

SOLAS CONVENTION



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Fall 2023

Chapter II-2: Regulations 1, 3 and 4 – Flashpoint of Bunkered Fuel Oil

SOLAS Chapter II-2 has been amended to address safety concerns related to fuel oil characteristics by requiring a flashpoint declaration from the fuel oil supplier or confirmation that the flashpoint is above 70° C.

Ships shall be provided with a declaration signed and certified by the fuel oil supplier's representative that the oil fuel supplied is in conformity with Regulation 4.2.1 of SOLAS II-2/4.2.1, as well as the test method used for determining the flashpoint.

Cases where oil fuel suppliers have failed to meet flashpoint requirements should be properly reported. Amendments on this subject affect these regulations in Chapter II-2:

- Regulation 1 Application
- Regulation 3 Definitions
- Regulation 4 Probability of Ignition

Effective Date: 1 January 2026 Source: MSC.520(106)





Chapter XV: New SOLAS Chapter XV – Safe Carriage of Industrial Personnel

The maritime offshore and energy sectors' growth has led to the emergence of new offshore industrial activities, which have increased the demand on the shipping sectors. The new SOLAS Chapter XV is focused on the safe carriage of industrial personnel on board ships that are engaged in offshore industrial activities during international voyages.

The Interim Recommendations on the safe carriage of more than 12 industrial personnel on board vessels engaged on international voyages, outlined in Resolution MSC.418(97), can be applied until 1 July 2024.

Effective Date: 1 July 2024

Sources: MSC.521(106) and MSC.527(106)



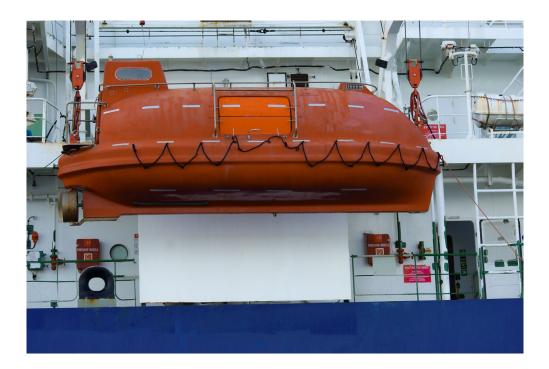


1978 SOLAS Protocol: Amendments to the Cargo Ship Safety Equipment Certificate

A minor revision was made to remove radio installations from the cargo ship safety equipment certificate form, acknowledging that requirements for radio installations used in life-saving appliances are now addressed within the updated form of the cargo ship radio certificate.

The amendments address the replacement of the cargo ship safety equipment certificate form.

Effective Date: 1 January 2026 Source: MSC.522(106)





Chapter V/Regulations 19 and 27: ECDIS Performance Standards

Electronic chart display and information systems (ECDIS) contribute to safe navigation by providing simple and reliable updated navigational data.

Revisions to the ECDIS performance standards given in resolution MSC.232(82) were adopted, introducing updates to acknowledge new technologies and standards used by electronic navigational data services (ENDS). The resolution outlines the criteria and procedures for approving shipborne radio equipment, and it establishes performance standards for the equipment to ensure reliable communication for the safety of the ship and crew.

The revisions also incorporate updated references to the latest standards of the International Hydrographic Organization (IHO) for electronic navigation data.

Effective Date: 1 January 2029

Source: MSC.530(106)





Chapter V/Regulations 19 and 27: ECDIS Performance Standards

Regarding the application of these revised ECDIS performance standards for equipment installed on or after:

- 1 January 2029 must conform to these revised performance standards.
- 1 January 2026 but before 1 January 2029 must conform to either these revised performance standards or the standards given in Resolution MSC.232(82)
- 1 January 2009 but before 1 January 2026 must conform to the performance standards given in Resolution MSC 232(82).
- 1 January 1996 but before 1 January 2009 must conform to the performance standards given in Resolution A.817(19), as amended by Resolutions MSC.64(67) and MSC.86(70).

