued as MSC.1/Circ.1502/Rev.1.

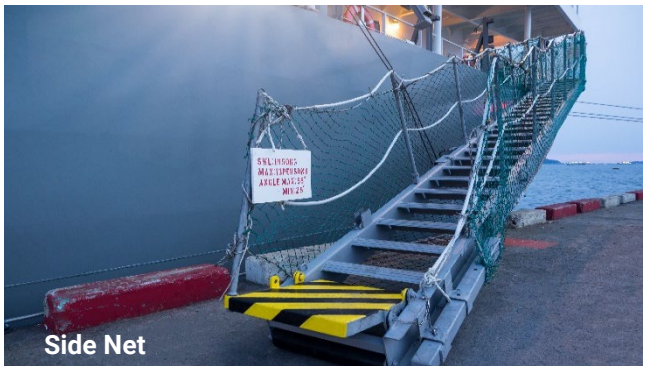
Source: MSC.1/Circ.1502/Rev.1

Revised Guidelines for Construction, Installation, Maintenance and Inspection/Survey of Means of Embarkation and Disembarkation

The Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation, as set out in MSC.1/Circ.1331, provide detailed requirements in support of SOLAS regulation II-1/3-9.

These Guidelines have been revised to introduce requirements for the use of side nets and accept them as an alternative to safety nets, in order to reduce the risk of personnel falling during embarkation and disembarkation.


Safety Net


Side Net

The revision also includes updated references to applicable ISO Standards for accommodation ladders, gangways, and associated winches, which are installed or replaced on or after 1 July 2026, and clarify the procedures for the static load testing of accommodation ladders and gangways and for the operational testing of associated winches in alignment with IACS Recommendation 119.

-	On ships constructed before 1 January 2010		On ships constructed on or after 1 January 2010	
	Installed before 1 July 2026	Installed on or after 1 July 2026	Installed before 1 July 2026	Installed on or after 1 July 2026
Accommodation ladders	ISO 5488:1979	ISO 5488:1979 or 2015	ISO 5488:1979	ISO 5488:2015
gangways	ISO 7061:1993	ISO 7061: 1993, 2015 or 2024	ISO 7061:1993	ISO 7061:1993, 2015 or 2024
Accommodation ladder winches	ISO 7364:1983	ISO 7364:1983 or 2016	ISO 7364:1983	ISO 7364:2016

The revised Guidelines was approved as MSC.1/Circ.1331/Rev.1.

Source: MSC.1/Circ.1331/Rev.1

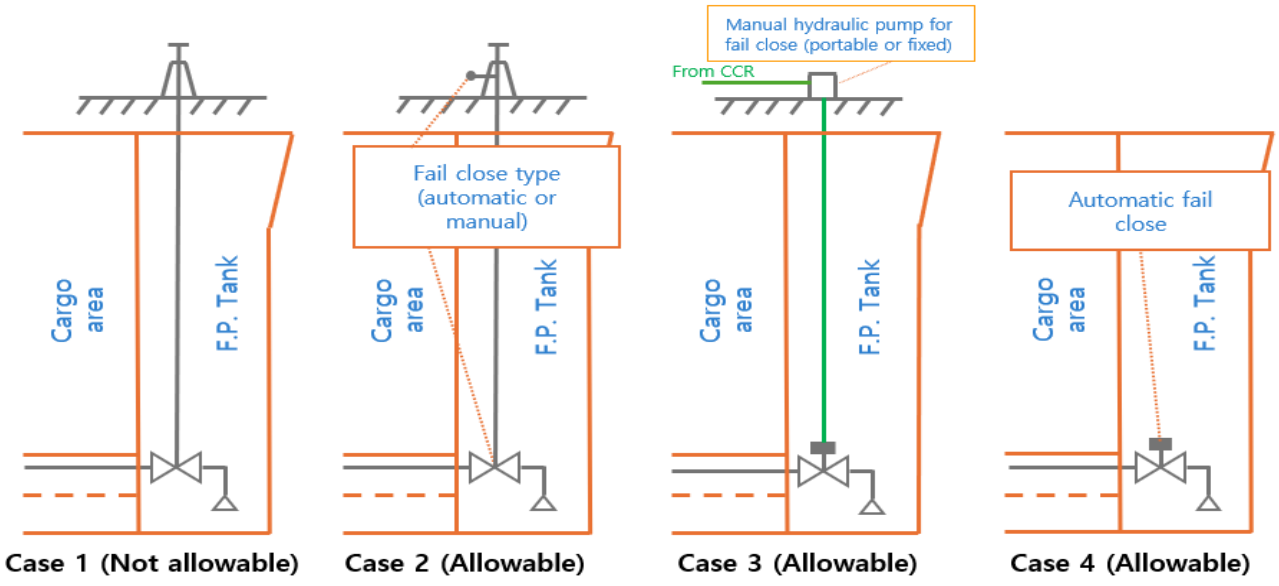
Unified Interpretations of SOLAS regulation II-1/12.6.2

For ships constructed on or after 1 January 2024, SOLAS regulation II-1/12.6.2, as adopted by resolution MSC.474(102), no longer restricts the type of allowable valves installed on a piping piercing through ship's collision bulkhead, i.e. screw-down valves or butterfly valves. Instead, it emphasizes requirements concerning the valve's control method and location. However, the term "remotely controlled valve" in the revised provision has raised ambiguity, as it could be misinterpreted to imply that only power-actuated valves are permitted.

