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**INTLREG**

# INTERNATIONAL REGISTER OF SHIPPING

## INTLREG Regulatory Bulletin 2026 Winter Edition, January

This bulletin is published to serve as an *aide-mémoire* of recent regulatory changes in the international shipping industry. This bulletin provides information of regulatory changes adopted by the International Maritime Organization (IMO) with entry into force (or action dates) dates from **01-Jan-2026** to **01-Jan-2027**.

Further information on these regulations can be obtained from the resolution of the appropriate IMO body adopting the new requirements. These resolutions are available at IMO website.



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## Objective



Intlreg establishes and administers rules and guidelines for the classification of ships, and other floating marine structures covering their design, construction, and operational maintenance for the purpose of determining and maintaining the structural and mechanical fitness for their intended purpose.



Intlreg objective is to safeguard life, property, & environment

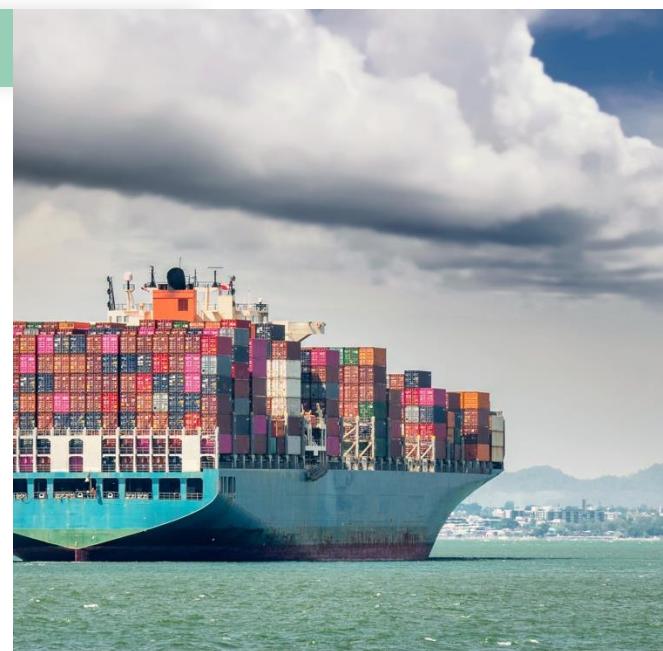
## Vision & Mission



Our vision is to become a leading classification society with full range of supporting services.



Our mission is to continuously ensure safety of life & property at sea, prevention of pollution in the marine environment through development and verification of standards for design, construction & operational maintenance of marine-related facilities.



## Quality Policy



It is the quality policy of INTLREG to provide services that meet or exceed the customer expectations, all applicable requirements and the quality which is continuously perfected through the documented quality management system of the organization and establishment of measurable quality objectives.



We promote continual improvement of our quality management process in the pursuit of high levels of safety of life, property and protection of the maritime environment.



The quality management system, supported by management commitment ensure the continual delivery of:

- High levels of technical expertise and competence;
- Integrity, impartiality and ethical practices; and
- Excellence of services in all of our product lines



All of the employees of the organization supported by our Internal quality system are accountable for the implementation of our quality policy, and shall be committed at all times to fulfil the needs and meet the requirements of our customers, our Suppliers, our employees and interested parties.

Amendment 42-24 to IMDG Code represents one of the most comprehensive updates to the IMDG Code in recent cycles, reflecting the steady increase in the transport of chemicals, lithium-based batteries, organic peroxides, waste materials, and new synthetic substances. These revisions strengthen the regulatory framework in several key areas:

## 1. Enhanced Chemical Classification and Segregation Controls

The amendment refines the classification and segregation rules for several high-risk substances. Alcoholates now have dedicated segregation requirements due to their extreme sensitivity to moisture and potential for violent reactions. Updates to Segregation Groups SG 53 and SG 48 improve the regulatory differentiation and handling requirements for liquid organic substances that exhibit varied thermal stability and flammability characteristics. Additionally, the redefinition of UN 1362 and associated entries clarifies the treatment of carbon-based substances—especially charcoal—addressing historical issues of mis-declaration, spontaneous ignition, and cargo fires.

## 2. Introduction of New Definitions and Expanded Terminology

To improve global harmonization and reduce ambiguity, the amendment introduces or revises definitions such as "Recycled plastics material," "Degree of filling," and "Metal powders." These updated definitions support improved packaging selection, compatibility assessments, and safe material handling. They also align maritime transport requirements more closely with UN Model Regulations and other modal transport codes.

## 3. New UN Entries and Modernized Classification for Emerging Cargoes

The revised Code introduces new UN numbers and classification rules for substances increasingly transported in international trade, including sodium-ion batteries, updated organic peroxides, and a broader set of reactive or self-reactive substances. The classification criteria for "Articles containing dangerous goods (N.O.S.)" have been redesigned to prevent inconsistent declarations and reflect technological advancements in shipped equipment containing embedded hazardous materials.

## 4. Strengthened Requirements for Packaging, Marking, Labels, and Documentation

Amendment 42-24 to IMDG Code incorporates wide-ranging updates to packaging instructions, hazard communication requirements, and unit marking obligations. Packaging performance tests have been refined, particularly for corrosive, reactive, and temperature-sensitive products. Documentation requirements—such as dangerous goods declarations and packing certificates—now require expanded detail to ensure better traceability, hazard identification, and stowage control.

## Convention / Regulation

2026 amendments to the IMDG Code, (Amendment 42-24 to IMDG Code)

## Application

All ships (including cargo ships <500 GT) carrying packaged dangerous goods

## Entry into Force / Applicable From

01 January 2026

## Reference

IMDG Code, MSC.556(108),  
MSC.1/Circ.1588/Rev.3

## 5. Updated Provisions for Medical Waste and Pharmaceutical Products

The amendment establishes new special provisions and handling codes for medical waste, reflecting the global increase in biological and pharmaceutical shipments. It also introduces exemptions and tailored requirements for vaccine shipments and genetically modified organisms (GMOs) used in pharmaceutical applications, balancing safety with global public health logistics.

## 6. Improved Fire, Decomposition, and Explosion Risk Management

For organic peroxides, explosives, and self-reactive substances, the Code incorporates additional operational and stowage safeguards. These reflect recent lessons learned from port incidents and container fires. The amendments enhance the requirements for segregation, ventilation, temperature control, and emergency response.

## 7. Migration of Mandatory Footnote Text into Main Code Body

A number of footnotes previously containing prescriptive, mandatory safety language have been formally integrated into the main body of the Code. This ensures legal clarity, simplifies compliance audits, and aligns the Code with modern regulatory drafting standards.

Collectively, these changes provide a more robust safety architecture, improve global uniformity in dangerous goods transport, enhance traceability and hazard communication, and address the risks associated with new cargo types and evolving maritime logistics. Overall, Amendment 42-24 modernizes the IMDG Code, improves safety and environmental protection, and enhances global uniformity in dangerous goods transport.

### Convention / Regulation



2026 amendments to the IMDG Code, (Amendment 42-24 to IMDG Code)

### Application



All ships (including cargo ships <500 GT) carrying packaged dangerous goods

### Entry into Force / Applicable From



01 January 2026

### Reference



IMDG Code, MSC.556(108),  
MSC.1/Circ.1588/Rev.3

# Implications

## To Ship Owners / Ship Managers

Ship operators must update crew training syllabi to incorporate revised segregation rules, new definitions, and handling protocols for emerging cargo classes such as sodium-ion batteries and newly classified organic peroxides. Dangerous Goods Manifests, packing certificates, and stowage plans must all be revised to reflect new packaging instructions, hazard labelling requirements, and classification changes. Operational procedures—including stowage planning, monitoring of reactive cargoes, and emergency response actions—must be adjusted to account for updated decomposition, ignition, and reactivity profiles. Companies should strengthen internal DG audits and onboard verification processes to mitigate PSC detention risks, particularly concerning mis-declared or improperly packaged cargoes. Emergency drills, fire containment strategies, and spill response procedures should also be modernized based on the amended specifications.

## To Flags & RO

Flags must incorporate Amendment 42-24 to IMDG Code into national legislation and update DG-related circulars and guidance to industry. ROs must verify compliance with updated segregation rules, classification entries, and documentation requirements during statutory surveys. Surveyors will need refreshed training to accurately inspect packaging performance markings and DG documentation under the revised definitions. PSC regimes are likely to intensify inspections on stowage plans and labelling, requiring Flags to ensure uniform interpretation and guidance across their fleets.

## To Shipbuilders / Manufacturers

Shipbuilders may need to revise cargo hold arrangements, ventilation systems, and fire detection strategies to support the updated stowage and segregation provisions for reactive or temperature-sensitive substances. Packaging and container manufacturers must ensure their products meet updated performance standards and hazard communication requirements. Equipment suppliers must revise labels and documentation to comply with new UN entries and definitions. Manufacturers and logistics providers must update MSDS and technical specifications to align with updated IMDG requirements.

## Convention / Regulation



2026 amendments to the IMDG Code, (Amendment 42-24 to IMDG Code)

## Application

All ships (including cargo ships <500 GT) carrying packaged dangerous goods



## Entry into Force / Applicable From



01 January 2026

## Reference



IMDG Code, MSC.556(108),  
MSC.1/Circ.1588/Rev.3

The 2026 amendments to the STCW-F Convention and Code represent a significant modernization of training, certification, and competency standards for fishing vessel personnel. These updates aim to improve safety outcomes in one of the world's highest-risk maritime sectors and strengthen global harmonization of fishing crew qualifications.

## 1. Enhanced Competency Requirements for Navigational and Engineering Personnel

The amendments introduce mandatory simulator-based training for navigation officers, enabling more consistent competence in collision avoidance, emergency manoeuvering, and watchkeeping practices. This reflects industry-wide adoption of simulation as a core training tool in line with STCW (1978) standards.

## 2. Stricter Medical Fitness and Fitness-for-Duty Standards

Medical fitness requirements have been updated to reflect modern understanding of physical and mental health risks in fishing operations. The amendments include clearer criteria for eyesight, hearing, physical stamina, and medical conditions that may impair safe watchkeeping.

## 3. Harmonization Between STCW and STCW-F Certificates

Clarifications are added to improve equivalency between STCW-F certificates and STCW (1978) certificates, supporting mobility of seafarers between fishing and merchant fleets while ensuring competence consistency.

## 4. Updated Training Standards for Safety, Emergency Response, and Crew Welfare

New mandatory training elements address bullying, harassment, sexual assault prevention, and improved workplace culture on board fishing vessels. Enhanced safety and emergency response training aligns with casualty data demonstrating high fatality and injury rates in the fishing sector.

## 5. Expanded Seagoing Service Options for Certification Eligibility

The amendments broaden acceptable forms of seagoing service for officer candidates, reflecting diverse fishing operations and enabling more flexible qualification pathways.

These revisions collectively modernize the STCW-F regime, strengthen crew competence, and enhance safety, welfare, and operational standards across the global fishing fleet.