Effective Date: 1 January 2029 Source: MSC.503(106)





Chapter V: Electronic Chart Display and Information System (ECDIS) – Guidance

Revisions were made to the IMO circular "ECDIS – Guidance for Good Practice" to further support the importance of up-to-date ECDIS information for safe navigation.

In these revisions, a new section specifically addressing onboard ECDIS updates has been added with guidance about the revision or re-issuance of Type Approval certificates following an onboard ECDIS update.

This guidance applies to cases where updates are initiated by the manufacturer to improve functions and cases where updates are required to maintain compatibility with the latest standards of the IHO.

Appendix 4 provides examples of onboard ECDIS updates and describes the documentation that should be provided to decide if recertification is necessary.

Effective Date: 28 November 2022

Source: MSC.1 Circular 1503/Revision 2





Chapter II-2/Regulation 9: Unified Interpretations of SOLAS

IMO approved two new unified interpretations of SOLAS Chapter II-2, focusing on arrangements of duct penetrations through fire-rated divisions:

- Regulation II-2/9.7.3.1.2 Required fire insulation should only be provided to the part of the duct and/or sleeve that is on the same side of the division being fire insulated and be extended for a minimum of 450 mm along the duct and/or sleeve.
- Regulation II-2/9.7.3.2 When a duct passing through a division is to be in accordance with SOLAS regulations for B-class fire-rated divisions, no clearance should be allowed between the duct and the division.

Effective Date: 5 December 2022

Source: MSC.1 Circular 1655





Chapter V: Long-Range Identification and Tracking (LRIT) Systems

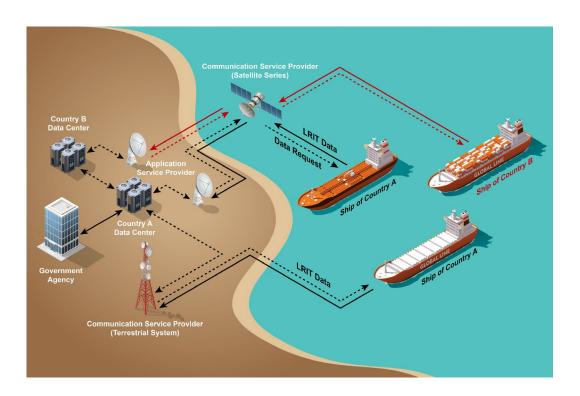
The long-range identification and tracking (LRIT) system facilitates the global identification and tracking of ships.

Standards and guidance related to the LRIT information transmitting equipment on board ships have been updated based on a report of the LRIT operational governance body, including matters related to:

- The role of the LRIT international data exchange (IDE) business continuity facility maintained by the European Maritime Safety Agency (EMSA)
- Connectivity issues with the IDE disaster recovery site maintained by the U.S. Coast Guard
- Validation of public key infrastructure (PKI) certificates
- Removal of the functionality from the LRIT system for remote reprogramming of the LRIT shipborne equipment

Effective Date: 15 June 2022

Sources: MSC.263(84) Revision 1 MSC.1/Circular 1259/Revision 9, MSC.1/Circular 1307/Revision 1, and MSC.1 Circular1376/Revision





Spring 2023

Chapters II-1, III, IV, V, and Appendix: Global Maritime Distress Safety System

Communications between ships and shore and search and rescue (SAR) at sea depend on integrated satellite and terrestrial radiocommunication system in the global maritime distress safety system (GMDSS).

Amendments to Chapters II-1, III, IV, V and the appendix (certificates) of the 1974 SOLAS Convention have been adopted to update terminology and requirements related to the GMDSS.

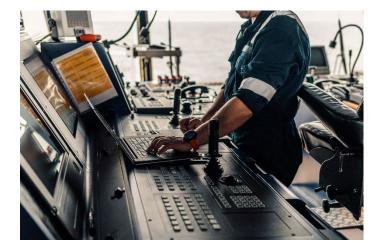
Amendments include:

- Complete replacement of SOLAS Chapter IV (radio communications)
- Relocation of provisions for lifesaving appliance communication equipment from Chapter III to Chapter IV

Changes in this resolution collectively represent the IMO's efforts to modernize the GMDSS.