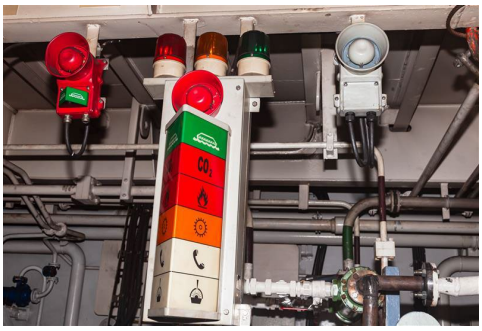
To clarify this ambiguity, unified interpretations proposed by KR through IACS were approved as MSC.1/Circ.1692 at this session, in addition to the adoption as IACS UI SC 306. The interpretations provide the following clarifications regarding the valve arrangement under SOLAS II-1/12.6.2:

- Both a deck-standing manual valve and a mechanically powered valve are acceptable, provided they include a fail-close function.
- The fail-close function should be either automatic, or manually operable from above the bulkhead deck (passenger ships) or freeboard deck (cargo ships).

Illustrative examples of acceptable and non-acceptable arrangements are provided below.



Source: MSC.1/Circ.1692



The Code on Alerts and Indicators, 2025

The Code on Alerts and Indicators has been comprehensively updated to reflect the amendments of various IMO instruments adopted since its previous edition in 2009. The revised draft Code was approved by MEPC 83 in April and subsequently by MSC 110. It is scheduled for formal adoption at the IMO Assembly 34, which will be convened in November 2025.

Source: MSC 110/21/Annex 14

Accessibility of Information on Seafarer Medical Certificates and Recognized Medical Practitioners

The Committee adopted resolution MSC.579(110) to enhance access to information on seafarer medical certificates and recognized medical practitioners. The resolution urges IMO Member States to ensure that shipping companies can verify the validity of seafarers' medical certificates, and to make publicly available, in English, both the list of recognized medical practitioners and any relevant verification tools of seafarer medical certificates via official government websites. It further encourages the voluntary provision of this information through the IMO GISIS portal to promote global transparency and consistency.

Source: MSC 110/21/Annex 15

Generic Interim Guidelines on Training for Seafarers on Ships Using Alternative Fuels and New Technologies

Generic Interim Guidelines were approved as STCW.7/Circ.25 to support the safe operation of ships using alternative fuels and new technologies, in line with the 2023 IMO GHG Strategy. The Guidelines aim to serve as a common reference for the development and approval of training courses for seafarers on board such ships. Though non-mandatory, they are intended to help ensure competent crew operations and promote a just and equitable transition to ships using alternative fuels and new technologies. The Guidelines will be kept under review as operational experience accumulates.

Source: STCW.7/Circ.25

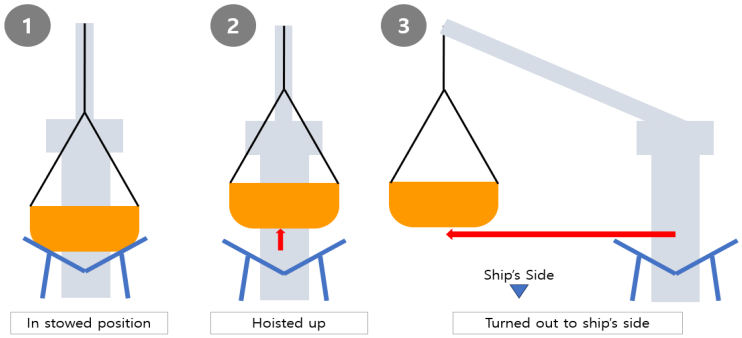
Unified Interpretations of Paragraphs 6.1.1.3 and 6.1.2.2 of the LSA Code relating to the Launching of Dedicated Rescue Boats

In accordance with paragraph 6.1.1.3 of the LSA Code, launching appliances must not rely on any means other than gravity or stored mechanical power, independent of the ship's power supplies, for launching the survival craft or rescue boat they serve.

However, when dedicated rescue boats are launched, they are often not capable of being hoisted from the stowed position using the stored mechanical power. This functional limitation has been the subject of repeated Port State Control (PSC) deficiencies.

To address the issue, practical solutions, such as tilting cradles that minimize the vertical hoisting distance, have been recommended. However, in the absence of legally binding requirements, these recommendations have lacked enforceability, resulting in continued PSC observations on this matter.

To resolve the recurring challenges, Korean Register submitted relevant proposals to the IMO through IACS and actively led the ensuing discussions for years. As a result, the Committee at this session approved a unified interpretation as MSC.1/Circ.1693 to clarify that, for cargo ships, the act of hoisting a dedicated rescue boat from its stowed position (Step 2) should be regarded as part of the launching preparation process, rather than the launching process itself. Accordingly, manual hoisting prior to embarkation (i.e. Step 2) may be considered acceptable for the subsequent slewing-out operation (i.e. Step 3).



In addition, MSC.1/Circ.1693 clarifies paragraph 6.1.2.2 of the LSA Code that, for cargo ship's rescue boats where manual slewing-out (without stored mechanical power) is permitted by paragraph 6.1.1.3 of the Code, as amended by resolution MSC.459(101), the hoisting and slewing-out operations need not be initiated from within the rescue boat itself.

Source: MSC.1/Circ.1693

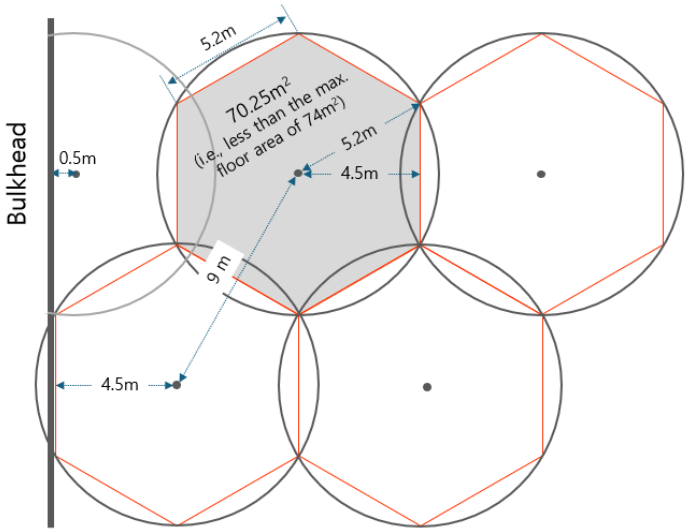
Unified Interpretations of the FSS Code relating to Acceptable Spacings of Combined Smoke and Heat Detectors