## Convention / Regulation

Amendments to International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F) and the STCW-F Code

## Application

All seagoing fishing vessels flying the flag of a country that has ratified the STCW-F Convention

## Entry into Force / Applicable From

01 January 2026

## Reference

STCW-F Convention and Code  
MSC.561(108),  
MSC.562(108)

# Implications

## To Ship Owners / Ship Managers

Fishing vessel operators must ensure that all crew, especially navigation and engineering personnel, meet the updated competency and simulator training requirements. Companies will need to revise recruitment, training, and certification verification procedures to ensure crew credentials align with amended STCW-F provisions. Enhanced welfare-related training—including harassment prevention—must be incorporated into company training programs and safety management systems. Operators may face increased costs and logistical requirements due to mandatory simulator training, medical fitness evaluations, and re-certification of existing crew whose qualifications no longer meet the updated standards. Failure to comply may result in detention, certificate withdrawal, or inability to crew vessels lawfully under ratifying flags.

## To Flags & RO

Flags must update national legislation, training approval systems, and certification standards to incorporate the revised STCW-F requirements. ROs conducting audits or inspections must verify crew certification validity, medical fitness documentation, and compliance with new training elements. Administrations must ensure training institutions and simulators meet updated performance and curriculum requirements. PSC inspections may focus on STCW-F compliance, particularly for vessels with multinational crew.

## To Shipbuilders / Manufacturers

Shipbuilders may need to consider accommodation and workplace layout improvements to support welfare and safety measures emphasized in the amendments. Manufacturers of training simulators and navigation equipment may see increased demand due to mandatory simulator-based training for navigation officers. Safety equipment suppliers should ensure products support enhanced emergency response training requirements. Training centers may require new simulator installations or upgrades to comply with certification standards.

## Convention / Regulation

Amendments to International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F) and the STCW-F Code



## Application

All seagoing fishing vessels flying the flag of a country that has ratified the STCW-F Convention



## Entry into Force / Applicable From

01 January 2026



## Reference

STCW-F Convention and STCW-F Code  
MSC.561(108),  
MSC.562(108)



# Summary

The 2026 amendments to the STCW Code introduce several substantial updates intended to strengthen global competency standards, improve crew welfare, and better align seafarer training with emerging technologies and modern maritime risks.

## 1. New Mandatory Training on Prevention of Violence, Harassment, and Sexual Misconduct

A new training requirement—Table A-VI/1-4—mandates awareness and preventive measures related to sexual harassment, bullying, discrimination, and workplace violence. This addition reflects growing international emphasis on seafarer welfare and the need for safer working environments aboard ships.

## 2. Revised Medical Fitness Requirements

The amendments refine medical examination standards, providing updated criteria for physical and mental fitness, sensory capability, medication assessment, and chronic health conditions. These ensure seafarers remain capable of performing safety-critical duties under demanding shipboard conditions.

## 3. Enhanced Competency Standards for Modern Navigation Technologies

Training and competency requirements for ECDIS, integrated navigation systems, and digital voyage planning tools have been updated to reflect their widespread use on modern ships. These revisions address issues identified in incident investigations where inadequate training contributed to navigational errors.

## 4. Strengthened Emergency Preparedness Training

Enhanced requirements for passenger ship emergency duties, crisis management, crowd handling, and survival techniques ensure crew proficiency in high-stress maritime incidents. These amendments incorporate lessons learned from recent passenger ship casualties.

## 5. New Training Guidance for Alternative Fuel Technologies

As the industry adopts fuels such as LNG, methanol, ammonia, and hydrogen, the Code introduces preliminary training guidance on safe handling, hazard identification, bunkering interfaces, and emergency response for low-flashpoint fuels. This supports transition to decarbonized propulsion systems.

Collectively, the amendments seek to enhance operational safety, address human element issues, and ensure the training regime keeps pace with technological and regulatory developments.

## Convention / Regulation

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) – Amendments to the STCW Code



## Application

Applies to all seafarers serving on ships subject to STCW Convention



## Entry into Force / Applicable From

01 January 2026



## Reference

STCW Code. MSC.560(108),  
MSC.1/Circ.1664



# Implications

## To Ship Owners / Ship Managers

Ship managers must revise training matrices to include new mandatory training on harassment and workplace violence prevention, ensuring documentation and certification align with the amended standards. Training programs for navigation officers must be updated to reflect new ECDIS and integrated navigation competency requirements. Crew medical fitness procedures must be strengthened, with more comprehensive health screenings and monitoring of medication and chronic conditions. Passenger ship operators must enhance emergency preparedness and crowd management drills to reflect the revised training standards. Companies operating or preparing to operate vessels using alternative fuels must begin incorporating specialized training programs to meet future regulatory expectations.

## To Flags & RO

Flags must incorporate the amendments into national STCW regulations and ensure training providers revise course syllabi accordingly. ROs must verify compliance during ISM audits and flag/RO certification processes, ensuring crew hold valid training for new requirements. Administrations must update medical fitness certification procedures and examiner guidance. PSC inspections will likely focus on proper documentation of the new training element, particularly on passenger ships and vessels using advanced navigation systems.

## To Shipbuilders / Manufacturers

Shipbuilders may need to integrate enhanced training considerations into bridge layouts and simulation packages for newbuilds, especially those with advanced digital navigation systems. Manufacturers of simulators and navigation equipment must ensure training modules align with updated STCW competency requirements. Designers of alternative-fuel vessels should support training centers with operational manuals and safety case data. Safety equipment manufacturers may see increased demand for training tools used in passenger ship drills and emergency preparedness scenarios.

## Convention / Regulation



International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) – Amendments to the STCW Code

## Application



Applies to all seafarers serving on ships subject to STCW Convention

## Entry into Force / Applicable From



01 January 2026

## Reference



STCW Code. MSC.560(108),  
MSC.1/Circ.1664

The 2026 amendments introduce a complete prohibition on the use of Perfluoro-octane Sulfonic Acid (PFOS) in all firefighting applications onboard ships. PFOS, a persistent organic pollutant (POP), poses long-term environmental and health hazards due to its resistance to degradation and high toxicity. The amendments align SOLAS requirements with obligations under the Stockholm Convention on Persistent Organic Pollutants, ensuring uniform global elimination of PFOS-containing firefighting agents.

## 1. Mandatory Phase-Out of PFOS-Based Firefighting Media

The amendments ban the installation of new PFOS-based extinguishing media from 01 January 2026 and require existing shipboard systems and portable equipment using PFOS to be removed and replaced during the first scheduled survey after that date.

## 2. Approval and Use of PFOS-Free Alternative Agents

Replacement foam concentrates must comply with updated IMO testing standards and demonstrate environmental acceptability, extinguishing performance, and chemical stability equivalent or superior to PFOS-based foams.

## 3. Updated Testing and Verification Procedures

The amendments introduce revised testing methods for foam system performance and require verification that replacement media are PFOS-free. Laboratories and ship operators must use updated reference test protocols.

## 4. Strict Control on Collection, Disposal, and Documentation

Removed PFOS media must be managed as hazardous waste and disposed of using licensed shore-side facilities. Ships must maintain documentation of PFOS removal, disposal certificates, and replacement media specifications for survey verification.

## 5. Alignment with Global Environmental and Safety Standards

These revisions strengthen environmental compliance, improve onboard fire safety, and support global efforts to eliminate POPs from marine operations.

## Convention / Regulation



Amendments to SOLAS chapter II-2 on the prohibition of Perfluoro octane Sulfonic Acid (PFOS )

## Application



All cargo ships, passenger ships, and high-speed craft equipped with fixed or portable firefighting systems that may contain PFOS-based media must, comply by first applicable safety equipment survey after 01 Jan 2026 and mandatory for all new installations

## Entry into Force / Applicable From



01 January 2026

## Reference



SOLAS II-1, 1994/2000 HSC Code, MSC.532(107),  
MSC.536(107),  
MSC.537(107),  
MSC.1/Circ.1318

# Implications

## To Ship Owners / Ship Managers

Ship Owners/ managers and Masters to take note of above and accordingly ensure that by the first scheduled Safety Equipment Annual/Periodical/Intermediate/Renewal survey on or after 1 January 2026. Appropriate evidence is available on board providing that fire-extinguishing media does not contain PFOS in concentrations above 10 mg/kg (0.001% by weight) or towards safe disposal of any prohibited fire-extinguishing media. When removed from a ship, ensure PFOS are delivered to appropriate shore-based reception facilities. The removal and subsequent delivery to an appropriate shore-based reception facility are duly recorded in the ship's official logbook. Ensure the tanks are cleaned and all residues of PFOS are removed. Replacement extinguishing media is approved and certificated in accordance with the applicable IMO guidelines. The extinguishing media approval certificate clearly indicates the absence of PFOS in the media. Shipowners must inventory all fixed and portable firefighting systems to identify PFOS-containing media and plan for their replacement before the first survey after 01 January 2026. Budgeting and procurement strategies must account for the cost of new PFOS-free firefighting agents, testing, and waste disposal. Crew training must be updated to reflect any operational differences between new extinguishing agents and previously installed PFOS-based foams. Documentation—including disposal certificates, replacement system approval data, and updated fire control plans—must be maintained for verification by surveyors and PSC authorities. Failure to comply may result in survey deficiencies, operational restrictions, or detentions.

## To Flags & RO

Flags must update national requirements and guidance to enforce the PFOS prohibition and define acceptable PFOS-free alternatives. ROs must verify PFOS removal, disposal documentation, and proper installation of replacement firefighting media during safety equipment surveys. Surveyors require updated training on new verification and testing procedures. PSC inspections will focus on compliance during transitional surveys and verify proper waste disposal documentation.

## To Shipbuilders / Manufacturers

Shipbuilders must ensure all newbuilds delivered after 01 January 2026 are equipped exclusively with PFOS-free firefighting media. Manufacturers of foam concentrates must redesign or certify products to meet updated IMO performance and environmental standards. System integrators must verify compatibility of replacement media with existing piping and hardware. Documentation packages for new installations must clearly indicate PFOS-free compliance.

## Convention / Regulation

Amendments to SOLAS chapter II-2 on the prohibition of Perfluoro octane Sulfonic Acid (PFOS)



## Application

All cargo ships, passenger ships, and high-speed craft equipped with fixed or portable firefighting systems that may contain PFOS-based media must, comply by first applicable safety equipment survey after 01 Jan 2026 and mandatory for all new installations



## Entry into Force / Applicable From

01 January 2026



## Reference

SOLAS II-1, 1994/2000 HSC Code, MSC.532(107), MSC.536(107), MSC.537(107), MSC.1/Circ.1318



The 2026 amendments to SOLAS Chapter II-1-1/3-13 establish a strengthened international framework for the design, installation, testing, operation, and maintenance of lifting appliances and anchor handling winches. These changes aim to reduce accidents involving lifting gear—one of the most frequent causes of serious injuries and structural failures on board ships.

## 1. Mandatory Design Approval and Certification by Classification Societies

Lifting appliances with SWL  $\geq$  1,000 kg must undergo formal design appraisal and certification by a recognized organization. This requirement ensures structural integrity, load-bearing capability, and compliance with updated safety factors and fatigue assessment criteria.

## 2. Enhanced Testing Requirements Including Dynamic Load Testing

The amendments introduce mandatory dynamic load tests for anchor handling winches and certain lifting appliances. These tests more accurately simulate operational conditions, assessing system performance under varying loads, speeds, and dynamic forces.

## 3. Strengthened Inspection, Examination, and Documentation Standards

Revised requirements include detailed documentation of SWL markings, maintenance history, design limitations, and test records. Ships must maintain onboard documentation for verification at surveys and inspections.

## 4. Standardized Safety Factors and Structural Criteria

The amendments harmonize global standards relating to load factors, allowable stresses, and design considerations for lifting appliances. This creates consistency across newbuilds and retrofits irrespective of flag or shipyard practices.