Effective Date: 1 January 2024

Sources: MSC.496(105) and MSC.497(105)





Chapters II-1, III, IV, V and Appendix: Global Maritime Distress Safety System

The purpose of revising the GMDSS standards is to enable the use of modern communication systems while removing requirements to carry obsolete systems.

Several revised standards for radiocommunication equipment have also been adopted related to SOLAS amendments to modernize the GMDSS.

Effective Date: 1 January 2024

Sources: MSC.507(105) through MSC.517(105), MSC.1/Circular.803/Revision.1, and MSC.1/Circular.1645





Chapter II-1/Regulations 25 and 25-1 and Chapter XII/Regulation 12: Water Level

Amendments were adopted to the Performance Standards for Water Level Detectors on Bulk Carriers and Single Hold Cargo Ships Other Than Bulk Carriers due to the importance of providing effective water level detection that will quickly indicate flooding/water accumulation in holds.

The amendment's intention is to broaden the application of this standard to all vessels subject to Regulations 25 and 25-1 of SOLAS Chapter II-1 and Regulation 12 of SOLAS Chapter XII.

Revised performance standards should apply to water level detectors installed on or after 1 January 2024.

Effective Date: 1 January 2024 Source: MSC.188(79)/Revision.1





Chapter II-1/Regulations 25 and 25-1 and Chapter XII/Regulation 12: Water Level

In addition, the amended standard for water level detection incorporates new requirements, including:

- Operation in low temperatures
- Instances when bilge level alarms are used as water level detectors on multiple hold cargo ships for compliance with new SOLAS Regulation II-1/25-1
- Clarity on water level detector height measured when a lining or insulation is fitted to a hold

The revised performance standards should apply to water level detectors installed on or after 1 January 2024.

Effective Date: 1 January 2024 Source: MSC.188(79)/Revision.1





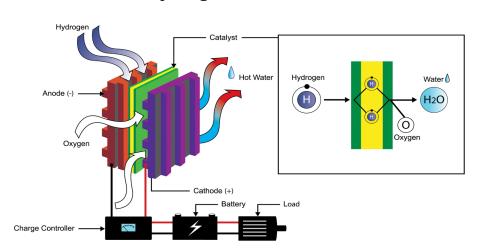
Chapter II-1/Part G: Fuel Cell Power Installations

The Interim Guidelines for the Safety of Ships Using Fuel Cell Power Installation updates were made to provide timely guidance on relatively new technology. These new interim guidelines:

- Provide an international standard of provisions for ships using fuel cell power installations
- Provide criteria for fuel cell power installations and arrangements with at least the same level of safety and reliability as new and comparable conventional oil-fueled main and auxiliary machinery installations, regardless of specific fuel cell type and fuel
- Apply to ships that must comply with SOLAS Chapter II-1 Part G (Ships Using Low-Flashpoint Fuels)
- Provide standards for fuel cell space ventilation, fire safety, electrical controls and hazardous areas considerations

Effective Date: 15 June 2022

Source: MSC.1/Circular.1647



Hydrogen Fuel Cells



Chapter II-1/Regulation 5: Unified Interpretation — Lightweight Changes

An IMO unified interpretation was adopted to clarify the extent of lightship property changes requiring a recalculation of the ship's lightweight and a possible new inclining test, as well as when the stability information is to be updated.

The interpretation of SOLAS Regulations II-1/5.4 and II-1/5.5 clarifies that in cases in which a ship's lightship properties changed beyond the specified deviation limits, instruments or documents using lightship properties should be updated based on the new lightship properties.

Documents affected by such changes may include the stability booklet, stability computer, loading manual and loading instrument.

Where the lightship properties are updated through detailed weight calculations, these calculations should be verified on board.



Effective Date: 9 May 2022 Source: MSC.1/Circular.1362/Revision.1



Chapter II-1/Regulation 5-1: Unified Interpretation — Timber Deck Cargo

An interpretation was adopted to revise the Unified Interpretation Regarding Timber Deck Cargo in the Context of Damage Stability Requirements (MSC/Circular.998). This update provides guidance regarding the damage stability of vessels carrying timber deck cargoes.

