DNV·GL

TECHNICAL REGULATORY NEWS No. 23/2020 - STATUTORY

IMO MARITIME SAFETY COMMITTEE

Relevant for shipowners, managers, designers, manufacturers and flag states

November 2020

The 102nd session of IMO's Maritime Safety Committee (MSC) was held remotely from 4 to 11 November. This news summarizes the most relevant updates to the SOLAS Convention and other IMO instruments on maritime safety. The MSC 102 also considered the impact of the Covid-19 pandemic on seafarers and the session agreed on measures to make information that may facilitate safe crew changes available to all affected parties.



Meeting highlights

Covid-19 measures

- Approved an MSC circular containing the industry-developed recommended framework of protocols for ensuring safe ship crew changes and travel during the Covid-19 pandemic
- Agreed to develop a universal logo/symbol to aid seafarers to access and navigate available services
- Agreed to make information on ports facilitating crew changes available in IMO's online information database GISIS

Technical safety measures

- Adopted new requirements for safe mooring operations
- Approved new interim guidelines for methyl/ethyl alcohols as fuel
- Approved new guidance for weather-dependent lashing of cargoes
- Approved new requirements for lifting appliances and anchor handling winches
- Approved interim guidelines for the second-generation intact stability criteria
- Recognized the Indian Regional Navigation Satellite System (IRNSS)
- Confirmed that the DNV GL ship construction rules comply with the Goal Based Standards (GBS) for bulk carriers and oil tankers

Adoption of amendments to mandatory instruments The MSC 102 adopted amendments to the following IMO instruments:

SOLAS – Safety of Life at Sea

Watertight integrity: Amendments to SOLAS Chapter II-1 align the design criteria for watertight integrity in parts B-2 to B-4 with the probabilistic damage stability approach in parts B and B-1. The amendments address inter alia assumptions regarding progressive flooding, valves in the collision bulkhead and watertight doors.

The amendments will enter into force on 1 January 2024, with voluntary early implementation of Regulation 12 on collision bulkhead valves.

Safe mooring operations: Amendments to SOLAS Chapter II-1/3-8 include new requirements on the design of mooring arrangements, the selection of mooring equipment including lines, and the regime for maintenance and inspection of mooring equipment including lines. Maintenance and inspection requirements will be given retroactive application for all ships. See also <u>Technical & Regulatory News</u>.

The following associated new and revised guidelines were approved:

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

The amendments will enter into force on 1 January 2024.

IGF Code – **Safety for ships using gases or other low-flashpoint fuels** *LNG-fuelled ships*: Amendments address cofferdams required for fire protection purposes (Chapter 6.7) and fixed fire-extinguishing systems in LNG fuel preparation spaces (Chapter 11).

Metallic materials for cryogenic service: Amendments include welding procedure tensile tests for materials other than aluminium alloys.

The amendments will enter into force on 1 January 2024.

DNV·GL

IGC Code – Ships carrying liquefied gases in bulk Metallic materials for cryogenic service: Amendments include welding procedure tensile tests for materials other than aluminium alloys.

The amendments will enter into force on 1 January 2024.

IMDG Code – Ships carrying dangerous goods

Amendments to the IMDG Code to facilitate the multimodal transport of dangerous goods.

The amendments will enter into force on 1 January 2022, with voluntary application from 1 January 2021.

Goal-based new ship construction standards (GBS)

GBS for bulk carriers and oil tankers are basically IMO rules for class rules. Under the GBS standards, IMO auditors use guidelines to verify construction rules for bulk carriers and oil tankers of class societies acting as Recognized Organizations. The GBS standards (MSC.287(87)) are mandatory to all ships delivered after 1 July 2020.

Initial verification of Türk Loydu's ship construction rules

The MSC 102 noted that the non-conformities identified in the initial verification audit had been rectified.

Maintenance verification of 11 IACS members' ship construction rules

The MSC 102 noted that 11 of the IACS members' ship construction rules for bulk carriers and oil tankers had demonstrated continued conformance to the GBS standards.

Re-verification of DNV GL's ship construction rules

The MSC 102 confirmed that the DNV GL ship construction rules for bulk carriers and oil tankers continued to conform to the GBS standards. The re-verification was requested by DNV GL due to the merger between DNV and GL in 2013.

Human element, training and watchkeeping (HTW)

STCW Code – Crew certificates

The MSC 102 adopted amendments to Table B-I/2 of the STCW Code to clarify the certificates or documentary evidence for seafarers required under the STCW Convention.