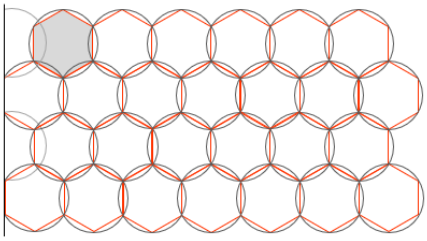
The revised Table 9.1 of chapter 9 of the FSS Code, as adopted by resolution MSC.555(108), introduces the spacing requirements for combined smoke and heat detectors, which apply to ships constructed on or after 1 January 2026, as shown below:

Type of detector	Maximum floor area per detector (m2)	Maximum distance apart between centres (m)	Maximum distance away from bulkheads (m)
Heat	37	9	4.5
Smoke	74	11	5.5
Combined smoke and heat	**74**	**9**	**4.5**

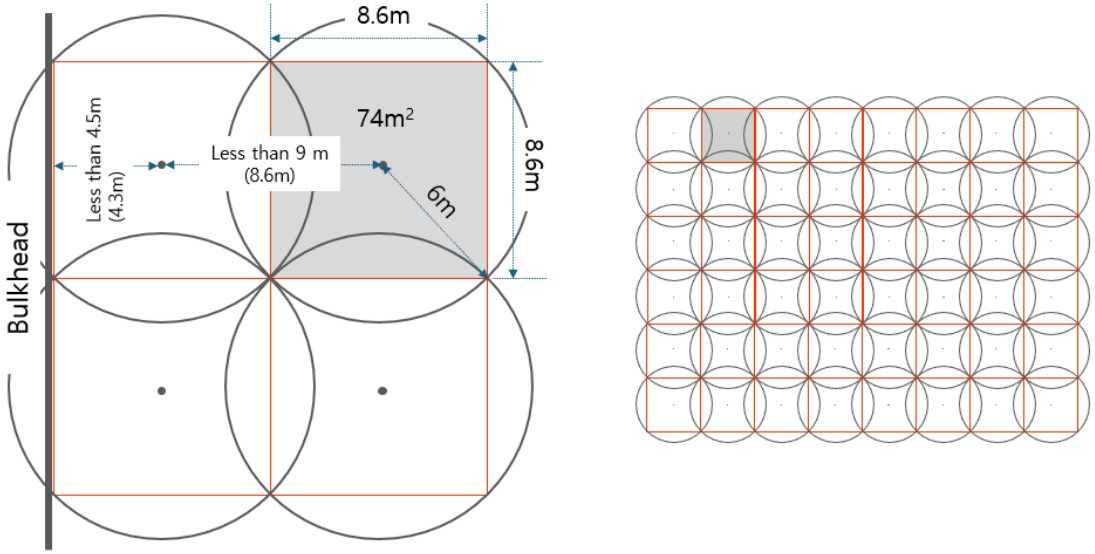
The combined detectors have spacing criteria different from those of heat detectors and smoke detectors, which have raised questions regarding their practical application in design. To address this, the Committee approved unified interpretations as MSC.1/Circ.1695, which provides acceptable principles for spacing calculations with illustrative guidance, as follows:

- Determination of the spacing based on the maximum distance between detectors (9m) using hexagon layout





- Determination of the spacing based on the maximum floor area per detector (74 m^2) using a square layout



These unified interpretations will take effect from 1 January 2026, in line with the entry-into-force date of the revised Table 9.1 of the FSS Code.

Source: MSC.1/Circ.1695

Unified Interpretations of SOLAS Chapter II-2 and 1994/2000 HSC Codes pertaining to Fire-extinguishing Media containing PFOS

The use and storage of fire-extinguishing media (e.g. liquid foam) containing perfluoro-octane sulfonic acid (PFOS) will be prohibited from 1 January 2026 in accordance with SOLAS regulation II-2/10.11 and regulation 7.9.4 of the 1994 and 2000 HSC Codes, as respectively amended by resolutions MSC.532(107), MSC.536(107) and MSC.537(107). However, these provisions do not specify how compliance is to be demonstrated.

To address this ambiguity, the Committee approved unified interpretations as MSC.1/Circ.1694, which clarify the following:

- Fire-extinguishing media with PFOS concentrations exceeding 10 mg/kg (0.001% by weight) are considered to contain PFOS.
- Maker's declaration[10] or laboratory test reports are acceptable documentation to demonstrate that PFOS is not present.
- For all fire-extinguishing media installed before 1 January 2026 without such documentation, sample testing is required.

These unified interpretations will take effect from 1 January 2026. It is noted that IACS has recently issued IACS UI SC 309 and UI HSC 11, which correspond to MSC.1/Circ.1694.

For more details, please refer to **KR Technical Information 2025-IMO-12**.

Source: MSC.1/Circ.1694

[10] Maker's declaration should contain information about the foam, such as, foam type, production date, batch No., type approval, etc.

Unified Interpretations of SOLAS regulation II-1/3-13.2.4 relating to the Documentation of Load Test and Thorough Examination for existing Non-Certified Lifting Appliances

From 1 January 2026, lifting appliances will be subject to SOLAS regulation II-1/3-13, regardless of their installation date.

In line with the understanding reached at MSC 106, lifting appliances installed before this date and not certified under another international instrument (e.g. ILO Convention No.152) should be documented as compliant with SOLAS regulation II-1/3-13.2.4 by a factual statement issued by the Administration or its recognized organization upon satisfactory completion of load test and thorough examination before the first renewal survey on or after 1 January 2026.