The update is based on the revised International Association of Classification Societies (IACS) Unified Interpretation SC161.

The update to UI SC161 was necessary due to relevant SOLAS amendments and the revocation of the 1991 Timber Code, which was replaced by the Code of Safe Practice for Ships Carrying Timber Deck Cargoes, 2011 (Resolution A.1048(27)) (2011 TDC Code).

Updates were also made to address lashings and uprights used for timber cargoes and to address how buoyant timber deck cargo should be accounted for in damage stability calculations.

Effective Date: 9 May 2022

Source: MSC.1/Circular.1653





Chapter II-1/Regulation 3-12: Unified Interpretation — Noise Level Limit in Workshops

A unified interpretation of paragraph 4.2.1 of The Code on Noise Levels On Board Ships (Resolution MSC.337(91)) has been updated to clarify the application of noise limits for workshops other than workshops that form part of machinery spaces.

Such spaces must be recognized as separate spaces from the engine room. This space may include access doors of the equivalent acoustic insulating properties as the bulkhead.

Workbenches and workstations inside the machinery space should not be considered workshops other than those forming part of machinery spaces.

Different noise level limits are assigned according to which type of workshop it is.

Effective Date: 9 May 2022 Source: MSC.1/Circular.1654





Chapter II-2/Regulation 10: Exemption of Fixed Gas Fire-Extinguishing Systems

To address fire risks in cargo holds, Regulation 10.7 of Chapter II-2 of SOLAS requires the provision of fixed gas fire-extinguishing systems for cargo space protection.

Revision 5 to IMO circular MSC.1/Circ.1395, "Lists of Solid Bulk Cargoes For Which A Fixed Gas Fire-Extinguishing System May Be Exempted Or For Which A Fixed Gas Fire-Extinguishing System Is Ineffective" provides guidance for the application of SOLAS Regulation II-2/10.7.1.4, where it is recognized that it may not be necessary or appropriate to provide a fixed gas fire-extinguishing system for certain cargoes listed in the tables in the Annex to the Circular.

These cargo lists are reviewed and updated as needed.

Effective Date: 28 April 2022

Source: MSC.1/Circular.1395/Revision.5





Chapter II-2/Regulation 10: Exemption of Fixed Gas Fire-Extinguishing Systems

The IMO circular list provided by MSC.1/Circular 1395 was recently amended to include several new cargoes.

Leach residue containing lead and superphosphate (triple, granular) has been added to Table 1 as non-combustible cargo with low fire risk.

Ammonium nitrate-based fertilizer (materials hazardous only in bulk) (MHB) has been added to Table 2 as cargo for which a fixed gas fire-extinguishing system is ineffective and an alternative giving equivalent protection must be provided.

Effective Date: 28 April 2022

Source: MSC.1/Circular.1395/Revision.5





Chapter V: Revised Performance Standards for Voyage Data Recorders

The voyage data recorder (VDR) or the simplified voyage data recorder (SVDR) is an instrument that records navigation and communication information that could be essential in a maritime incident investigation.

Revisions to performance standards for SVDRs were adopted to recommend SVDRs be constructed to minimize risk of damage during recovery operations to the same extent as required by MSC.471(101) for float-free EPIRBs.

The float-free capsule containing the VDR recording medium should be capable of transmitting initial satellite distress alerting signal and locating homing signals for at least seven days.

In addition to the SVDR requirement, revisions to VDR performance standards were adopted to recommend that VDRs' float-free recording medium be installed in a float-free capsule that should maintain recorded data for at least six months following termination of the recording.

The VDR recording medium should be capable of being accessed following an incident but secure against a physical or an electronic manipulated change or deletion of recorded data.

Revised performance standards should apply to VDRs installed on or after 1 July 2022.