STCW Convention and Code – Definition of "high voltage"

The MSC 102 approved a definition of "high voltage" as above 1,000 Volts to be included in the STCW Convention Regulation 1/1, and a definition of "electro technical officer" to be included in Section A-1/1 of the STCW Code. The amendments are subject to adoption at MSC 103.

Carriage of cargoes and containers (CCC)

Interim guidelines for methyl/ethyl alcohol as fuel The MSC 102 approved interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel.

Alternative metallic materials for cryogenic service

The MSC 102 approved interim guidelines for the acceptance of alternative metallic materials for cryogenic service in ships carrying LNG in bulk and ships using LNG or other low-flashpoint fuels as fuel.

High manganese materials for cryogenic service

The MSC 102 approved a revision of the interim guidelines on the application of high manganese austenitic steel for cryogenic service.

Weather-dependent lashing

Cargoes require lashing and securing to remain in place when exposed to the accelerations acting on them due to the ship's behaviour at sea.

The MSC 102 approved modifications to Annex 13 of the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) to determine weather-dependent acceleration reductions on non-standardized cargoes, including vehicles on ro-ro ships and heavy cargoes. Amendments to the following instruments were approved accordingly:

- Revised guidelines for the preparation of the Cargo Securing Manual
- Guidelines for securing arrangements for the transport of road vehicles on ships
- Code of Safe Practice for Ships Carrying Timber Deck Cargoes

The amendments are relevant for ro-ro, general cargo and multipurpose ships, with non-mandatory application.

Ships carrying liquefied gases in bulk (IGC Code)

The MSC 102 approved unified interpretations to the IGC Code. The unified interpretations are based on IACS UIs and relate inter alia to welding details, cargo sampling, cargo filters and cargo piping insulation.

Ships carrying dangerous goods (IMDG Code)

The MSC 102 approved unified interpretations to the IMDG Code, clarifying that the requirement in 7.1.4.4.2 to stow certain dangerous goods not less than 12 metres from life-saving appliances applies to the main survival craft and rescue boats only.

Navigation, communications and search and rescue (NCSR)

Satellite navigation systems

All ships shall have on board a receiver for a recognized global navigation satellite system or a terrestrial radio navigation system. Operators include, for example, GPS (USA), Galileo (EU), GLONASS (Russia) and BeiDou (China).

The MSC 102 recognized the Indian Regional Navigation Satellite System (IRNSS) as a component of the World-Wide Radio Navigation System for the provision of positioning, navigation and timing services.

The MSC 102 also approved draft performance standards for receivers for the Quasi-Zenith Satellite System (QZSS) which is under establishment by Japan.

Ship design and construction (SDC)

Subdivision and damage stability

The MSC 102 adopted revised Explanatory Notes to SOLAS Chapter II-1 (MSC.429(89)/Rev.1), following amendments to SOLAS Chapter II-1 to ensure consistency between the design criteria for watertight integrity and the probabilistic damage stability approach.

DNV·GL

The revised Explanatory Notes provide application provisions both for ships constructed on or after 1 January 2020 and for ships constructed on or after 1 January 2024.

Watertight doors on passenger ships

The revised Explanatory Notes to SOLAS Chapter II-1 include a new Explanatory Note to Regulation 17.3 regarding doors above the bulkhead deck for passenger ships. The purpose is to add clarity to the requirements for fire safety, watertightness and escape. The MSC 102 approved amendments to the associated MSC.1/Circ. 1572 regarding doors in watertight bulkheads of passenger ships and cargo ships.

Non-SOLAS ships in polar waters

Incidents in polar waters pose risks to human life, to the polar environment and to search and rescue operations. The IMO has initiated a phase 2 of the Polar Code to address safety measures also for non-SOLAS ships operating in polar waters. This has resulted in draft guidelines for fishing vessels of at least 24 metres in length and for noncommercial pleasure yachts above 300 GT.

The MSC 102 agreed to develop safety guidelines for commercial yachts and for cargo ships between 300 and 500 GT, operating in polar waters.

Second-generation intact stability criteria

The MSC 102 approved interim guidelines for second-generation intact stability criteria. The 2008 Intact Stability Code uses empirical criteria, based on past casualty data. Hence, as ship design evolves, the uncertainty of these criteria increases. The new second-generation intact stability criteria are performance-based and rely on advanced numerical simulations or simplified criteria in addition to operational measures.

