

# WHAT'S NEW WITH SOLAS 2024?



Relevant for ship owners and managers, design offices, shipyards, suppliers and flag states.

June 2022

A set of amendments to the International Convention for the Safety of Life at Sea (SOLAS) and the associated Codes enter into force on 1 January 2024. This statutory news highlights the changes that have been adopted for the 2024 update of SOLAS and its associated Codes.



The SOLAS Convention is regarded as the most important of all international treaties concerning the safety of merchant ships. Amendments to the technical provisions generally follow a four-year cycle of entry into force. This news highlights amendments related to:

- Safe mooring operations
- Modernization of the GMDSS
- Watertight integrity
- Watertight doors on cargo ships
- Fault-isolation of fire detection systems
- Life-saving appliances
- Safety of ships using LNG as fuel

## Safe mooring operations

New SOLAS requirements intend to improve mooring safety by introducing additional requirements to selection, arrangement, inspection, maintenance and replacement of mooring equipment, including lines. Documentation regarding the design of mooring arrangements and the selection of mooring equipment will be required to be provided and kept on board.

The new requirements are incorporated in SOLAS Regulation II-1/3-8 on towing and mooring equipment, and supported by the following guidelines:

- Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring" (MSC.1/Circ. 1619)
- "Guidelines for inspection and maintenance of mooring equipment including lines" (MSC.1/Circ.1620)
- "Revised guidance on shipboard towing and mooring equipment" (MSC.1/Circ. 1175/Rev.1)

The design requirements will apply to new cargo and passenger ships constructed on or after 1 January 2024 that are above 3000 GT, and should also apply to ships of 3000 GT and below as far as reasonably practicable. The maintenance and inspection requirements will be applied retroactively for all ships.

## Modernization of the Global Maritime Distress and Safety System

The requirements to the Global Maritime Distress and Safety System (GMDSS) have been modernized to contain more generic requirements, independent of specific service providers, and to remove carriage requirements for obsolete systems. Furthermore, the requirements for communication equipment have been moved from SOLAS Chapter III on life-saving appliances to Chapter IV on radio communications. The definitions of the sea areas A1 to A4 have been amended to reflect that the geographical area of coverage may vary between various satellite service providers.

Since the IMO adopted the worldwide system for communication of emergency information in 1988, Inmarsat has been the only approved provider of satellite communication services for the GMDSS. In 2018, the IMO also recognized Iridium as a provider of such services, and the 2020 update of SOLAS replaced provider-specific terms with the more generic "recognized mobile satellite service".

Consequential amendments have been made to the 1994 and 2000 High-Speed Craft (HSC) Codes, the Special Purpose Ships (SPS) Code and the Mobile Offshore Drilling Units (MODU) Code.

The amendments will enter into force on 1 January 2024. Existing SOLAS certificates do not have to be reissued before they expire as a consequence of the reorganization of SOLAS Chapters III and IV.

## Watertight integrity

Amendments to SOLAS Chapter II-1 will ensure that the requirements to watertight integrity in parts B-2 to B-4 capture the probabilistic damage stability approach in parts B and B-1. The amendments address inter alia assumptions regarding progressive flooding, valves in the collision bulkhead and the consideration of watertight doors.

The amendments are a result of experience with the revised SOLAS Chapter II-1 after the probabilistic damage stability approach was introduced in the 2009 update of SOLAS. The approach assesses the probability of survival for a ship in case of damage, related to the extent and location of the damage. The probabilistic approach is perceived to give a more realistic representation of the condition of a ship in damaged situations, and to allow more freedom regarding, for example, the placement of watertight bulkheads.

The amendments will apply to new cargo and passenger ships constructed on or after 1 January 2024 and will not have any impact on existing ships.

### Watertight doors on cargo ships

The requirements to watertight doors in MARPOL Annex I, the Load Lines Convention, the IBC Code and the IGC Code have been amended to harmonize the consideration of watertight doors in damage stability calculations with the same in SOLAS. The inconsistencies were related to the type of watertight doors (sliding, hinged), to the technical/operational requirements and to the terminology for the frequency of use of watertight doors.

The amendments to the Load Lines Convention and the IBC Code will enter into force on 1 January 2024, and the amendments to MARPOL Annex I and the IGC Code will enter into force on 1 July 2024. The amendments will apply to cargo ships and will not have any impact on existing ships.

### Fault isolation of fire detection systems

The requirements for fire detection systems have been adjusted so that short circuit isolators do not need to be provided at each individually identifiable fire detector for cargo ships and passenger ship balconies. For cargo ships, one short circuit isolator per deck will typically be acceptable.

The amendments to Chapter 9 of the Fire Safety Systems (FSS) Code will enter into force on 1 January 2024.

### Life-saving appliances

Various adjustments have been made to SOLAS Chapter III and the associated Life-Saving Appliances (LSA) Code:

- The launching appliance of new rescue boats less than 700 kg does not need to have stored mechanical power, but handling shall be possible by one person.
- Free-fall lifeboats will not need to be launch-tested with the ship making headway at speeds of up to 5 knots in calm water, as there are no additional dynamic loads on the launching arrangements
- Lifeboats equipped with two independent propulsions systems do not need to be equipped with buoyant oars.

The amendments will apply to cargo and passenger ships and enter into force on 1 January 2024. Flag states are

invited to voluntarily apply the launch test provisions for free-fall lifeboats earlier.

### Ships using LNG as fuel

The International Code for Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code) has been amended to reflect experiences gained since the code entered into force in 2017. The main amendments address:

- Cofferdams for fire protection purposes (Chapter 6.7)
- Safe fuel distribution outside machinery spaces (Chapter 9)
- Fire protection between spaces with fuel containment systems (Chapter 11)
- Fixed fire-extinguishing systems in LNG fuel preparation spaces (Chapter 11)

The amendments will apply to new ships using natural gas as fuel and will enter into force on 1 January 2024.

### Towards SOLAS 2026

The 105th session of the IMO's Maritime Safety Committee in April 2022 was the last session to adopt amendments to the 2024 update of SOLAS and the related mandatory codes. Amendments adopted less than 18 months before 1 January 2024 would normally be pushed to the next four-year cycle of entry into force.

The IMO has, however, recognized that the COVID-19 situation have caused delays in some ongoing work and has hence introduced an ad hoc mid-term amendments cycle. The next update of SOLAS will therefore enter into force on 1 January 2026 and will include amendments adopted before 1 July 2024.

### Recommendations

We recommend our customers to review and assess the implications of the above-mentioned regulations.

### References

For an overview of new requirements, please visit the DNV Compliance Planner. The Compliance Planner provides you with a tailored list of upcoming statutory requirements relevant for your DNV fleet, including DNV recommended actions to achieve compliance.

- [Direct link to Fleet Status](#) - for DNV customers only
- [Info page on the Compliance Planner](#) - open link:

### Contact

#### For customers:

DATE - Direct Access to Technical Experts via [My Services](#) on Veracity.

#### Otherwise:

Use our [office locator](#) to find the nearest office.