Effective Date: 1 July 2022

Sources: MSC.493(104) and MSC.494(104)





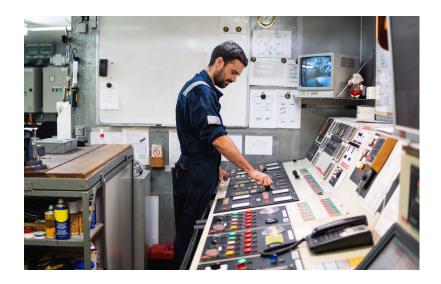
Chapter IV: Emergency Position Indicating Radio Beacon Maintenance and Testing

The Emergency Position Indicating Radio Beacon (EPIRB) plays a critical role in the GMDSS and in search and rescue efforts immediately following a maritime incident.

Guidelines for annual testing and shore-based maintenance of EPIRBs have been revised to correlate with the latest version of the Performance Standards for Float-Free EPIRBs Operating on 406 MHz (Resolution MSC.471(101)), including minor changes in terminology and the updated GMDSS standards.

Effective Date: 18 October 2021

Sources: MSC.1/Circular.1039/Revision.1 and MSC.1/Circular.1040/Revision.2





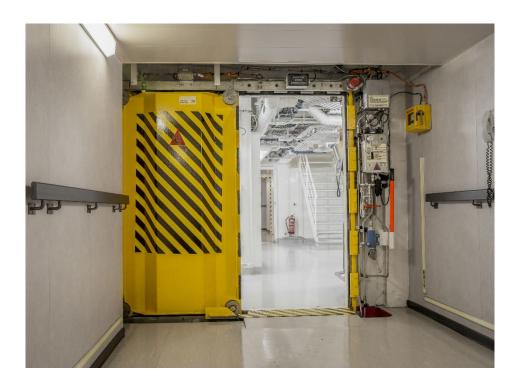
Fall 2022

Chapters II-1: New Requirements on Doors, Hatches and Valves

To address inconsistencies with Parts B 1, B 2, and B 4 of SOLAS Chapter II 1, which had developed due to amendments over time, a collection of amendments was approved primarily focused on openings in watertight boundaries. Subjects addressed by these amendments include:

- Openings in collision bulkheads
- Openings in watertight boundaries below the bulkhead deck in passenger ships
- Openings in the shell plating below the bulkhead deck of passenger ships and the freeboard deck of cargo ships
- Internal watertight integrity of passenger ships above the bulkhead deck

Effective Date: January 1, 2024 Source: MSC.474(102)





Chapter II-1/Regulation 3-8: Safe Mooring of Ships

To improve safety related to mooring equipment, amendments were adopted to provide improved standards for the design, inspection and maintenance of equipment and lines.

For all new and existing ships, regardless of size or date of construction, mooring equipment will be subject to new inspection and maintenance requirements, and MSC.1/Circular 1620, Guidelines for Inspection and Maintenance of Mooring Equipment Including Lines, was approved to provide standardized guidance for these inspections.

For new ships of 3,000 GT and above, the mooring arrangement and equipment used during normal operation of the ship must meet the requirements of MSC.1/Circular 1619, Guidelines on the Design of Mooring Arrangements and the Selection of Appropriate Mooring Equipment and Fittings for Safe Mooring. 2 of 9

Effective Date: 1 January 2024

Sources: MSC.474(102), MSC.1/Circular 1619, and MSC.1/Circular 1620





Chapter II-1/Regulation 14.2.1.2: Fixed Carbon Dioxide Fire-Extinguishing Systems

Several amendments were adopted for the Guidelines for the Maintenance and Inspection of Fixed Carbon Dioxide Fire-Extinguishing Systems (MSC.1/Circular 1318) to address concerns about a lack of clarity in the standard regarding the frequency of hydrostatic testing required for storage cylinders.

The amended standard will require that at the 10-year inspection of the system, at least 10% of the total number of cylinders be tested. Before the 20th anniversary and every 10th anniversary afterward, all remaining bottles would be subject to a hydrostatic test.