Industrial personnel (IP)

The IMO is working on a new mandatory IP Code intended for cargo vessels carrying industrial personnel to and from offshore facilities and ships. The new IP Code is intended to promote consistent application of requirements by flag administrations for such ships, and to fill the regulatory gap between SOLAS cargo ships and SOLAS passenger ships, giving credit to the capabilities of industrial personnel.

The MSC 102 acknowledged that some sort of grandfathering may be required for existing ships carrying more than 12 industrial personnel according to the interim recommendations on the safe carriage of more than 12 industrial personnel (Resolution MSC.418(97)). The extension of the grandfathering, and the further work on the draft IP Code, will be considered in an intersessional working group until SDC 8 in February 2022.

The targeted entry into force date for the draft of the new SOLAS regulation and the accompanying IP Code is 1 January 2024.

Water level detectors on non-bulk cargo ships

The MSC 102 approved the draft of the new SOLAS Regulation II-1/25-1, requiring new multiple-hold cargo ships to be fitted with water level detectors in each cargo hold intended for cargo. Bilge alarm sensors are acceptable as water level detectors. The draft new regulation

harmonizes the requirements for bulk carriers and non-bulk carriers, and will not apply to tankers, liquid holds and tanks entirely above the freeboard deck.

The draft of the new regulation will enter into force on 1 January 2024, subject to adoption by MSC 103.

Enhanced survey programme (ESP)

The MSC 102 approved draft amendments to the 2011 ESP Code so that thickness measurements need only be taken of "suspect areas" at the first renewal survey of double-hull oil tankers. This will align the thickness measurement requirements for oil tankers with those for bulk carriers. The amendments will be submitted to MSC 103 for adoption.

Watertight doors on cargo ships

The MSC 102 approved, subject to concurrent approval by the MEPC 76, draft amendments to the MARPOL and Load Lines Convention and to the IBC and IGC Codes. The aim is to address inconsistencies between these IMO instruments and SOLAS when it comes to the consideration of watertight doors in damage stability calculations.

The draft amendments will enter into force on 1 January 2024, subject to adoption by MSC 103, and have no impact on existing ships.

Pollution prevention and response (PPR)

IBC Code – Ships carrying dangerous chemicals in bulk New carriage requirements for IBC Code products enter into force on 1 January 2021. Consequently, vessels holding a Certificate of Fitness or an NLS certificate will need to be provided with new certificates and corresponding product lists based on the new carriage requirements.

The MSC 102 approved, subject to concurrent approval by the MEPC 75, a revised MSC-MEPC.5/Circ. 7 on the replacement of certificates. DNV GL will issue new certificates prior to 1 January 2021 that will supersede the existing certificates on this date.

The MSC 102 further agreed that Chapter 17 of the IBC Code should be amended to include the updated carriage requirements for methyl acrylate and methyl methacrylate.

Ship systems and equipment (SSE)

Fire safety of ro-ro ships

The MSC 102 approved amendments to the "Revised guidelines for the design and approval of fixed water-based fire-fighting systems for ro-ro spaces and special category spaces" (MSC.1/Circ.1430/Rev.1). The amendments extend the maximum height for these fire-fighting systems from 9 to 10 metres for alignment with the definition of special category spaces.

Fault isolation of fire detection systems

The MSC 102 approved draft amendments to Chapter 9 of the Fire Safety Systems Code to adjust the requirements to short circuit isolators in fixed fire detection systems. Short circuit isolators need not to be provided at each individually identifiable fire detector for cargo ships and for passenger ship balconies. For cargo ships, one per deck will typically be acceptable.

DNV·GL

The amendments will enter into force on 1 January 2024, subject to adoption by MSC 103.

On-board lifting appliances and anchor handling winches

The IMO has agreed to develop new safety measures for shipboard cranes on board all ships and for anchor handling winches on board vessels used for anchor handling operations. Neither is covered by the current IMO instruments.

The MSC 102 approved a new draft SOLAS Regulation II-1/3-13 requiring applicable on-board lifting appliances and anchor handling winches to be designed, constructed and installed in accordance with classification rules or equivalent rules acceptable to the flag administration. Associated guidelines for lifting appliances and associated loose gear were approved in principle.

The new regulation will enter into force on 1 January 2024, with retroactive application, subject to adoption by MSC 103.