## 5. Application Timeline for Existing Vessels

Passenger ships must comply by their first renewal survey after 2026, while cargo ships must comply within the transitional period defined in the amendments.

## Convention / Regulation



Amendments to SOLAS Chapter II-1-1/3-13 on Safety Requirements for Lifting Appliances and Anchor Handling Winches

## Application



All SOLAS-applicable vessels equipped with lifting appliances or anchor handling winches with Safe Working Load (SWL)  $\geq$  1,000 kg

## Entry into Force / Applicable From



01 January 2026

## Reference



SOLAS II- I-1/3-13, Resolution MSC.532(107),  
MSC.1/Circ.1662,  
MSC.1/Circ.1663

# Implications

## To Ship Owners / Ship Managers

Ship Owners/ Managers and Masters are advised to be guided by above and accordingly plan for compliance with the requirements as per new SOLAS Regulation II-1/3-13. Shipowners must conduct a full inventory and compliance assessment of existing lifting appliances and anchor handling winches to ensure conformity with the strengthened SOLAS requirements. Maintenance programs must be updated to incorporate revised inspection intervals, enhanced testing protocols, and detailed documentation requirements. Crew training should address safe operational practices, updated technical limitations, and new record-keeping obligations. Budgeting considerations may be necessary for upgrading or replacing non-compliant equipment or conducting structural evaluations. Non-conformance may lead to survey deficiencies, PSC detentions, or operational restrictions.

## To Flags & RO

Flags must adopt the amended requirements into national regulations and issue guidance to ensure consistent global implementation. ROs must update survey procedures to verify compliance with design approval, load testing, and documentation requirements. Surveyors require training on new structural criteria and dynamic load test protocols. Enforcement will focus on correct certification, SWL markings, and maintenance records during statutory surveys.

## To Shipbuilders / Manufacturers

Shipyards must incorporate updated design and certification requirements into construction specifications for new vessels. Manufacturers of lifting appliances and winches must redesign products to meet revised safety factors and testing protocols. Equipment documentation and manuals must reflect updated structural criteria and operational limitations. Component suppliers must ensure compatibility of delivered hardware with the new certification requirements.

## Convention / Regulation

Amendments to SOLAS Chapter II-1/3-13 on Safety Requirements for Lifting Appliances and Anchor Handling Winches



## Application

All SOLAS-applicable vessels equipped with lifting appliances or anchor handling winches with Safe Working Load (SWL)  $\geq 1,000$  kg



## Entry into Force / Applicable From

01 January 2026



## Reference

SOLAS II- I-1/3-13, Resolution MSC.532(107),  
MSC.1/Circ.1662,  
MSC.1/Circ.1663



The 2026 amendments to the IGF Code refine safety, design and operational requirements for vessels using gases and other low-flashpoint fuels, reflecting experience from early-adopter vessels and advances in fuel and system technologies. Key revisions include:

- 1. Bunkering interface and procedures** — strengthened requirements for ship/shore compatibility checks and documented bunkering procedures, intended to reduce transfer incidents and cross-contamination risks.
- 2. Pressure relief and tank safety** — revised pressure relief system sizing and performance criteria, with improved calculation methods to address transient and emergency scenarios.
- 3. Ventilation and fuel-system isolation** — clarified ventilation requirements for fuel supply piping and emergency shutdown arrangements to mitigate gas accumulation and ignition risks.
- 4. Material and construction standards** — updated acceptance of certain high-manganese austenitic steels and revised material selection guidance for fuel tanks and associated piping to manage embrittlement, compatibility and fracture toughness.
- 5. Fuel preparation room classification** — clarified classification of fuel preparation rooms (Category A machinery spaces) and associated layout, fire protection and monitoring requirements.
- 6. Operational and documentation requirements** — enhanced requirements for operational procedures, training, maintenance records and safety management system (SMS) integration specific to low-flashpoint fuels.

The amendments aim to close identified safety gaps, improve harmonisation between flag administrations and industry practice, and facilitate safer adoption of alternative fuels while maintaining robust risk controls.

## Convention / Regulation



Amendments to the International Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels (IGF Code)

## Application



All ships using gases or other low-flashpoint fuels (new-buildings and conversions as specified in the IGF Code and national legislation)

## Entry into Force / Applicable From



01 January 2026

## Reference



IGF Code, MSC.524(106),  
MSC.566(109),  
MSC.1/Circ.1599/Rev.3

# Implications

## To Ship Owners / Ship Managers

Owners and managers must undertake a comprehensive review of any gas-fueled vessels and conversions to ensure conformity with the updated IGF provisions. Practical actions include: updating ship-specific safety cases and fuel risk assessments; verifying that pressure relief systems, tank design and ventilation arrangements meet revised calculations and performance standards; and ensuring bunkering procedures and ship/shore compatibility checks are documented and validated. Crew training must be extended to cover emergency shutdown sequences, bunkering interfaces, fuel preparation room protocols and material-specific maintenance requirements. Maintenance and testing programmes should be revised to reflect the new pressure relief testing, inspection intervals, and condition monitoring; records must be retained in searchable formats for survey and PSC verification. Where conversions or retrofits are contemplated, early engagement with the flag administration and Recognised Organisations (ROs) is essential to agree acceptable compliance routes and any phased implementation measures.

## To Flags & RO

Flag administrations must amend national guidance and approval procedures to reflect the revised IGF technical standards, including bunkering interfaces, pressure relief validation, and material acceptability. ROs will need to update survey checklists, plan-approval criteria and condition-assessment protocols for newbuilds and conversions. Surveyors and technical reviewers should receive focused training on revised calculation methods, material verification, and fuel-system emergency arrangements. Flags and ROs should provide clear guidance on acceptable transitional arrangements and documentation required for compliance demonstrations.

## To Shipbuilders / Manufacturers

Shipyards and naval architects must integrate the updated material specifications, pressure relief designs, ventilation arrangements and fuel preparation room classifications into design and procurement documentation. Equipment manufacturers (tanks, relief devices, valves, isolation systems) must ensure products meet the revised performance and testing criteria and provide supporting verification data. Bunkering equipment and ship/shore interface suppliers should align mechanical and procedural interfaces with the strengthened bunkering standards. All technical manuals and maintenance procedures supplied with equipment must be revised to reflect the amended IGF requirements.

## Convention / Regulation

Amendments to the International Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels (IGF Code)

## Application

All ships using gases or other low-flashpoint fuels (new-buildings and conversions as specified in the IGF Code and national legislation)

## Entry into Force / Applicable From

01 January 2026

## Reference

IGF Code, MSC.524(106),  
 MSC.566(109),  
 MSC.1/Circ.1599/Rev.3

# Summary

The 2026 SOLAS/FSS amendments impose comprehensive enhancements to fire safety systems for Ro-Ro spaces and vehicle decks, reflecting lessons learned from vehicle-deck fires and the growing carriage of vehicles and vehicle batteries. Principal elements include:

- 1. Advanced Detection Systems:** Mandatory adoption of individually addressable smoke and heat detectors and linear heat detection systems, with zonal and point-detection schemes specified to improve early warning and localization of fires within vehicle decks and adjacent spaces.
- 2. Continuous Video Surveillance:** Requirement for robust CCTV/video monitoring systems covering vehicle decks and ramps, with performance standards for image quality, low-light capability and recording to support early detection and incident review.
- 3. Engineered Water-Based Protection:** Introduction of engineered water-spray/fixed monitor nozzle systems with specified flow rates, coverage patterns, and monitor placement on weather decks and open vehicle spaces to provide effective cooling and suppression without compromising personnel safety.
- 4. Structural Fire Integrity & Openings:** Strengthening of structural fire protection around openings, vents and access points adjacent to survival craft, accommodation and machinery spaces; stricter standards for deck penetrations and closure appliances.
- 5. Operational Controls & Separation Distances:** Defined safety buffers and mandatory operational controls for vehicle handling, separation of hot works and vehicle operations from critical areas, and requirements for stowage management to reduce fire propagation risk.
- 6. Testing, Maintenance & Documentation:** New test regimes and inspection intervals for detection, monitoring, suppression, and CCTV systems plus requirements for updated Fire Control Plans and documentation to demonstrate compliance.

Collectively, the amendments raise the standard for prevention, early detection, rapid response and post-event analysis for fires on vehicle decks, and mandate technical and operational measures for both newbuilds and existing tonnage where retrofit is required.

## Convention / Regulation

Amendments to SOLAS chapter II-2, Reg. 20 and the International Code for Fire Safety Systems (FSS Code) on Fire Safety of Ro-Ro spaces

## Application

All Ro-Ro Passenger Ships and Cargo Ships and with Ro-Ro Spaces and vehicle decks

## Entry into Force / Applicable From

01 January 2026

## Reference

SOLAS II-2, Reg. 20, FSS Code. MSC.550(108), MSC.555(108), MSC.1/Circ.1615

# Implications

To Owners / Ship Managers	<ol style="list-style-type: none"><li>1. Technical gap analysis and retrofit planning: Owners must perform immediate surveys of Ro-Ro spaces to identify shortfalls versus the new detection, CCTV, structural and monitor nozzle requirements. Retrofit projects will require detailed engineering plans, class/flag approvals, and likely drydock scheduling to install fixed linear detectors, addressable point detectors, CCTV cabling and engineered water sprays.</li><li>2. Operational &amp; safety management changes: Update SMS and shipboard procedures for vehicle deck operations, hot work permits, vehicle battery handling (including EVs), and dynamic stowage controls; implement new pre-sailing checks and local response protocols tied to the upgraded detection/monitoring systems.</li><li>3. Crew training &amp; drills: Train deck and bridge teams on interpretation of addressable detector alarms, use of CCTV for incident verification, operation of engineered monitor nozzles, and revised muster/evacuation procedures tailored to vehicle-deck incidents and battery fires.</li><li>4. Procurement, testing and maintenance: Specify equipment to the amended performance standards, engage approved OEMs for CCTV, linear heat detection and nozzle systems, and update maintenance contracts to include new testing intervals and recorded verification required by surveyors and PSC.</li><li>5. Budgeting &amp; compliance timeline: Plan capital expenditure for retrofits, disposal/replacement of obsolete firefighting hardware, and anticipated increased survey/inspection items; coordinate with class and flag early to identify acceptable phased compliance options where allowed.</li></ol>
To Flags & RO	Flag Administrations must update national guidance and survey procedures to reflect the enhanced detection, monitoring, and suppression requirements for Ro-Ro spaces. ROs will need to review and approve retrofit plans, verify correct installation during surveys, and confirm performance testing and CCTV recording capabilities. Surveyors should be trained on the new detector zoning, linear heat detection acceptance criteria, and engineered water monitor performance. Flags should issue implementation advice on acceptable transitional arrangements and documentation required for compliance.
To Shipbuilders / Manufacturers	Naval architects and shipyards must integrate addressable detection layouts, linear heat detection routing, CCTV mounting and cabling, and engineered monitor nozzle systems into newbuild designs and tender documentation. Fire-safety equipment manufacturers must supply components meeting the specified flow/coverage and environmental performance criteria and provide certified test data. Suppliers should update installation, commissioning and maintenance manuals to support survey verification. Design teams must also consider structural reinforcement and sealing around openings to meet the strengthened fire-integrity requirements.