To support uniform implementation, the Committee approved unified interpretations as MSC.1/Circ.1696, which reflect this understanding, specify the required contents of the factual statement, and provide a model format. This unified interpretation has been also issued as IACS UI SC 310 for application on all ships on or after 1 January 2026.

Source: MSC.1/Circ.1696

Revised Code of Practice for Atmospheric Oil Mist Detectors

Oil spray/mist, vaporized fuel, or oil droplets released in machinery spaces can create a hazardous atmosphere and lead to fires. Although oil mist detection for engine room is not mandated under SOLAS chapter II-2, MSC.1/Circ.1086 has served as guidance for the installation, operation, and maintenance of such detectors for over two decades. To reflect current technologies and industry practices, the revised Code was approved at this session as MSC.1/Circ.1086/Rev.1.

Source: MSC.1/Circ.1086/Rev.1

Amendments to resolution MSC.81(70) and MSC.1/Circ.1628/Rev.3 relating to the Procedure for Lifejacket Buoyancy Test

Resolution MSC.81(70) and MSC.1/Circ.1628/Rev.3 respectively set out the Revised recommendations on the testing of life-saving appliances (LSA) and the Revised standardized LSA evaluation and test report forms. In this regard, concerns were raised that their test procedures for lifejacket buoyancy were not fully aligned with paragraph 2.2.1.11 of the LSA Code.

To resolve these issues, resolution MSC.81(70) and MSC.1/Circ.1628/Rev.3 were amended by resolution MSC.580(110) and MSC.1/Circ.1628/Rev.4, respectively. The revisions clarify the test procedures and acceptance criteria for evaluating lifejacket buoyancy loss of 5% after 24 hours of immersion, and introduce preconditioning steps to eliminate trapped air prior to the initial buoyancy measurement.

Source: MSC 110/21/Annex 19 and MSC.1/Circ.1628/Rev.4

Revised Recommendations for Entering Enclosed Spaces aboard Ships

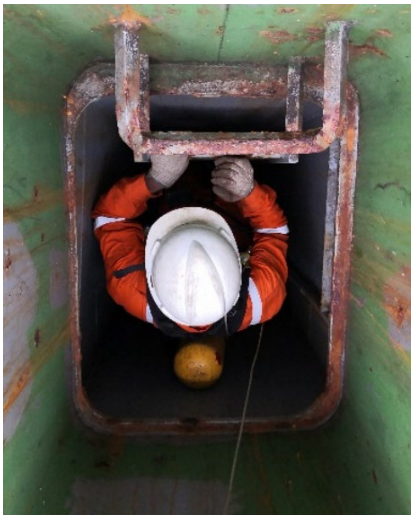
Since the adoption in 2011, resolution A.1050(27) has served as the IMO's operational guidance for entry into enclosed spaces on ships. However, in light of recurring accidents, the recommendations in resolution A.1050(27) have been significantly enhanced through several key updates, as outlined below:

- Safety Management for Entry into Enclosed Spaces: This section now emphasizes enhanced training for personnel and introduces new requirements for enclosed space entry drills.

- Identification of Hazards and Assessment of Risks: This section has been expanded to include updated guidance on developing an Enclosed Space Register.

- Testing of Atmospheres: Updates in this area mandate the use of SOLAS-compliant equipment and provide new guidance on managing risks associated with oxygen-depleting cargoes and steel-related hazards. These topics are now addressed in newly added appendices.

- Entry Permit and Emergency Response Plan: Examples of both documents have been revised or established.



These revised recommendations were adopted at this session as resolution MSC.581(110). As a result, the existing resolution A.1050(27) will be revoked by the IMO Assembly at its 34th session, scheduled for November 2025.

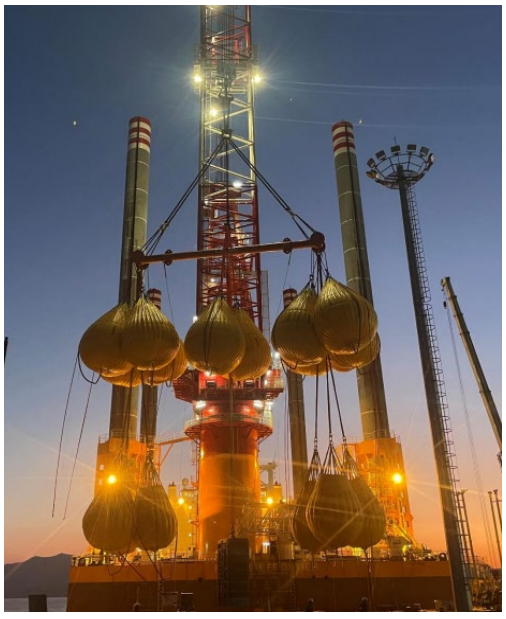
Source: MSC 110/21/Annex 28

Future Amendments to Mandatory IMO Instruments

Following discussions on the reports of SDC 11, SSE 11, and NCSR 12 convened in 2025, the Committee approved draft amendments to mandatory IMO instruments, which are scheduled for adoption at MSC 111 or MSC 112 in 2026, as summarized below. These draft amendments, however, are not legally binding until formally adopted in the future.

Person's Weight Criterion for Cargo Ships Transporting Industrial Personnel

The body weight of industrial personnel is generally assumed to be higher than the average, due to the physical characteristics and equipment typically associated with offshore operations. In consideration of this, Part V of the IP Code specifies a person's weight of 90 kg for use in stability calculations for high-speed cargo craft carrying more than 12 industrial personnel, which constitutes a safety enhancement compared to the standard person mass of 75 kg applied under the HSC Code.



Currently, paragraph 3.1.1.1 of Part A of the IS Code defines a person mass of 75 kg for the purpose of intact stability calculations. However, Part IV of the IP Code, which applies to cargo ships, does not specify a separate person mass criterion as provided in Part V for high-speed cargo craft, implying that the IS Code standard applies by default.