The standard also clarifies that when cylinders are removed for testing, they should be replaced so that the quantity of fire-extinguishing medium continues to satisfy the requirements of Chapter 5 of the FSS Code. Additionally, an internal inspection of all control valves should be performed at least once every five years.

Effective Date: 25 May 2021 Source: MSC.1/Circular 1318, Revision 1





Chapter II-1/Regulation 25-1: Water-Level Detectors on Multiple-Hold Cargo Ships

Amendments to SOLAS Chapter II-1 were adopted in new Regulation 25-1, which addresses water-level detection requirements for multiple-hold cargo ships (other than bulk carriers and tankers). The new regulation will require such vessels to be fitted with water-level detectors in each cargo hold intended for dry cargoes, regardless of length.

The regulation calls for water-level detectors to alarm at water levels not less than 0.3 m above the bottom of the cargo hold and at water levels of 15% of the depth of the cargo hold (but not more than 2 m). As an alternative to the water-level detector at a height of not less than 0.3 m, a bilge-level sensor serving the bilge pumping arrangement is required by Regulation II-1/35-1 to be installed in the cargo hold bilge wells or another suitable location considered acceptable, subject to:

• The fitting of the bilge-level sensor at a height of no less than 0.3 m in the aft end of the cargo hold

• The bilge-level sensor providing an audible and visual alarm at the navigation bridge that is clearly distinctive from the alarm given by other water-level detectors fitted in the cargo hold

Effective Date: 1 January 2024 Source: MSC.482(103)





Chapter II-2/Regulation 9.2.2.3.2.2(9): Containment of Fire

A unified interpretation was adopted to clarify the designation of a pantry space as an "isolated pantry containing no cooking appliances in accommodation spaces" to determine the required space categorization for fire-rated boundaries.

Such spaces are defined as pantries enclosed in an accommodation space and only accessible from accommodation spaces and the open deck. The interpretation distinguishes such spaces from other types of pantries that may adjoin a main galley space, which would be considered differently for fire-rated boundary requirements.

Effective Date: 1 January 2021 Source: MSC.1/Circular 1634





Chapter III/Regulation 33: Lifeboat Launching

An amendment was made to clarify that only davit-launched lifeboats will be subject to the requirement of demonstrating the capability of launching and towing while the ship is making headway at speeds up to 5 knots in calm water. This clarification confirms that free-fall lifeboats will not be subject to this requirement.

Corresponding amendments were made to Chapter IV of the LSA Code and the Recommendation on Testing of Life-Saving Appliances (MSC.81(70)) to make the same clarification.

Effective Date: 1 January 2024 Sources: MSC.482(103), MSC.485(103), and MSC.488(103)





Chapter VI: Amendments to 2011 TDC Code

The Code of Safe Practice for Ships Carrying Timber Deck Cargoes, 2011 (2011 TDC Code) provides an international standard for the safe stowage and securing of timber cargoes. Part B, Chapter 6 of the code was amended so that cargo securing arrangements should follow the calculation in Annex 13 of the revised CSS Code.

Effective Dates: 7 December 2020 Sources: MSC.1/Circular 1624





Chapter VI and VII: Amendments to CSS Code

The Code of Safe Practice for Cargo Stowage and Securing (CSS Code) provides an international standard for the safe stowage and securing of cargoes in various forms.

Amendments to the CSS Code have been adopted to replace the complete text of Annex 13 of the code, "Methods to assess the efficiency of securing arrangements for semi-standardized and non-standardized cargo."

Effective Date: 7 December 2020 Source: MSC.1/Circular 1623





Chapter VI and VII: Cargo Securing Manual and Ro-Ro Transport

The Guidelines for the Preparation of the Cargo Securing Manual are intended to provide a uniform approach to preparing cargo securing manuals. Updates to these guidelines were adopted to align with the previous amendments to the CSS Code.

Similarly, updates to the Guidelines for Securing Arrangements for the Transport of Road Vehicles on Ro-Ro Ships were adopted to align with the CSS Code amendments.

Effective Dates: 11 November 2020 and 7 December 2020 Sources: MSC.479(102) and MSC.1/Circular 1353, Revision 2



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