## Convention / Regulation

Amendments to SOLAS chapter II-2, Reg. 20 and the International Code for Fire Safety Systems (FSS Code) on Fire Safety of Ro-Ro spaces



## Application

All Ro-Ro Passenger Ships and Cargo Ships and with Ro-Ro Spaces and vehicle decks



## Entry into Force / Applicable From

01 January 2026



## Reference

SOLAS II-2, Reg. 20, FSS Code. MSC.550(108), MSC.555(108), MSC.1/Circ.1615



# Summary

The 2026 amendments to the IGC Code strengthen technical and operational requirements for bulk gas carriers to reflect advances in cargo containment, materials technology, gas detection/monitoring and lessons learned from incidents and trials. Principal changes include:

- 1. Material specifications:** Acceptance of certain high-manganese austenitic steels for cargo tanks and secondary barriers subject to certification criteria addressing fracture toughness, corrosion resistance and low-temperature performance.
- 2. Pressure-relief and venting systems:** Revised sizing methods, capacity factors and installation rules for pressure-relief devices and emergency venting to better accommodate boil-off, transient loads and worst-case discharge scenarios.
- 3. Cargo monitoring and instrumentation:** Mandatory enhancements to cargo monitoring systems—improved real-time temperature and pressure logging, alarm setpoints, redundancy and data-recording capabilities to support operational decision-making and incident investigation.
- 4. Fire protection and segregation:** Strengthened fire protection requirements for cargo deck areas, compressor rooms and adjacent spaces, including revised fire detection, fixed extinguishing arrangements and separation measures.
- 5. Emergency shutdown and safety systems:** Improved requirements for emergency shutdown (ESD) systems, fail-safe interlocks and human-machine interface clarity for rapid, reliable isolation of cargo systems.

These amendments aim to raise containment integrity, improve early detection of hazardous conditions, and ensure robust emergency mitigation capability across the gas carrier fleet.

## Convention / Regulation



International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - 2026 Amendments

## Application



All Gas carriers (new-buildings and conversions as specified in national regulations and the Code)

## Entry into Force / Applicable From



01 January 2026

## Reference



IGC Code, MSC.523(106)

# Implications

To Ship Owners / Ship Managers	<p>Technical reviews and retrofits: Owners must review existing fleet designs and planned conversions to determine required modifications for tank materials, pressure-relief capacity, cargo-monitoring upgrades and fire-protection improvements. Where conversions or renewals are scheduled, owners should integrate amendment requirements into scope-of-work and budget planning.</p> <p>Operational procedures and training: Update cargo handling procedures, cargo control room checklists, alarm response protocols and maintenance regimes. Crew training must cover enhanced monitoring systems, revised alarm logic, ESD procedures and verification of material certificates.</p> <p>Documentation and data management: Ensure cargo monitoring systems provide certified real-time logging and that voyage/cargo records meet new retention and reporting expectations for surveys and incident investigations. Technical files and manuals must be revised to reflect updated systems and testing regimes.</p> <p>Engage early with flag/RO and class: For vessels undergoing modifications or newbuilds, engage flag administrations and Recognised Organisations early to agree acceptable means of compliance, survey schedules and test programmes; anticipate additional plan approvals and witnessing of critical tests.</p>
To Flags & RO	<p>Flag Administrations must update certification criteria and national guidance to reflect revised material acceptance, pressure-relief validation and cargo-monitoring requirements. ROs and class societies will need to update plan-approval checklists, survey protocols and sample witness-test procedures (e.g., relief device verification, instrumentation calibration). Surveyors and technical reviewers should be trained on new material qualification evidence and on interpreting enhanced monitoring data. Flags should issue implementation guidance and transitional provisions for in-service ships.</p>
To Shipbuilders / Manufacturers	<p>Shipyards and tank designers must incorporate the amended material specifications and pressure-relief design methods into tender and construction documentation. Manufacturers of relief valves, pressure sensors, cargo monitoring systems, and fixed fire-protection equipment must ensure products meet revised capacity, redundancy and data-recording requirements. Material suppliers must provide traceable certification demonstrating compliance with enhanced fracture toughness and corrosion-resistance criteria. All supplier documentation, test reports and installation manuals should be updated to support class/flag plan approval and survey verification</p>

## Convention / Regulation



International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - 2026 Amendments

## Application



All Gas carriers (new-buildings and conversions as specified in national regulations and the Code)

## Entry into Force / Applicable From



01 January 2026

## Reference



IGC Code, MSC.523(106)

# Summary

Amendments to SOLAS Chapter II-2 aim to enhance the safety of ships using oil fuel. The 2026 amendments introduce a strengthened safety framework addressing risks related to fuel oil quality, stability, compatibility, and fire hazards. These changes respond to recurring global incidents involving poor-quality fuel oil, sludge formation, stability failures, ignition delays, and contamination events. The amendments aim to ensure higher assurance of fuel oil quality and safer on-board management practices.

## 1. Expanded Fuel Oil Quality Requirements Beyond Flashpoint

The traditional SOLAS focus on flashpoint has been broadened to include safety-critical parameters such as stability, compatibility, viscosity, ignition quality, and catalytic fines content. Suppliers must now provide more detailed compositional information to support safe engine and boiler operation.

## 2. Mandatory Fuel Oil Documentation Enhancements

The Bunker Delivery Note (BDN) must include updated information confirming conformity with safety requirements, and ships must retain representative samples with expanded testing protocols. The new requirements promote transparency throughout the bunkering chain.

## 3. Strengthened Fuel Sampling and Verification Procedures

Ships must implement enhanced sampling during bunkering and maintain onboard testing capabilities or arrangements with accredited laboratories. The amendments emphasize early detection of non-compliant fuels to prevent machinery damage or fire hazards.

## 4. Risk Mitigation for Non-Compliant or Contaminated Fuel

Guidance (via MEPC.1/Circ.875/Rev.2) provides structured onboard actions when encountering problematic fuel—including segregation, controlled use, alternative fuel sourcing, and reporting to authorities—ensuring continuity of safe operations.

## 5. Updated Fire Safety Measures for Fuel Storage and Handling Systems

The amendments reinforce fire protection requirements for settling and service tanks, transfer systems, purification arrangements, and FO piping in high-risk zones. Ships must verify compliance of insulation, leak detection, and shutdown arrangements.

Overall, these revisions modernize fuel oil safety management, enhance the integrity of the supply chain, and align SOLAS requirements with evolving fuel characteristics encountered under global energy transitions.

## Convention / Regulation

Amendments to SOLAS Chapter II-2 – Additional safety measures governing the procurement, storage, testing, and use of fuel oil on board ships

## Application

All SOLAS applicable vessels, regardless of tonnage, construction date, or area of operation

## Entry into Force / Applicable From

01 January 2026

## Reference

SOLAS II-2, MSC.520(106),  
 MEPC.1/Circ.875/Rev.2,  
 MSC.1/Circ.1646)

# Implications

To Ship Owners / Ship Managers

Ship owners and operators are advised to ensure that vessels under their fleet obtains the necessary documentation confirming compliance with the flashpoint requirements (i.e., the oil fuel supplier's preliminary declaration certifying compliance with SOLAS II-2/4.2.1 & BDN indicating the oil fuel's flashpoint, etc.), before and after bunkering.

1. Revised fuel procurement processes: Owners must verify that fuel suppliers provide BDNs and samples meeting updated requirements. Additional supplier vetting and contractual clauses may be required to mitigate risks associated with off-spec fuels.
2. Strengthened onboard fuel management: Ships must update procedures for sampling, segregation, compatibility testing, and monitoring of FO stability during storage and transfer. Chief engineers must ensure routine checks for settling tank stratification, sludge formation, and ignition irregularities.
3. Crew training and engine-room readiness: Engineers must be trained in detecting symptoms of unstable or incompatible fuels, interpreting expanded BDN information, and applying mitigation actions when contaminated fuels are received.
4. Documentation and record-keeping: Ships must maintain verifiable records of BDNs, sample handling, onboard fuel testing, and corrective actions taken, as these will be subject to survey and PSC inspections.
5. Machinery and piping risk controls: Operators may need to upgrade FO leak-detection systems, insulation arrangements, temperature-control equipment, and transfer procedures to comply with enhanced fire protection requirements.

To Flags & RO

Flags should update national regulations and circulars to reflect expanded fuel oil safety requirements and revised BDN content. ROs must verify compliance during safety equipment surveys, machinery surveys, and ISM audits, including checks on sampling procedures, documentation, and FO handling practices. Surveyors require training on new safety parameters and fire-risk controls within fuel systems. PSC inspectors will increasingly focus on FO sampling records, BDN completeness, and evidence of corrective actions for non-compliant fuel.

To Shipbuilders / Manufacturers

Shipbuilders may need to adjust FO system designs to enhance leak prevention, temperature control, segregation, and sampling access points. FO purifier manufacturers and engine OEMs must ensure technical documentation reflects the risks associated with unstable or incompatible fuels and required mitigation procedures. Equipment suppliers should provide updated manuals for leak detection, shutdown systems, and thermal protection. Newbuilds must integrate the revised SOLAS fire protection requirements into FO tank arrangements and piping systems.

## Convention / Regulation

Amendments to SOLAS Chapter II-2 – Additional safety measures governing the procurement, storage, testing, and use of fuel oil on board ships

## Application

All SOLAS applicable vessels, regardless of tonnage, construction date, or area of operation

## Entry into Force / Applicable From

01 January 2026

## Reference

SOLAS II-2, MSC.520(106),  
MEPC.1/Circ.875/Rev.2,  
MSC.1/Circ.1646)

The 2026 revision to MSC.215(82) formalizes a change in the designation of approved PSPC coating inspectors. The term "PSPC Qualified Coating Inspector" is replaced with the modernized professional title "Marine Coating Professional (MCP)". While the nomenclature changes, the underlying competency standards, qualification pathways, inspection responsibilities, and required technical knowledge remain unchanged. SOLAS Regulation II-1/ 3-2 and II-1 /3-11 stipulates performance standards for protective coatings as per Resolutions, MSC 215 (82) & MSC 288(87). These Resolutions require 'NACE Coating Inspector Level 2' as one of the coating inspector qualifications related to Performance Standards for Protective Coatings (PSPC). NACE International recently changed its name to Association for Materials Protection and Performance (AMPP). As a result, the name of the coating inspector qualification is changed to AMPP Certified Coating Inspector.

## 1. Updated Professional Nomenclature

The amendment standardizes the qualification designation to "Marine Coating Professional (MCP)" to align terminology across IMO instruments, industry certification standards, and recognized training bodies.

## 2. No Change to Competency Requirements

Existing requirements—inspection knowledge, coating technology understanding, corrosion assessment skills, and documentation proficiency—remain unchanged. The revision strictly concerns naming and administrative clarity.

## 3. Transitional Provisions for Existing Inspectors

Inspectors already certified as "PSPC Qualified Coating Inspectors" may continue using their existing credentials until expiration. Upon renewal or revalidation, they will transition to the MCP designation.

## 4. Alignment Across IMO PSPC-Related Documents

The amendment ensures consistent terminology throughout PSPC documentation, technical files, inspection forms, and IMO guidance circulars such as MSC.1/Circ.1331.

## 5. Impact on Contracts, Technical Files, and Project Documentation

All new construction projects subject to PSPC after July 2026 must reference MCP in specifications, ITPs (Inspection & Test Plans), and Coating Technical Files (CTFs).