To resolve this inconsistency, MSC 110 approved a new paragraph 2.1.7 in Part IV of the IP Code, establishing that a person's weight of 90 kg shall be used in stability calculations, in lieu of the 75 kg.

The draft amendments are expected to enter into force on 1 January 2028, upon the adoption at MSC 111, and will apply to cargo ships subject to the IP Code, which are contracted for construction on or after 1 January 2028, or delivered on or after 1 January 2032.

Source: MSC 110/21/Annex 11

Use of Remote Inspection Techniques (RIT) under the 2011 ESP Code

Remote Inspection Techniques (RIT) refer to a means of surveying any parts of a ship's structure without requiring surveyors' direct physical access. While RIT has been utilized for hull survey under class rules, it had not been formally incorporated into the 2011 ESP Code until now.

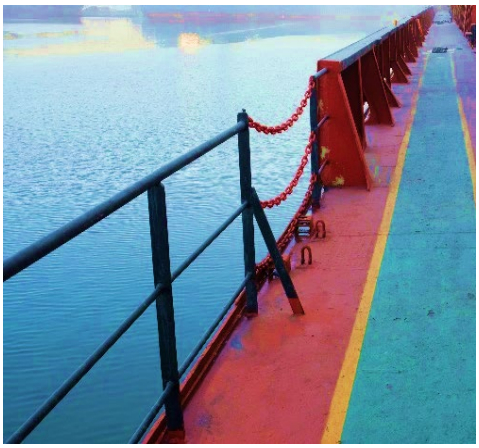
To facilitate the use of RIT as a supplement to close-up surveys of hull structures in bulk carriers and oil tankers, MSC 110 approved draft amendments to the 2011 ESP Code. These draft amendments establish the definition and requirements of RIT, procedures for the approval of service suppliers providing RIT, etc.

The draft amendments are expected to enter into force on 1 January 2028, subject to the adoption at MSC 111. In line with these amendments, corresponding IACS UR Z10 series are expected to be also revised.

Source: MSC 110/21/Annex 12

Harmonization of Guard Rail Requirements under the 1988 Load Line Protocol

The risk of personnel falling from height may not be substantially different across various parts of the ship, including deckhouses, superstructures, and upper decks. However, regulation 25 of Annex I of Annex B to the 1988 Load Line Protocol has specified different guard rail configurations depending on a ship's locations, i.e. requiring three-course guard rails only on superstructures and freeboard decks, but two-course guard rails on other exposed decks.



To harmonize these requirements, MSC 110 approved draft amendments to regulation 25, expanding the requirement for three-course guard rails to cover all exposed decks and sea access holes (e.g. edges of moonpools). The amendments also clarify that where keep chains are used in place of guard rails, they must be tightened as much as practicable.

These draft amendments are expected to enter into force on 1 January 2028, subject to adoption at MSC 111, and will apply to ships the keels of which are laid on or after 1 January 2028.

Source: MSC 110/21/Annex 13

Simulated Launch of Free-Fall Lifeboats

SOLAS regulation III/19.3.4.4 requires free-fall lifeboats to be launched by free-fall at intervals not exceeding six months; however, simulated launching is also permitted as an alternative means of testing. In this regard, concerns have been raised that the lack of specific design requirements for simulated launching devices has resulted in, or increased the risk of, accidents during such tests.

To address this issue, MSC 110 approved a new paragraph 4.7.7 for inclusion in the LSA Code, specifying design requirements for arrangements to test the release system of free-fall lifeboats without actual launching, as follows:

- Application of a safety factor of at least 6 based on the maximum working load of the free-fall lifeboat

- Use of corrosion-resistant materials, excluding falls and temporarily installed equipment

As a consequence and with a view towards the adoption at MSC 111, the draft amendments to paragraphs 6.2.3 and 6.2.7 of resolution MSC.402(96) were also approved to explicitly identify the simulated launching device as one of the items subject to annual servicing.

The above draft amendments are expected to enter into force on 1 January 2028, subject to the adoption at MSC 111, and will apply to free-fall lifeboats installed on or after 1 January 2031.

To support the above amendments, the Committee also agreed to approve draft revisions of the following IMO instruments at MSC 111:

- Revised Recommendation on Testing of Life-Saving Appliances (Resolution MSC.81(70));
- Revised guidelines for developing operation and maintenance manuals for lifeboat systems (MSC.1/Circ.1205/Rev.1);
- Unified interpretations of paragraph 4.4.7.6 of the LSA Code, as amended by resolution MSC.320(89) (MSC.1/Circ.1529);
- Guidelines on safety during abandon ship drills using lifeboats (MSC.1/Circ.1578); and
- Revised standardized life-saving appliance evaluation and test report forms (survival craft) (MSC.1/Circ.1630/Rev.3)

Source: MSC 110/21/Annexes 16, 17, and 18

Application provisions for the previous amendments of the LSA Code

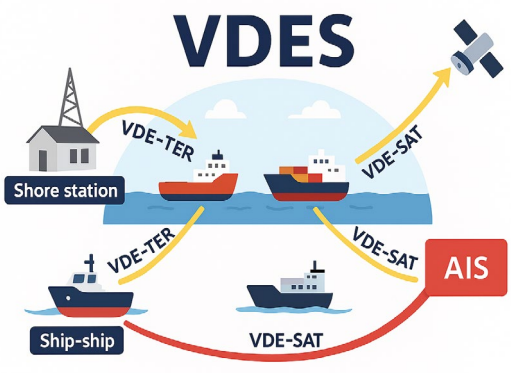
At MSC 109, the Committee decided to incorporate the application provisions, previously included only in the cover pages of resolutions adopting amendments to the LSA Code, into the main body of the Code itself. In line with this decision, and with a view to adoption at MSC 111, several amendments were made and approved during this session.