Life-saving appliance evaluation and test report forms

The MSC 102 approved amendments to the non-mandatory "Standardized life-saving appliance evaluation and test report forms" (MSC/Circ. 980 and addenda) to incorporate effective amendments to the LSA Code and the "Revised recommendation on testing of lifesaving appliances" (Resolution MSC.81(70)).

Launching of free fall-lifeboats

The MSC 102 agreed to remove the requirement to launch free-fall lifeboats with the ship making headway at speeds up to 5 knots in calm water, as there is no additional dynamic load on the launching arrangements to be accounted for. Draft amendments to SOLAS Chapter III/33, the LSA Code para 4.4.1.3 and Resolution MSC:81(70) were approved accordingly.

The draft amendments enter into force on 1 January 2024, subject to adoption by the MSC 103, with voluntary early implementation.

Isolated pantries on passenger ships carrying more than 36 passengers The MSC 102 approved a unified interpretation to clarify applicable structural fire protection arrangements for isolated pantries (fire risk category 9) on board ships carrying more than 36 passengers.

Water-based fire extinguishing systems on ro-ro decks

The MSC 102 endorsed a corrigendum to MSC.1/Circ.1430/Rev.1 to prevent unintentional retroactive application of the fire and component test requirements for systems installed before 1 January 2021.

Retro-reflective materials on life-saving appliances

The MSC 102 acknowledged that the testing technology referred to in Annex 2 of Resolution A.658(16) on retro-reflective materials used on life-saving appliances is becoming outdated. A new MSC resolution was approved, replacing the Assembly resolution, with updated acceptable test equipment.

The Covid-19 pandemic (any other business)

Border closures and national restrictions following the Covid-19 pandemic have left hundreds of thousands of seafarers trapped on board ships, or unable to join ships. This is first and foremost a humanitarian crisis, but it may, in turn, affect ship safety and disrupt the global supply chain.

During its second extraordinary session, the Maritime Safety Committee adopted Resolution MSC.473(ES.2) on "Recommended action to facilitate crew change, access to medical care and seafarer travel during the Covid-19 pandemic". Following up on this recommendation, the MSC 102 considered measures to make information that may facilitate safe crew changes available to all affected parties.

Protocols for safe crew change

The MSC 102 agreed to issue the industry-led "Recommended framework of protocols for ensuring safe ship crew changes and travel during the COVID-19 pandemic" as a new, continuously updated MSC circular.

Information on ports facilitating crew changes

The MSC 102 agreed to create a new module in IMO's online information database GISIS to make information about both national focal points of contact and ports that facilitate crew changes available to shipping companies.

Universal logo for seafarers

The MSC 102 agreed that the Secretariat should work with the International Labour Organization (ILO) and the International Civil Aviation Organization (ICAO) to develop a universal non-text logo to aid seafarers in accessing and navigating services available. The logo may be used to identify people, resources and places dedicated to assisting seafarers.

Recommendations

DNV GL recommends its customers to monitor the outcome of future MSC sessions for information on inter alia autonomous shipping, fuel oil safety, domestic ferry safety and new regulatory development work, as the agenda of the MSC 102 was reduced to accommodate a remote session.

CONTACT

For customers:

DATE – Direct Access to Technical Experts via <u>My Services</u> on Veracity.

Otherwise

Use our office locator to find the nearest DNV GL office

DNV.GL

Provisional list of resolutions and circulars

Please note that the list and document references are provisional.

Resolution MSC.474(102) Amendments to SOLAS, 1974, as amended.

Resolution MSC.475(102) Amendments to the IGF Code

Resolution MSC.476(102) Amendments to the IGC Code

Resolution MSC.477(102) Amendments to the IMDG Code

Resolution MSC.478(102) Amendments to the STCW Code

Resolution MSC.479(102) Revised guidelines or securing arrangements for the transport or road vehicles on ro-ro ships

Resolution MSC.429(98)/Rev.1 Revised explanatory notes to SOLAS chapter II-1 (In effect until 31 December 2023)

Resolution MSC.429(98)/Rev.2 Revised explanatory notes to SOLAS chapter II-1 (In effect on 1 January 2024)

Resolution MSC.62(67)/Rev1. Revised guidelines for safe access to tanker bows

Resolution MSC.480(102) Revised recommendation on the use and fitting of retro-reflective materials on life-saving appliances

Resolution MSC.481(102) Performance standards for shipborne Japanese Quasi-Zenith Satellite System (QZSS) receiver equipment.