## Convention / Regulation

Performance Standard for Protective Coatings (PSPC) — Revision of the qualification title for approved coating inspectors

## Application

All newbuilding projects and surveys requiring PSPC-compliant coating inspections; all vessels subject to PSPC requirements (e.g., cargo oil tanks in tankers  $\geq 500$  GT, ballast tanks in bulk carriers  $\geq 500$  GT, and other PSPC-relevant areas as applicable).

## Entry into Force / Applicable From

01 January 2026 (with transitional provisions)

## Reference

MSC.557(108), MSC.215(82),  
IMO MSC.1/Circ.1331

# Implications

To Ship  
Owners /  
Ship  
Managers

**Documentation updates:** Owners must ensure all coating inspection documentation, CTFs, maintenance records, and procurement specifications reference the MCP designation for projects commencing after the amendment's entry into force.

**Verification of inspector qualifications:** Shipowners must confirm that inspectors engaged for PSPC-related surveys hold valid MCP certification (or equivalent transitional credentials).

**Alignment of management systems:** Companies should update internal maintenance manuals, coating management procedures, and contractor evaluation criteria to reflect the new professional designation.

**Continuity for existing records:** Legacy inspection documents remain valid; however, cross-referencing may be needed during major surveys, vessel transfers, or resale transactions to avoid confusion.

**Contractual clarity:** Shipowners entering into newbuilding or major repair contracts must ensure specification documents explicitly require MCP-qualified inspectors.

To Flags  
& RO

Flag Administrations must update national circulars, PSPC guidance, and survey instructions to reflect the MCP designation. ROs should revise plan approval checklists, coating inspection forms, and PSPC verification procedures accordingly. Surveyors must confirm MCP credentials during new construction and renewal inspections. Flags should provide transitional guidance to ensure continuity of previously issued qualifications.

To  
Shipbuilders  
/  
Manufacturers

Shipyards must update project specifications, ITPs, and quality documentation to reference MCP inspectors for PSPC-relevant inspections. Coating manufacturers should revise technical data sheets and application guidelines to align terminology with the updated designation. Training providers must issue new MCP certificates going forward. All PSPC-related documentation accompanying newbuild deliveries must use the updated nomenclature.

## Convention / Regulation



Performance Standard for Protective Coatings (PSPC) — Revision of the qualification title for approved coating inspectors

## Application



All newbuilding projects and surveys requiring PSPC-compliant coating inspections; all vessels subject to PSPC requirements (e.g., cargo oil tanks in tankers  $\geq 500$  GT, ballast tanks in bulk carriers  $\geq 500$  GT, and other PSPC-relevant areas as applicable).

## Entry into Force / Applicable From



01 January 2026 (with transitional provisions)

## Reference



MSC.557(108), MSC.215(82),  
IMO MSC.1/Circ.1331

The 2026 amendments to the LSA Code introduce targeted improvements to life-saving appliances to enhance survivability and operational reliability in emergencies. These updates reflect accumulated casualty data, technical evaluations, and field experience from recent maritime incidents.

## 1. Enhanced Lifejacket Performance Criteria

Revisions improve buoyancy distribution, righting moment, and freeboard performance to ensure unconscious persons turn face-up reliably. Requirements address varied body sizes, clothing conditions, and environmental factors.

## 2. Updated Lowering Speed for Survival Craft

For vessels with high freeboard, the maximum lowering speed is now limited to 1.3 m/s to reduce the risk of injuries during lowering, especially under adverse weather conditions.

## 3. Improved Ventilation Standards for Totally Enclosed Lifeboats

Ventilation requirements are increased to at least 5 m<sup>3</sup>/h per person, improving habitability and reducing CO<sub>2</sub> buildup during extended occupancy.

## 4. Safer Release and Recovery Systems

Release gear and hook mechanisms must incorporate design safeguards against accidental activation during recovery. Redundant safety interlocks and improved mechanical reliability are emphasized.

## 5. New Environmental and Durability Testing Protocols

Life-saving appliances must undergo expanded testing in extreme conditions, including low-temperature performance, corrosion resistance, and stability under dynamic loading.

Collectively, these amendments strengthen the reliability of life-saving appliances, reduce evacuation hazards, and ensure that equipment performance reflects real-world emergency conditions.

## Convention / Regulation



Amendments to the International Life-Saving Appliance (LSA) Code — 2026 amendments enhancing performance, testing, and design requirements for life-saving equipment

## Application



All SOLAS-applicable vessels and all life-saving appliances installed onboard (new and existing, subject to transitional provisions)

## Entry into Force / Applicable From



01 January 2026

## Reference



LSA Code, MSC.554(108)

# Implications

To Ship  
Owners /  
Ship  
Managers

**Equipment inventory review:** Owners must evaluate existing lifejackets, lifeboats, and release mechanisms to determine compliance with updated standards, planning replacements or upgrades where required.

**Maintenance and testing updates:** Maintenance schedules must incorporate enhanced inspection and functional testing for ventilation systems, hooks, release mechanisms, and lowering arrangements.

**Crew training:** Operating procedures for survival craft launch, recovery, and occupancy must be updated to reflect revised design limitations and safety margins; crew must be trained accordingly.

**Documentation and certification:** Ships must update LSA inventories, test reports, and servicing records for verification during annual and renewal surveys.

**Budget and procurement planning:** Replacement of non-compliant or obsolete equipment should be budgeted, with attention to OEM availability and expected supply chain lead times.

To Flags  
& RO

Flag Administrations must integrate the amendments into national LSA regulations and update survey instructions for annual and renewal LSA inspections. ROs must verify compliance with upgraded performance criteria, ventilation requirements, and release gear safeguards. Surveyors require awareness of transitional provisions that differentiate between newbuild and existing-vessel requirements. Flags may issue implementation circulars clarifying replacement timelines for existing lifeboat equipment.

To  
Shipbuilders  
/  
Manufacturers

Shipyards must ensure all newbuilds delivered after 01 January 2026 are fitted with LSA equipment meeting the updated performance and testing criteria. Manufacturers must update product designs, testing certifications, and manuals to align with revised buoyancy, ventilation, and release mechanism requirements. Suppliers must provide revised documentation packages for class approval and onboard verification. Training centers working with manufacturers may need to update operational demonstrations.

## Convention / Regulation



Amendments to the International Life-Saving Appliance (LSA) Code — 2026 amendments enhancing performance, testing, and design requirements for life-saving equipment

## Application



All SOLAS-applicable vessels and all life-saving appliances installed onboard (new and existing, subject to transitional provisions)

## Entry into Force / Applicable From



01 January 2026

## Reference



LSA Code, MSC.554(108)

# Summary

The 2026 amendments strengthen the Enhanced Survey Programme (ESP) through improved inspection planning, more robust structural evaluation requirements, and enhanced documentation controls. These updates address findings from casualty investigations, survey deficiencies, and long-term corrosion and fatigue trends observed across aging bulk carriers and tankers.

## 1. Revised Annual Survey Requirements for Side Structure and Hull Integrity

Annual surveys now include expanded examination of wing tanks, cargo holds, transverse webs, frames, and shell plating, with more prescriptive gauging of critical structural areas to detect early signs of corrosion and fatigue.

## 2. Enhanced Close-Up Survey and Thickness Measurement (TM) Requirements

The updated Code mandates additional close-up surveys in cargo holds and ballast tanks, supported by more detailed TM plans. Specific structural members—such as frame brackets, hopper knuckles, and longitudinal stringers—must be gauged at specified intervals.

## 3. Strengthened Survey Planning Documentation (SPP)

Survey Planning Documentation must now include historical defect trends, previous repair records, coating condition evaluations, and photographs, enabling more predictive survey planning and risk-based inspection strategies.

## 4. Additional Requirements for Remote Inspection Techniques (RIT)

The amendments clarify acceptance criteria, limitations, and conditions under which drones, crawlers, or remote cameras can be used. RIT can supplement but not replace required close-up surveys unless explicitly authorized by the Administration.

## 5. Improved Reporting, Recording, and Verification Standards

Surveyors must ensure clearer documentation of structural deterioration, coating breakdown, and temporary repairs. Reports must include photographic evidence and TM comparison tables demonstrating deterioration trends year-over-year.

These changes enhance oversight of structural safety and aim to reduce structural failures and cargo-hold related incidents.

## Convention / Regulation



International Code on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, 2011 ESP Code — 2026 amendments

## Application



All bulk carriers and oil tankers subject to the 2011 ESP Code )

## Entry into Force / Applicable From



01 January 2026

## Reference



2011 ESP Code,  
MSC.553(108)

To Ship Owners / Ship Managers

**More comprehensive survey preparation:** Owners must ensure tanks and cargo spaces are safe for entry and accessible for expanded close-up surveys and thickness measurements, requiring improved cleaning, gas freeing, and staging arrangements.

**Enhanced documentation management:** Operators must update Survey Planning Documentation, incorporating historical trends, coating assessments, repair summaries, and TM archives for submission before surveys.

**Increased maintenance requirements:** Findings from expanded gauging may necessitate earlier repairs or steel renewals; owners should anticipate increased drydock and repair workloads.

**Crew training:** Ship staff must support surveyors by understanding new survey access expectations, RIT coordination, and data preparation.

**Budgeting and resource planning:** The expanded TM and close-up requirements may increase operational and maintenance costs, requiring proactive budgeting.

To Flags & RO

Flags must integrate the amendments into national survey procedures and ensure uniform application across recognized surveyors. ROs need to update ESP checklists, survey reporting formats, and TM acceptance criteria. Surveyors must receive training on expanded structural examination requirements and use of RIT under the amended guidelines. Administrations should provide guidance on transitional arrangements for existing vessels undergoing surveys during 2026.

To Shipbuilders / Manufacturers

Shipyards should incorporate lessons from ESP revisions into newbuilding structural details, corrosion protection strategies, and access arrangements. Manufacturers of RIT equipment must ensure their systems meet clarified IMO acceptance criteria and provide supporting documentation for class review. Coating and steel manufacturers may be asked to provide enhanced performance data to assist in SPP documentation. Designs for future vessels may require improved inspection access to facilitate expanded survey requirements.

## Convention / Regulation



International Code on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, 2011 ESP Code — 2026 amendments

## Application



All bulk carriers and oil tankers subject to the 2011 ESP Code )

## Entry into Force / Applicable From



01 January 2026

## Reference



2011 ESP Code, MSC.553(108)

## Convention / Regulation



International Code for the Safe Carriage of Grain in Bulk (Grain Code) — 2026 amendments

## Application



All ships certified to carry grain in bulk under SOLAS Chapter VI

## Entry into Force / Applicable From



01 January 2026

## Reference



Grain Code, MSC.552(108)

The 2026 amendments to the Grain Code update grain stability assessment methodologies and strengthen requirements related to documentation, stowage, and securing arrangements. These revisions reflect modern grain-handling practices, larger parcel sizes, and stability challenges encountered in recent maritime incidents involving cargo shift.

### 1. Updated Grain Stability Calculations

Revised formulas for assessing transverse stability and heeling moments generated by grain shift ensure more accurate representation of vessel response, especially for wide-beam vessels and ships carrying multiple grain types. Updated angle-of-repose values improve loading plan accuracy.

### 2. Enhanced Documentation Requirements

Ships must provide expanded documentation for grain stability compliance, including updated cargo plans, trim and stability calculations, and verification of cargo distribution assumptions. Documentation must be maintained onboard for survey and PSC review.

### 3. Revised Requirements for Shifting Boards, Division Trimming, and Securing

Construction and arrangement standards for shifting boards, feeders, and strapping/locking devices have been strengthened to prevent cargo movement under dynamic sea loads.