Specifically, existing paragraphs 2.2.1.6.2, 4.4.7.6.8, 4.4.7.6.17, 4.6.6, 4.6.7, and 6.1.1.3 were amended to clearly specify the application dates. Additionally, the preamble, as well as paragraphs 2.2.1.18, 4.4.7.6.18, 4.6.8, and 6.1.1.3 of the Code, were either amended or newly introduced to clarify the amended provisions regarding the application dates.

Source: MSC 110/21/Annex 16

Introduction of VHF Data Exchange System (VDES) as an alternative to AIS

The VHF Data Exchange System (VDES) is an advanced maritime communication system that builds upon and extends the capabilities of the Automatic Identification System (AIS) by integrating four components: AIS, Application Specific Messages (ASM), terrestrial VHF data exchange (VDE-TER), and satellite VHF data exchange (VDE-SAT).



Operating in the VHF band, VDES enables secure, automated, two-way digital data exchange between ships, shore authorities, and satellites, with minimal involvement of shipboard personnel. It is designed to support e-navigation, enhance the safety, security, and efficiency of navigation, enable standardized reporting, and

allow coastal States to access information on ships, cargo, and passengers, all with a high level of availability and data integrity.

To enable the carriage and use of VDES as an alternative to AIS, the phrase “or VDES” will be added after references to “AIS” in various provisions of SOLAS chapter V and the appendix, as well as in the corresponding sections of the 1994 and 2000 HSC Codes.

To support the above amendments, the Committee also agreed to approve the following draft IMO instruments at MSC 111:

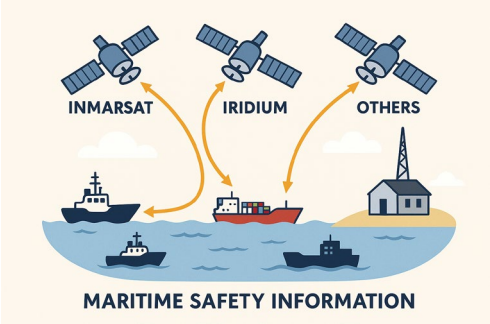
- Introduction of VHF data exchange system (VDES) into the IMO regulatory framework
- Performance standards for shipborne VHF data exchange system (VDES)
- Guidelines for the operational use of shipborne VHF data exchange system (VDES)

The above draft amendments are expected to enter into force on 1 January 2028, subject to the adoption at MSC 111, and will apply to all ships of 300 GT and upwards engaged on international voyages, cargo ships of 500 GT and upwards not engaged on international voyages, and all passenger ships irrespective of size.

Source: MSC 110/21/Annexes 22, 23, 24, 25, 26, and 27

Dissemination of MSI and SAR-related information through all RMSS

The introduction of Iridium and BMDSS as Recognized Mobile Satellite Services (RMSS), alongside the long-standing INMARSAT, prompted the concern that maritime safety information (MSI) and search-and-rescue information are not available across all types of RMSS.



Accordingly, MSC 110 approved draft amendments to SOLAS regulations IV/5, V/4, and V/5 to specify the obligations of SOLAS Contracting Governments to avail the dissemination of MSI and SAR-related information through all RMSS.

To support the above amendments, the Committee at this session also agreed to approve the draft revision of resolution MSC.509(105)/Rev.1[11] at MSC 111.

The above draft amendments are expected to enter into force on 1 January 2028, subject to the adoption at MSC 111.

Source: MSC 110/21/Annexes 20 and 21

Autonomous Ships: Development of a Goal-based MASS Code

Progress of Developing the MASS Code

At MSC 110, Working Group on Maritime Autonomous Surface Ships (MASS) was established to continue the development of the draft non-mandatory MASS Code. The Working Group successfully finalized most of the remaining chapters of the draft Code, except for definitions, human element, and the form of certificates.

Source: MSC 110/WP.8/Annex 1

[11] Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS)

Updated Work Plan

The Committee updated the road map for developing a goal-based MASS Code, as follows:

- MASS-ISWG 4 to further develop the non-mandatory MASS Code (September 2025);
- Finalization and adoption of the non-mandatory MASS Code at MSC 111 (May 2026);
- Development of a framework for an Experience-building phase (EBP) until MSC 112 (December 2026);
- Experience-building phase from 2026;
- Commencement of developing the mandatory MASS Code from 2028; and
- Adoption of the mandatory MASS Code at a future session before 1 July 2030 for entry into force on 1 Jan 2032

Source: MSC 110/21/Annex 8

Alternative Fuels and New Technologies for GHG Reduction

Identification of Regulatory Gaps and Barriers: Alternative Fuels and New Technologies

The Committee has, over several sessions, identified a range of alternative fuels and innovative technologies aimed at reducing greenhouse gas (GHG) emissions from ships. Building on the discussions of the intersessional working group established at MSC 108, MSC 110 continued deliberations on this matter, with a particular focus on reviewing regulatory gaps and barriers to the safe and effective introduction of these fuels and technologies and developing recommendations to address them.

Below are key alternative fuels and new technologies, along with identified regulatory gaps and barriers and related recommendations for improvement:

- **Methanol and Ethanol Fuels**

  As regulatory gaps, it was identified that the IBC Code and MSC.1/Circ.1621[12] have different requirements for methanol and ethanol due to their differing toxicity thresholds. It was also noted that traditional fixed water-based or gas firefighting systems may not be effective in addressing alcohol fires. Accordingly, it was recommended that MSC.1/Circ.1621 and the FSS Code be respectively amended by CCC and SSE Sub-Committees.

- **Fuel Cell**

  It was concerned that MSC.1/Circ.1647[13] does not sufficiently address the latest developments in design and operations, especially for hydrogen-based systems. Accordingly, it was recommended to revise

[12] interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel

[13] Interim Guidelines for the safety of ships using fuel cell power installations

MSC.1/Circ.1647 to clarify definitions and design concepts, align safety measures with international standards (ISO, IEC, etc.), incorporate ventilation and exhaust system limitations, and require the separation of ESD-protected spaces and gas-safe spaces. To address these issues, the Committee recommended that these aspects be taken into account during the development of mandatory regulations for fuel cells, as originally planned by the CCC Sub-Committee.