[...] Draft Assembly resolution on guidelines for vessel traffic services

MSC.1/Circ.1619 Amendments to the Revised Emergency Response Procedures for Ships Carrying Dangerous Goods (MSC.1/Circ.1588) (EmS Guide)

MSC.1/Circ.1620 Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring

MSC.1/Circ.1621 Guidelines for inspection and maintenance of mooring equipment including lines

MSC.1/Circ.1175/Rev.1 Revised guidance on shipboard towing and mooring equipment

MSC.1/Circ.1164/Rev.22

Promulgation of information related to reports of independent evaluation submitted by Parties to the 1978 STCW Convention, as amended, confirmed by the Maritime Safety Committee to have communicated information which demonstrates that Parties are giving full and complete effect to the relevant provisions of the Convention

MSC.1/Circ.797/Rev.34 List of competent persons maintained by the Secretary-General pursuant to section A-I/7 of the STCW Code

MSC.1/Circ.1622 Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel

MSC.1/Circ.1623 Guidelines for the acceptance of alternative metallic materials for cryogenic service in ships carrying liquefied gases in bulk and ships using gases or other low-flashpoint fuels

MSC.1/Circ.1599/Rev.1 Revised Interim guidelines on the application of high manganese austenitic steel for cryogenic service

MSC.1/Circ.1624 Amendments to the Code of Safe Practice for Cargo Stowage and Securing (CSS Code)

MSC.1/Circ.1353/Rev.2 Guidelines for the preparation of the Cargo Securing Manual

MSC.1/Circ.1625 Amendments to the Code of Safe Practice for Ships Carrying Timber Deck Cargoes, 2011 (2011 TDC Code)

MSC.1/Circ.1626 Unified interpretation of the IGC Code

MSC.1/Circ.1627 Unified interpretation of the IMDG Code

MSC-MEPC.5/Circ.[...]

Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code (subject to approval by MEPC 75)

PPR.1/Circ.9 Revised carriage requirements for methyl acrylate and methyl methacrylate

MSC.1/Circ. 1572/Rev.1

Unified interpretations of SOLAS chapters II-1 and XII, of the technical provisions for means of access for inspections (resolution MSC.158(78)) and of the Performance Standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers (resolution MSC.188(79))

MSC.1/Circ.1628

Interim Guidelines for the second generation intact stability criteria

MSC.1/Circ.1430/Rev.2

Revised guidelines for the design and approval of fixed water-based fire-fighting systems for ro-ro spaces and special category spaces

MSC.1/Circ.1629

Revised standardized life-saving appliance evaluation and test report forms (personal life-saving appliances)

MSC.1/Circ.1630

Revised standardized life-saving appliance evaluation and test report forms (visual signs)

MSC.1/Circ.1631 Revised standardized life-saving appliance evaluation and test report forms (survival craft)

MSC.1/Circ.1632 Revised standardized life-saving appliance evaluation and test report forms (rescue boats)

MSC.1/Circ.1633

Revised standardized life-saving appliance evaluation and test report forms (launching and embarkation appliances)

MSC.1/Circ.1634

Revised standardized life-saving appliance evaluation and test report forms (other life-saving appliances)

MSC.1/Circ.1635 Unified interpretations of SOLAS chapter II-2

MSC.1/Circ.1318/Rev.1 Revised guidelines for the maintenance and inspections of fixed carbon dioxide fire-extinguishing systems

COLREG.2/Circ.75 Amended traffic separation schemes and associated measures

SN.1/Circ.339 Routeing measures other than traffic separation schemes

SN.1/Circ.340 Recognition of the Indian Regional Navigation Satellite System (IRNSS) as a component of the World-wide radionavigation system

MSC.1/Circ.1364/Rev.2 International SafetyNET Services Manual

MSC.1/Circ.1636 IMO Enhanced Group Call Coordinating Panel

SN.1/Circ.243/Rev.2/Corr.1

Guidelines for the presentation of navigation-related symbols, terms and abbreviations

MSC.1/Circ.1637

Industry recommended framework of protocols for ensuring safe ship crew changes and travel during the Coronavirus (COVID-19) pandemic

MSC.1/Circ.1638

Unified interpretation of SOLAS regulation II-1/3-10 concerning the term "unforeseen delay in delivery of ships" during the Coronavirus (COVID-19) pandemic

DNV·GL