### 4. Clarified Requirements for Partially Filled Compartments

The amendments detail additional conditions and calculations for partially filled holds, recognizing their heightened vulnerability to grain shift and stability degradation.

### 5. Improved Alignment with IMO Stability Instruments

The Grain Code has been harmonized with the 2008 IS Code stability standards, reducing interpretational inconsistencies across Administrations and Recognized Organizations.

Collectively, these amendments enhance overall vessel safety when carrying grain by more accurately addressing cargo-shift hazards and reinforcing structural and operational safeguards.

# Implications

To Ship Owners / Ship Managers	<p><b>Revised loading manuals and stability software:</b> Owners must update grain stability booklets and ship-specific loading software to incorporate new formulas, angle-of-repose values, and partial-hold conditions.</p> <p><b>Operational procedures:</b> Stowage procedures, trimming requirements, and cargo-distribution plans must be revised to ensure compliance with strengthened securing standards.</p> <p><b>Crew competency:</b> Deck officers must be trained in the updated stability calculations, documentation requirements, and trimming methods.</p> <p><b>Documentation control:</b> Ship staff must maintain revised stability calculations, grain plans, and certification for review by surveyors and PSC inspectors.</p> <p><b>Equipment and material upgrades:</b> Owners may need to upgrade shifting boards, securing arrangements, and feeder systems to satisfy enhanced construction requirements.</p>
To Flags & RO	Flags must update national grain carriage regulations and issue guidance reflecting revised stability requirements. ROs must review and reapprove grain loading manuals, stability booklets, and relevant software. Surveyors must confirm compliance with strengthened securing arrangements and revised documentation expectations. PSC inspections are expected to focus more closely on grain stability records and partial-hold loading conditions.
To Shipbuilders / Manufacturers	Shipyards must apply updated shifting board and securing arrangement requirements for new buildings. Designers may need to refine hold geometry and structural components to comply with enhanced grain stability criteria. Manufacturers of securing devices must certify compliance with revised strength specifications. Shipbuilders must deliver updated grain stability documentation at vessel handover.

## Convention / Regulation



International Code for the Safe Carriage of Grain in Bulk (Grain Code) — 2026 amendments

## Application



All ships certified to carry grain in bulk under SOLAS Chapter VI

## Entry into Force / Applicable From



01 January 2026

## Reference



Grain Code, MSC.552(108)

# Summary

The 2026 amendments strengthen navigational safety through mandatory carriage of electronic inclinometers and introduce unified reporting and certification practices to support casualty investigation and navigational risk reduction. Following amendments to SOLAS Chapter V and the Appendix (Certificates) for the mandatory carriage of electronic inclinometers, the appendix Form of safety equipment certificate for cargo ships (Form E) was modified for both 1978 & 1988 SOLAS Protocols. A new entry was added after Gas carrier: "Containership".

## 1. Mandatory Electronic Inclinometers

Ships must be fitted with electronic inclinometers meeting updated IMO performance standards that capture real-time heel angle, roll period, and roll amplitude, providing critical inputs for decision-making during heavy weather and ship handling operations.

## 2. Updated Performance Standards

Electronic inclinometers must meet revised accuracy, sampling rate, and data-filtering requirements established in MSC.532(107). Instruments must continue functioning under adverse conditions and integrate with bridge alert management systems where applicable.

## 3. Data Recording and Retention Requirements

Inclinometer data must be recorded and stored for a specified duration to support post-incident analysis, trend assessment, and voyage evaluation. Recording specifications align with IMO casualty investigation guidelines.

## 4. New SE Certificate Format

The SE Certificate has been updated to include verification of electronic inclinometer installation and compliance. Administrations and ROs must ensure certificates reflect the standardized wording and layout introduced under MSC.533(107) and MSC.534(107).

## 5. Harmonization with Navigation and Bridge System Standards

The inclinometer amendments align with broader SOLAS navigation safety initiatives and support integration with BNWAS, VDR, and bridge alert systems, strengthening holistic situational awareness for bridge teams.

These updates collectively improve navigational safety, support the detection of dangerous roll motions, and enhance post-incident investigatory capabilities.

## Convention / Regulation



Amendments to SOLAS Chapter V and Format of Safety Equipment (SE) Certificate on Carriage of Electronic Inclinometers

## Application



Passenger ships and cargo ships  $\geq 3,000$  GT, as specified in the amendments, for the mandatory carriage of electronic inclinometers meeting IMO performance standards

## Entry into Force / Applicable From



01 January 2026

## Reference



SOLAS V, MSC.532(107),  
MSC.533(107),  
MSC.534(107)

# Implications

To Ship Owners / Ship Managers

**Installation planning:** Owners must procure, install, and commission IMO-compliant electronic inclinometers on vessels subject to the amended SOLAS requirements. Integration with bridge systems and VDR may require additional engineering work.

**Training and operational readiness:** Bridge officers must be trained to interpret inclinometer data for decision-making during heavy weather and to understand alarm thresholds and system limitations.

**Record-keeping responsibilities:** Operators must ensure that inclinometer data is properly stored and accessible for audits, PSC inspections, and incident investigations.

**Certificate verification:** The SE Certificate must be updated at the next survey to reflect compliance with the new requirements.

**Maintenance and calibration:** Preventive maintenance routines must incorporate calibration checks and performance verification of electronic inclinometers.

To Flags & RO

Flags must update national SOLAS implementation guidance and the SE Certificate template to incorporate electronic inclinometer verification. ROs must confirm proper installation, testing, and documentation during safety equipment surveys. Surveyors must be familiar with updated performance standards and data-recording requirements. Administrations should issue transition guidance for vessels retrofitting inclinometers prior to certification renewal.

To Shipbuilders / Manufacturers

Shipyards must integrate electronic inclinometers into newbuild designs and ensure bridge systems accommodate the necessary power, interfaces, and data integration. Manufacturers must ensure their instruments comply with revised IMO accuracy, durability, and recording standards and provide supporting documentation for class approval. Installation manuals and calibration procedures must be updated for surveyor verification. Newbuild handover documentation must include inclinometer certification systems meet the updated IMO performance standards. System integrators should develop solutions for seamless data transfer between inclinometers and VDR systems. All stakeholders must ensure proper documentation is provided to demonstrate compliance with the new requirements.

## Convention / Regulation



Amendments to SOLAS Chapter V and Format of Safety Equipment (SE) Certificate on Carriage of Electronic Inclinometers

## Application



Passenger ships and cargo ships  $\geq 3,000$  GT, as specified in the amendments, for the mandatory carriage of electronic inclinometers meeting IMO performance standards

## Entry into Force / Applicable From



01 January 2026

## Reference



SOLAS V, MSC.532(107),  
 MSC.533(107),  
 MSC.534(107)

# Summary

The 2026 amendments update and harmonize international expectations for the continuing airworthiness and operational reliability of lifeboats, rescue boats, launching appliances and release gear. The revisions respond to incident analyses and technical reviews which identified failures in release mechanisms, inadequate ventilation, degraded propulsion reliability, and inconsistent maintenance documentation as recurrent safety vulnerabilities.

Key elements of the amendments include:

- 1. Expanded Thorough Examination and Operational Test Requirements:** More prescriptive and frequent functional checks of release gear, hooks, falls, winches, davits and associated control systems. Operational lowering and recovery trials must be performed at defined intervals and under specified conditions to demonstrate reliable performance.
- 2. Enhanced Ventilation and Habitability Checks:** Totally enclosed lifeboats must undergo more thorough ventilation inspections verifying minimum ventilation rates and delivery under realistic load conditions. Ventilation system performance is to be recorded and verified during periodic servicing.
- 3. Standardized Engine and Propulsion Testing:** Lifeboat/rescue-boat engines and propulsion systems are subject to standardized operational testing, including load/run tests, fuel-system checks and emergency starting procedures. Test regimes must demonstrate reliability under conditions approximating emergency use.
- 4. Tighter Release-gear Inspection and Overhaul Criteria:** Release mechanisms and hook systems must be inspected against clearer acceptance criteria; where applicable, overhaul intervals are specified and controlled by traceable maintenance records. Particular emphasis is placed on anti-accidental release features and redundancy in recovery chains.
- 5. Documented Competency of Service Personnel:** Service and overhaul work must be performed by personnel or organisations with demonstrable competency; certification, training and competence records for technicians are required.
- 6. Improved Record-Keeping and Traceability:** Detailed, auditable maintenance histories, test records, commissioning/test witness certificates and parts traceability must be kept onboard and made available for survey, PSC and audit.
- 7. Revised Repair and Spare-Part Control:** Repairs that may affect the structural integrity or operational performance of appliances must follow approved procedures; use of certified spare parts and manufacturer-approved repair methods is mandated.

Collectively these measures aim to reduce failures during launch/recovery, increase survival chances in emergency abandonment, and provide surveyors and PSC inspectors with clearer evidence of ongoing compliance.

## Convention / Regulation



Amendments to Requirements for Maintenance, Thorough Examination, Operational Testing, Overhaul and Repair of Lifeboats and Rescue Boats, Launching Appliances and Release Gear

## Application



All SOLAS-applicable ships and all lifeboats, rescue boats, launching appliances and release gear fitted onboard

## Entry into Force / Applicable From



01 January 2026

## Reference



MSC.402(96), MSC.559(108),  
 MSC.1/Circ.1206/Rev.1,  
 MSC.1/Circ.1578

# Implications

To Owners / Ship Managers	<p><b>Immediate asset review and gap analysis:</b> Conduct an inventory and condition assessment of all lifeboats, rescue boats, launching appliances and release gear to identify items needing modification, overhaul or replacement to meet the new functional and inspection standards.</p> <p><b>Revise maintenance contracts and schedules:</b> Update technical service agreements with approved service providers to include the expanded testing, overhaul intervals, ventilation verification and documented witness-testing requirements; schedule works to fit survey and operational windows.</p> <p><b>Technical preparedness and spare-part planning:</b> Ensure availability of certified spare parts, consumables and manufacturer-approved repair kits; plan for potential lead times when arranging overhauls or component replacements.</p> <p><b>Strengthen competency and contractor controls:</b> Verify competence and certification of shore-based service organisations and technicians; maintain records of training, competence assessments and certificates for all personnel engaged in LSA servicing.</p> <p><b>Update SMS, checklists and drill programmes:</b> Amend the Safety Management System to incorporate new verification activities, failure-reporting protocols and enhanced on-board checks; incorporate operational test outcomes into emergency drills and familiarisation training.</p> <p><b>Documentation and audit readiness:</b> Maintain comprehensive, auditable logs of all tests, overhauls, repairs and part replacements for surveyors and Port State Control; be prepared to present witnessed test certificates, wherever mandatory.</p> <p><b>Budget and operational planning:</b> Anticipate increased maintenance costs, drydock or alongside service periods and potential short-term availability impacts while equipment is taken out of service for required testing or overhaul.</p>
To Flags & RO	<p>Flag Administrations must update national inspection instructions and guidance to reflect the amended examination, testing and overhaul criteria. ROs should revise survey checklists and approval procedures for LSA servicing and witness-testing, and ensure surveyors are trained to evaluate competence records and test evidence. Administrations and ROs must define acceptable qualifications for service organisations and set expectations for documentation retention and auditability. Port State Control regimes will align inspection focus to include operational-test records and overhaul traceability.</p>
To Shipbuilders / Manufacturers	<p>Manufacturers and OEMs must update maintenance manuals, overhaul procedures and parts lists to align with the revised testing and inspection requirements. Design revisions may be needed to improve access for inspection, ventilation testing and component replacement. OEMs and yards should provide training and certification programmes for service technicians and approve authorised service providers. Documentation supplied with new equipment must include test procedures and acceptance criteria suitable for survey verification.</p>

## Convention / Regulation



Amendments to Requirements for Maintenance, Thorough Examination, Operational Testing, Overhaul and Repair of Lifeboats and Rescue Boats, Launching Appliances and Release Gear

## Application



All SOLAS-applicable ships and all lifeboats, rescue boats, launching appliances and release gear fitted onboard

## Entry into Force / Applicable From



01 January 2026

## Reference



MSC.402(96), MSC.559(108),  
 MSC.1/Circ.1206/Rev.1,  
 MSC.1/Circ.1578

# Summary

The 2026 amendments to SOLAS Chapter V introduce a mandatory global reporting regime for freight containers lost at sea or observed drifting, addressing long-standing navigational safety, environmental protection, and search-and-recovery challenges. The amendments establish clear responsibilities, standardized reporting content, and defined communication pathways.