- **Nuclear-Powered Ships**

  The existing Code of Safety for Nuclear Merchant Ships (resolution A.491(XII)), developed in early 1980s based on early pressurized water reactors (PWRs) and direct steam cycles, has been identified as having limitations in regulating advanced nuclear technologies such as Small Modular Reactors (SMRs). Accordingly, based on the gap analysis submitted at MSC 108, it was recommended that the Code be revised in a technology-neutral and goal-based manner by SDC Sub-committee, and in line with IAEA standards.

- **Safety of Onboard Carbon Capture and Storage (OCCS) Systems**

  The introduction of Onboard Carbon Capture and Storage (OCCS) systems involves new safety and legal challenges that are not currently addressed by existing IMO conventions. In particular, the storage and handling of carbon dioxide (CO_2) captured during ship operations raise significant concerns regarding classification, segregation, and transport safety, as these aspects fall outside the traditional scope of the IMDG Code.

  Based on its experience in approving OCCS installations on ships, Korean Register has actively promoted the development of safety standards for OCCS. It submitted a proposal to initiate relevant regulatory development through the Republic of Korea at MSC 108, presented technical content at MSC 109, and submitted an information document at MSC 110. To address these issues, the Committee developed its recommendation to initiate the development of safety guidelines for OCCS systems starting from CCC 12.

- **Battery Energy Storage System (BESS)**

  Despite the increasing use of BESS on board ships, concerns have been raised that there are currently no dedicated safety requirements at the IMO level. Accordingly, a need has been identified to develop a technology-neutral and goal-based interim guideline reflecting the characteristics of lithium-ion batteries, including fire safety requirements. It was recommended that SSE 12 start developing the guidelines in a way to accommodate a variety of emerging energy storage technologies, such as supercapacitor and sodium-ion battery.

In addition to the matters described above, the Committee endorsed that the identified regulatory barriers and gaps related to 12 alternative fuels and 20 new technologies be allocated to the respective sub-committees for the development of corresponding work plans, i.e. SDC, SSE and CCC Sub-Committees. For more details of work distributions, please refer to MSC 110/WP.9/Annexes 3, 4, and 5.

Source: MSC 110/WP.9

Application of the IGF Code to Ships Using Gaseous Fuels with a Flash Point of 60°C and above

While the title of the IGF Code refers to ships using gases or other low-flashpoint fuels, SOLAS Chapter II-1, Part G, which mandates the IGF Code, has specified that it applies to ships using low-flashpoint fuels with a flashpoint of less than 60°C. Due to this difference, concerns have been raised over the ambiguity as to whether the IGF

Code applies to ships using gaseous fuels with a flashpoint of 60°C or above. This regulatory uncertainty may affect the industry's investment in ships using alternative fuels such as ammonia, which has a flashpoint of 60°C or higher.

To resolve the concern, the amendments to SOLAS regulations II-1/2.34, 56, and 57 were approved by MSC 109, and planned to be adopted at this session. These draft amendments also triggered consequential amendments to various provisions under SOLAS chapter II-1, the IGF Code, and associated IMO instruments. Following discussions on document MSC 110/6/6, MSC 110 prepared these consequential amendments.

Notably, the definition of "low-flashpoint fuel" in SOLAS regulation II-1/2.29 was revised to remove the reference to gaseous fuels, as not all types of gaseous fuels meet the criterion of having a flash point below 60°C, which is the basis for the definition of low-flashpoint fuels.

In addition, several provisions under SOLAS regulations II-1/2.28 and 55, as well as the IGF Code, were amended to align with the revised definitions and expressions introduced in the draft amendments to SOLAS regulations II-1/2.29, 2.34, 56 and 57, as follows:

- The expressions "gaseous fuel or", "gas or", or "gaseous or" have been added alongside "low-flashpoint fuel", as appropriate.
- The definition of "gas" in paragraph 2.2.18 of the IGF Code has been aligned with that of "gaseous fuel" newly established in SOLAS regulation II-1/2.34.
- The definition of "low-flashpoint fuel" in paragraph 2.2.28 of the IGF Code has been revised to match the updated definition in SOLAS regulation II-1/2.29.

The above draft amendments, including the one approved at MSC 109, are expected to approved at MSC 111, with a view towards the adoption at MSC 112 and the entry-into-force on 1 July 2028. Corresponding updates to various non-mandatory IMO instruments are also expected to be finalized and approved in future sessions, taking into account document MSC 110/6/10.

Source: MSC 110/WP.7/Annexes 16 and 17

One-Ship One-Code: Application of the IGF Code to Gas Carriers

Based on the decision made at MSC 95, the IGF Code has not been applied to gas carriers subject to the IGC Code, i.e., the so-called "One Ship, One Code" policy. However, the increasing use of LNG and alternative fuels has prompted the question about whether SOLAS regulation II-1/56.4 precludes the simultaneous application of

both the IGC and IGF Codes to gas carriers. Following the initial discussions at MSC 109, the Committee continued its extensive deliberations at this session, discussing the documents respectively submitted by the Republic of Korea and SIGTTO et al.

After contemplation on the various options proposed, the Committee decided to slightly revise its standing policy such that the IGF Code shall not apply to gas carriers subject to the IGC Code when these vessels use products listed in Chapter 19 of the IGC Code as fuel. However, the Committee also agreed to establish a legal basis for applying IGC Code-specific guidelines to gas carriers that use gaseous or low-flashpoint fuels not listed in Chapter 19 of the Code. These IGC Code-specific guidelines are anticipated to contain the partial application of the IGF Code, together with safety requirements dedicated for gas carriers.