## 1. Mandatory Reporting of Lost Containers (Regulation V/31.2)

The master of a ship involved in the loss of one or more freight containers is required to report the incident without delay to ships in the vicinity, the nearest coastal State, and the ship's flag State. The reporting obligation applies regardless of whether the loss occurred gradually or as a single event.

## 2. Company Responsibility Where Master Cannot Report

If the ship is abandoned or the master's report is incomplete or unobtainable, the shipping company (as defined in SOLAS Chapter IX) must assume the reporting responsibilities, ensuring continuity of information flow.

## 3. Flag State Reporting to IMO

Once informed, the flag Administration is required to report the loss of freight containers to the IMO, enabling global data collection, trend analysis, and regulatory oversight.

## 4. Mandatory Reporting of Observed Containers at Sea

Masters of ships that observe freight containers drifting at sea must report the sighting to ships in the vicinity and the nearest coastal State, supporting collision avoidance and recovery actions.

## 5. Standardized Reporting Information (Regulation V/32.3)

The amendments define a uniform reporting format, including:

- Time and date (UTC)
- Ship identity (IMO number, name, call sign, MMSI)
- Precise position of loss or sighting
- Number (or estimated number) of containers lost or observed
- Container type and dimensions
- Dangerous goods status and UN number (if applicable)
- Environmental data such as wind, current, sea state, and estimated drift
- Initial reports may be incomplete; however, a final verified report must be submitted once accurate information is available.

These amendments significantly enhance navigational safety, facilitate early warning to other ships, and improve the effectiveness of coastal State response and recovery efforts.

## Convention / Regulation



Amendments to SOLAS Chapter V — Mandatory Reporting of Containers Lost at Sea

## Application



All SOLAS-applicable ships, particularly container ships and ships carrying freight containers, operating in international voyages.

## Entry into Force / Applicable From



01 January 2026

## Reference



SOLAS Chapter V, Regulations 31 & 32; IMO Resolution MSC.550(108)

# Implications

To Ship Owners / Ship Managers

**Operational procedure updates:** Companies must revise bridge procedures, emergency response manuals, and SMS documentation to incorporate mandatory container-loss and observation reporting requirements.

**Crew awareness and training:** Masters and bridge teams must be trained on the new reporting triggers, timelines, recipients, and standardized information elements required under SOLAS V/31 and V/32.

**Internal escalation protocols:** Shipping companies must establish shore-side reporting mechanisms to ensure timely reporting when the master is unable to do so.

**Documentation and records:** Owners must maintain records of reports sent, follow-up communications, and final verified container counts for audit, investigation, and PSC review.

**Risk management and liability:** Early reporting may mitigate navigational risk, environmental exposure, and potential liability arising from collisions, pollution, or cargo recovery claims.

To Flags & RO

Flag Administrations must implement national reporting procedures aligned with SOLAS V/31 and ensure onward reporting to IMO. ROs should verify that ships' SMS and bridge procedures include container-loss reporting during ISM audits. Surveyors and auditors must confirm crew familiarity with reporting obligations. PSC inspections may verify evidence of compliance following container-loss incidents.

To Shipbuilders / Manufacturers

While no direct design changes are mandated, shipbuilders and equipment suppliers may support compliance by integrating voyage data, container monitoring systems, and bridge decision-support tools that facilitate accurate position and event reporting. Manufacturers of container securing and monitoring technologies may see increased demand as operators seek to reduce container-loss incidents. Newbuild documentation may reference reporting obligations as part of navigational safety guidance.

## Convention / Regulation



Amendments to SOLAS Chapter V — Mandatory Reporting of Containers Lost at Sea

## Application



All SOLAS-applicable ships, particularly container ships and ships carrying freight containers, operating in international voyages.

## Entry into Force / Applicable From



01 January 2026

## Reference



SOLAS Chapter V, Regulations 31 & 32; IMO Resolution MSC.550(108)

The 2026 designation of the Canadian Arctic NOx Emission Control Area subjects the ships navigating within the defined geographic boundaries to Tier III NOx emission limits under MARPOL Annex VI. This development aligns the region with other global NOx ECAs (e.g., North American, US Caribbean) and supports environmental objectives to reduce nitrogen oxide pollution and protect vulnerable Arctic ecosystems.

## 1. Mandatory Tier III NOx Controls

Marine diesel engines installed on ships constructed on or after the ECA entry date, or engines undergoing major conversion, must comply with Tier III NOx emission limits, which represent an 80% reduction from Tier I levels.

## 2. Engine and Aftertreatment Technology Requirements

Ships may achieve Tier III compliance via NOx-reducing technologies such as Selective Catalytic Reduction (SCR), Exhaust Gas Recirculation (EGR), water injection systems, or equivalent approved measures under the NOx Technical Code.

## 3. Operational Controls and Documentation

Ships operating in and out of the ECA must document mode changes between Tier II and Tier III operation (where applicable), maintain technical files, and carry updated EIAPP certificates and Record Books of Engine Parameters.

## 4. Verification and Enforcement

Compliance verification is conducted through statutory surveys, onboard documentation checks, and Port State Control inspections. The ECA boundary coordinates and enforcement expectations are clarified in MEPC.1/Circ.878.

## 5. Environmental and Regulatory Rationale

The Canadian Arctic's designation reflects heightened sensitivity to nitrogen oxide emissions, with NOx contributing to ozone formation, particulate matter, and long-term impacts on Arctic air quality and ecosystems.

## Convention / Regulation



Designation of the Canadian Arctic as a Nitrogen Oxides (NOx) Emission Control Area (ECA) under MARPOL Annex VI - Regulation 13 and the NOx Technical Code 2008

## Application



All marine diesel engines installed on ships operating within the Canadian Arctic ECA, with specific applicability aligned to engine construction dates under MARPOL Annex VI Regulation 13 (Tier III requirements).

## Entry into Force / Applicable From



01 March 2026

## Reference



MARPOL Annex VI, NOx Technical Code 2008, MEPC.392(82), MEPC.1/Circ.878

# Implications

To Ship Owners / Ship Managers	<p><b>Engine compliance assessment:</b> Operators must identify whether engines onboard are required to meet Tier III levels within the Canadian Arctic and evaluate whether SCR, EGR, or equivalent retrofits are needed.</p> <p><b>Operational planning:</b> Ships transiting intermittently into the ECA must establish procedures for switching to Tier III compliant modes, including verifying readiness of NOx reducing systems.</p> <p><b>Documentation and certification:</b> Updated EIAPP certificates, NOx Technical Files, parameter records, and changeover procedures must be maintained for survey and PSC verification.</p> <p><b>Fuel and reagent logistics:</b> Ships using SCR systems must ensure adequate urea/DEF supply, storage, and handling arrangements for operations within the ECA.</p> <p><b>Budget and upgrade planning:</b> Operators of older vessels planning Arctic operations may need to consider retrofitting costs or operational restrictions if Tier III cannot be achieved.</p>
To Flags & RO	Flags must update national MARPOL Annex VI implementation guidelines and provide instructions on certification for engines operating within the Canadian Arctic ECA. ROs must verify that ships operating in the ECA possess appropriate EIAPP certification, approved Technical Files, and NOx-compliant machinery or aftertreatment systems. Surveyors should confirm correct changeover procedures and operational readiness of NOx reduction systems. PSC guidance will emphasize verification of Tier III operation when within the ECA.
To Shipbuilders / Manufacturers	Shipyards must integrate Tier III compliant engines or approved NOx-reduction systems into vessels designed for Arctic operations. Engine manufacturers must supply engines meeting Tier III standards and provide updated NOx Technical Files aligned with the new ECA requirements. SCR/EGR system suppliers must ensure compatibility with Arctic temperature and operational conditions. Builders must include appropriate space, ventilation, and piping arrangements to accommodate NOx aftertreatment systems.

## Convention / Regulation



Designation of the Canadian Arctic as a Nitrogen Oxides (NOx) Emission Control Area (ECA) under MARPOL Annex VI - Regulation 13 and the NOx Technical Code 2008

## Application



All marine diesel engines installed on ships operating within the Canadian Arctic ECA, with specific applicability aligned to engine construction dates under MARPOL Annex VI Regulation 13 (Tier III requirements).

## Entry into Force / Applicable From



01 March 2026

## Reference



MARPOL Annex VI, NOx Technical Code 2008, MEPC.392(82), MEPC.1/Circ.878

The 2026 designation of the Norwegian Sea as a NOx ECA brings the region under MARPOL Annex VI Tier III NOx controls to reduce atmospheric nitrogen oxide emissions in a sensitive marine environment. The ECA imposes stricter NOx emission limits for engines >130 kW installed on ships falling within applicability thresholds (construction/contract/keel-laying/delivery dates), together with an ultra-low sulfur fuel requirement ( $\leq 0.10\% \text{ m/m}$ ) that becomes effective region-wide on 01 March 2027.

## Key technical points:

**Phased Tier III applicability:** Tier III controls apply to engines on ships with building contracts after 01 March 2026, keel-laying after 01 September 2026, or delivery after 01 March 2030 (as specified in the designation).

**Emission control technologies:** Compliance may be achieved through SCR, EGR, water-injection or other approved NOx reduction measures meeting the NOx Technical Code.

**Fuel sulfur requirement:** A 0.10% m/m fuel sulfur cap is effective 01 March 2027 for vessels operating in the ECA.

**Verification & documentation:** Ships must carry appropriate EIAPP certificates, NOx Technical Files, and maintain records of operational parameters and changeover procedures; Port State Control will verify compliance within the ECA.

**Operational guidance:** Special guidance for changeover, monitoring and cold-climate operation may be required due to local environmental and operational conditions.

The designation aligns regional air-quality protection objectives with global NOx control policy and will require operators to plan technical, operational and logistical responses for compliance.

## Convention / Regulation



MARPOL Annex VI — Designation of the Norwegian Sea as a NOx Emission Control Area (ECA) under Regulation 13 and the NOx Technical Code

## Application



All ships operating within the geographic limits of the Norwegian Sea ECA; Tier III NOx limits apply according to vessel/engine contract, keel-laying and delivery dates specified under MARPOL Annex VI

## Entry into Force / Applicable From



01 March 2026 (phased applicability for Tier III requirements as defined in the designation)

## Reference



MARPOL Annex VI, MEPC.392(82)

# Implications

To Ship Owners / Ship Managers

**Compliance assessment:** Owners should immediately identify vessels that will be subject to Tier III requirements under the phased applicability rules and assess retrofit versus operational restriction options.

**Technical upgrades and retrofits:** Where Tier III cannot be met via engine tuning, vessels may require SCR/EGR installations or other approved aftertreatment systems; integration planning must consider space, urea/DEF storage, and control-system interfaces.

**Fuel management and logistics:** Operators must plan for ultra-low sulfur fuel availability and changeover procedures within the ECA; ships fitted with SCR will need reliable urea/DEF supply chains and handling arrangements.

**Operational procedures & documentation:** Establish robust changeover, monitoring and record-keeping procedures (EIAPP, NOx Technical File, engine parameter logs) to demonstrate compliance during surveys and PSC inspections.

**Commercial planning:** Where retrofits are uneconomic, commercial routing or trade adjustments may be necessary for affected vessels operating in the Norwegian Sea.

To Flags & RO

Flag Administrations must update national MARPOL Annex VI guidance and inform stakeholders of phased applicability criteria and verification expectations. ROs should ensure EIAPP and NOx Technical Files are correctly issued and verify the operational readiness of NOx-reduction systems during surveys. Surveyors require training on phased applicability, cold-climate operation impacts, and relevant documentation checks. Port State Control regimes will prioritize inspections of engine certificates, changeover records and fuel sulfur documentation within the ECA.

To Shipbuilders / Manufacturers

Shipyards and designers should accommodate space, piping, reagent storage and ventilation requirements for SCR/EGR/other NOx systems in newbuild designs intended for ECA operations. Engine and aftertreatment manufacturers must supply validated Tier III solutions with appropriate cold-climate performance data and updated NOx Technical Files. Suppliers should provide installation, commissioning and maintenance documentation tailored to Norwegian Sea operational conditions. Classification societies must be prepared to review and certify NOx-compliant designs and retrofit plans.

## Convention / Regulation



MARPOL Annex VI — Designation of the Norwegian Sea as a NOx Emission Control Area (ECA) under Regulation 13 and the NOx Technical Code

## Application



All ships operating within the geographic limits of the Norwegian Sea ECA; Tier III NOx limits apply according to vessel/engine contract, keel-laying and delivery dates specified under MARPOL Annex VI

## Entry into Force / Applicable From



01 March 2026 (phased applicability for Tier III requirements as defined in the designation)

## Reference



MARPOL Annex VI, MEPC.392(82)

# Summary

The 2026 IGC Code amendments introduce targeted improvements to enhance the safety, containment integrity, and operational reliability of liquefied gas carriers. These changes respond to feedback from operational experience, evolving cargo types, and new material technologies.

## 1. Updated Standards for Cargo Containment Systems

Clarifications and revisions are made to containment system design criteria, including insulation performance, allowable stress limits, and verification requirements for thermal loads. These improve safety margins for handling cryogenic cargoes such as LNG, LPG, and specialty gases.

### Convention / Regulation



Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - 2026 Amendments adopted by MSC.566(109)

## 2. Revised Material Selection and Qualification Requirements

Material specifications for tanks, secondary barriers, and piping systems are updated, including enhanced criteria for fracture toughness, low-temperature performance, weldability, and corrosion resistance. Certification documentation requirements are strengthened to ensure traceability and design compliance.

### Application



All new gas carriers and, where required, existing ships undergoing major modification or conversion, as defined under the amended provisions

## 3. Strengthened Requirements for Gas Detection, Monitoring, and Alarm Systems

Updates include improved detector sensitivity, redundancy criteria, alarm activation logic, and placement of gas detectors in enclosed and semi-enclosed spaces. Improved real-time monitoring enhances early detection of potential leakage.

### Entry into Force / Applicable From



01 July 2026

## 4. Enhanced Fire Safety and Hazardous Area Controls

Refinements are made to fixed fire-extinguishing arrangements in compressor rooms, cargo-handling spaces, and adjacent zones. Hazardous area classification boundaries are clarified to prevent ignition risks from electrical or mechanical sources.

## 5. Updated Requirements for Emergency Shutdown (ESD) Systems

The ESD system design, testing, and functionality requirements are strengthened to ensure rapid, fail-safe isolation of cargo systems during emergency events. Redundancy and control-system integrity are emphasized.

### Reference



IGC Code, MSC.566(109)

## 6. Revised Test Procedures and Documentation Requirements

Commissioning tests, periodic system tests, and on-board verification documentation have been expanded and standardized to ensure consistent compliance evaluation across Flags and ROs.

These updates collectively improve structural integrity, operational safety, and emergency preparedness of modern gas carriers.

# Implications

To Ship Owners / Ship Managers

**Compliance review and gap analysis:** Owners must evaluate whether existing vessel equipment and containment systems meet updated material, detection, and ESD requirements, particularly when planning repairs or modifications.

**Operational procedure revisions:** Cargo operation manuals, safety procedures, and emergency response plans must be revised to align with updated monitoring, alarm logic, and gas-handling protocols.

**Crew training:** Enhanced training is required for cargo officers and engineers to ensure competence in new detection systems, containment requirements, and revised ESD behavior.

**Maintenance and testing adjustments:** Maintenance intervals, testing procedures, and inspection routines must be updated to comply with revised test protocols for detection systems, fire protection equipment, and containment systems.

**Technical documentation updates:** Owners must ensure cargo system documentation, as-built drawings, technical files, and commissioning records are brought in line with amended requirements.

To Flags & RO

Flags must adopt the amended IGC Code within national frameworks and update plan-approval and survey procedures. ROs must revise technical review checklists, containment system evaluation criteria, and gas detection/ESD verification processes. Surveyors require updated training to assess compliance with enhanced material standards and testing regimes. PSC inspections will focus on documentation accuracy and functional verification of updated safety systems.

To Shipbuilders / Manufacturers

Shipyards must ensure newbuild designs incorporate updated containment, material, ventilation, gas detection, and ESD system requirements. Equipment manufacturers must provide products meeting revised IGC standards along with updated certification and test reports. Documentation packages delivered at vessel handover must reflect amended Code provisions. Manufacturers of sensors, valves, and fire protection equipment must ensure compatibility with new system performance criteria.

## Convention / Regulation



Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - 2026 Amendments adopted by MSC.566(109)

## Application



All new gas carriers and, where required, existing ships undergoing major modification or conversion, as defined under the amended provisions

## Entry into Force / Applicable From



01 July 2026

## Reference



IGC Code, MSC.566(109)

# Summary

The 08-25 amendments to the IMSBC Code, adopted by Resolution MSC.575(110) at MSC 110 (June 2025), represent a significant technical update aimed at improving the safe carriage of solid bulk cargoes by addressing emerging cargo types, refining hazard classifications, and harmonizing requirements with other IMO instruments, particularly the IMDG Code.

## 1. Introduction of New Cargo Schedules

The amendments introduce several new cargo schedules, including but not limited to:

- Aluminium Sulphate, Granular
- Fish Meal (Stabilized)
- Pea Protein Concentrate Pellets
- Phosphate Rock Fines

Each new schedule provides detailed guidance on cargo characteristics, hazards, trimming, ventilation, moisture control, and emergency response, thereby reducing ambiguity in cargo declaration and handling.

## 2. Revision of Existing Cargo Schedules

A number of existing schedules have been revised to improve technical accuracy and operational clarity, including:

- Direct Reduced Iron (DRI) (various forms)
- Aluminium Ferrosilicon Powder
- Ferrous Metal Borings, Shavings, Turnings
- Castor Products

Revisions include refined hazard descriptions, updated moisture limits, revised handling precautions, and clearer emergency measures.

## 3. Enhanced Safety Criteria for Direct Reduced Iron (DRI)

For Direct Reduced Iron (A), the amendments introduce apparent density as an explicit safety criterion. This supports improved risk assessment related to cargo stability, ventilation effectiveness, and the prevention of hazardous gas accumulation, particularly hydrogen generation due to corrosion reactions.

## 4. Harmonization of Segregation and Hazard Classification

The amendments enhance alignment between the IMSBC Code and the IMDG Code, particularly for cargoes classified as MHB (Materials Hazardous only in Bulk) and those presenting dual bulk and dangerous goods characteristics. This harmonization improves consistency in segregation, stowage, and documentation practices.

## 5. Special Provisions for Dry Powdery Cargoes

New special provisions are introduced for certain fine, dry powdery cargoes, allowing carriage on specially constructed or equipped ships subject to defined design, ventilation, and operational safeguards. These provisions recognize evolving ship designs and specialized bulk trades.

## 6. Focus on Emerging Hazard Scenarios

The amendments address risks such as:

- Hydrogen gas evolution from DRI in contact with moisture or certain metals
- Dust explosion hazards
- Self-heating and oxidation
- Cargo liquefaction and moisture migration

Overall, the 08-25 amendments modernize the IMSBC Code, enhance hazard clarity, and improve global uniformity in bulk cargo safety management.

## Convention / Regulation



Amendments (08-25) to the International Maritime Solid Bulk Cargoes (IMSBC) Code

## Application



All ships carrying solid bulk cargoes as defined under the IMSBC Code, including bulk carriers and other cargo ships engaged in international voyages

## Entry into Force / Applicable From



01 January 2027

## Reference



IMSBC Code; IMO Resolution MSC.575(110)

# Implications

To Ship Owners / Ship Managers

- **Cargo acceptance and verification:** Owners must review new and revised cargo schedules to ensure correct cargo identification, declaration, and acceptance prior to loading.
- **Loading and voyage planning:** Updated trimming, ventilation, moisture control, and segregation requirements must be incorporated into cargo plans and voyage risk assessments.
- **Crew training:** Masters, chief officers, and cargo officers must be trained on revised IMSBC schedules, particularly for DRI, fish meal, and fine powder cargoes with gas or dust hazards.
- **Documentation and procedures:** Cargo Information Forms, loading manuals, emergency response procedures, and SMS documentation must be updated to reflect the amended Code.
- **Risk mitigation:** Enhanced monitoring for temperature, gas accumulation, and moisture ingress may be required, especially for DRI and MHB cargoes, to prevent fire, explosion, or structural damage.

To Flags & RO

Flag Administrations must incorporate the 08-25 amendments into national regulations and issue guidance on early voluntary application from 2026. ROs must update cargo assessment procedures, survey checklists, and training for surveyors reviewing IMSBC compliance. Administrations should ensure consistent interpretation of revised cargo schedules and MHB classifications. Port State Control inspections are expected to focus on correct cargo declaration, documentation, and application of revised handling precautions.

To Shipbuilders / Manufacturers

Shipbuilders may need to consider enhanced ventilation, gas detection, and cargo hold coating solutions for vessels intended to carry revised IMSBC cargoes such as DRI or fine powders. Manufacturers of monitoring equipment (gas, temperature, humidity) may see increased demand to support compliance. Designers of specialized bulk carriers should account for new provisions applicable to specially constructed ships. Cargo handling equipment suppliers must ensure suitability for dust suppression and safe trimming operations.

## Convention / Regulation



Amendments (08-25) to the International Maritime Solid Bulk Cargoes (IMSBC) Code

## Application



All ships carrying solid bulk cargoes as defined under the IMSBC Code, including bulk carriers and other cargo ships engaged in international voyages

## Entry into Force / Applicable From



01 January 2027

## Reference



IMSBC Code; IMO Resolution MSC.575(110)

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