To reflect this revised policy, the Committee discussed draft amendments to SOLAS regulations II-1/56.4 and 56.5, as well as draft amendments to paragraph 1.1.1.2 of the IGC Code and the preamble of the IGF Code. However, the finalization and approval of the draft amendments was deferred to MSC 111

In order to facilitate the adoption of these amendments as early as possible, the Committee decided to postpone the adoption of previously scheduled amendments to SOLAS regulations II-1/2.34, 56, and 57, which relate to the application of the IGF Code to ships using gaseous fuels with a flashpoint of 60°C or above.

This policy change is expected to enable the safe use of new alternative fuels on gas carriers, while maintaining regulatory clarity and supporting the IMO's decarbonization goals.

Source: MSC 110/WP.7/Annexes 15, 16 and 17

New Work Programs

MSC 110 deliberated on the new output proposals submitted to this session and approved them as listed below. The new output categorized as "Biennial" will be initiated with urgency by the Committee or responsible Sub-Committees within the period of the year 2026-2027, and the one categorized as "Post-biennial" will get started at an appropriate point after the period of the year 2026-2027.

New outputs approved by MSC 110	Responsible bodies	
Development of performance standards for Ranging mode (R-mode) in radionavigation receivers	NCSR	Biennial (2026-2027)
Clarification of applicable equipment standards for fire-fighters' outfits in chapter 3 of the FSS Code	SSE	Post-biennial (one session)
Development of engine control room alert management (ECRAM) performance standards	SDC	Biennial (2026-2027)
Revision of resolution MSC.81(70) concerning requirements for testing the compliance of pyrotechnics	SSE	Post-biennial (two sessions)
Mitigation of fire risks caused by leakages from low-pressure fuel pipes and lubrication oil pipe, and use of thermal imaging cameras when inspecting insulations, in engine rooms	SSE	Post-biennial (two sessions)
Revision of the LSA Code regarding lowering speed requirements for fast rescue boats	SSE	Post-biennial (one session)
Review and, if necessary, amendment of SOLAS regulations II-2/13.4.1.1 and 13.4.2.1 to clarify the requirements on escape arrangements from the lower part of machinery spaces	SDC	Biennial (2026-2027)
Revision of testing requirements for floor covering materials in SOLAS regulation II-2/6.2.1	SSE	Post-biennial (one session)
Revision of SOLAS regulation II-2/20 and chapter 7 of the FSS Code	SSE	Post-biennial (one session)

New outputs approved by MSC 110	Responsible bodies	
Review of the financial architecture of the LRIT system	MSC	Biennial (2026-2027)
Development of guidelines addressing risks of falls from height	HTW	Post-biennial (four sessions)
Comprehensive revision of the guidelines on the implementation of the ISM Code by Administrations and companies	III	Biennial (2026-2027)
Review of the Casualty Investigation Code and the associated implementation Guidelines (resolution A.1075(28))	III	Biennial (2026-2027)
Development of guidelines addressing the implementation of provisions left "to the satisfaction of the Administration", or equivalent, in the relevant mandatory IMO instruments	III	Biennial (2028-2029)
Application of resolution MSC.402(96) to high-speed craft and mobile offshore drilling units in the HSC Codes and MODU Codes	SSE	Post-biennial (Two sessions)

Any Other Issues

Escape Trunks in Engine Rooms

The placement of escape trunks which do not extend down to the lowest deck level within ship's engine room, has become one of the most contentious safety issues over the past 18 months, largely due to repeated PSC detentions and observations made in China.

At the SDC Sub-Committee convened earlier this year, IACS proposed a revision to MSC.1/Circ.1511/Rev.1, but the issue remained unresolved. In light of the ongoing issues, MSC 110 revisited the matter based on several documents submitted for this session.

In this regard, IACS proposed a draft revision of MSC.1/Circ.1511/Rev.1 to reaffirm that the term "lower part of the space" used in SOLAS regulation II-2/13.4 refers to either the lowest deck level, platforms, or passages within a space, without necessarily meaning the absolute lowest one. On the other hand, Liberia proposed amending SOLAS Chapter II-2 to mandate that the bottom of escape trunks reach the lowest deck of the engine room, except where such a design is technically justified

Following in-depth deliberations, the Committee approved MSC.1/Circ.1689, inviting port State control (PSC) authorities to adopt a pragmatic approach in accepting the existing escape arrangements of ships already approved by their flag Administrations. This short-term measure should apply until a decision is made at IMO level or SOLAS regulation II-2/13.4 is amended and entered into force. As a long-term measure, the Committee also approved a new output and instructed the SDC Sub-Committee to further consider the matter in detail and develop appropriate measures, with a view to reporting back to MSC 111.

Source: MSC.1/Circ.1689

Update of a footnote to the LSA Code: ISO 18813:2022

Paragraphs 4.1.5.1.18 and 4.1.5.1.19 of the LSA Code list food and water rations as required items in liferafts, with ISO 18813:2006 referenced in a footnote to support these provisions. Following discussions at SSE 11, the Committee agreed to update the footnote to reference the latest version, ISO 18813:2022, and instructed the IMO Secretariat to incorporate this revision into the next edition of the LSA Code publication. However, in view of the discrepancies between the LSA Code and ISO 18813:2022, as identified in document SSE 11/19/1, the Committee also invited ISO to revise the standard to ensure its alignment with the Code's requirements.

Maritime Cyber Security

In addition to MSC-FAL.1/Circ.3/Rev.3, which provides the *Guidelines on Maritime Cyber Risk Management*, the Committee endorsed that a non-mandatory goal-based cyber security Code should be developed,, with the intention of eventually making it mandatory through inclusion in a new chapter of SOLAS. However, it invited interested member States and international organizations to submit proposals on a relevant new output to MSC 111 for further progress.

Should you have any questions, please contact P.I.C. Thank you.

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