

This Brief provides an overview of the more significant issues progressed at IMO's Maritime Safety Committee's 101st session which was held from 5 to 14 June 2019.

Fuel Quality and Safety

- The Committee developed an MSC Resolution recommending interim measures to enhance the safety of ships relating to the use of oil fuel. The measures recommend that SOLAS contracting governments:
 - ✓ Inform IMO for transmission to Parties to the SOLAS Convention and Member States of all confirmed cases where oil fuel suppliers delivered oil fuel that failed to meet the flashpoint requirements specified in SOLAS Reg II-2/4.2.1 and sulphur content and quality requirements under regulations 14 and 18 of MARPOL Annex VI;
 - ✓ Take action as appropriate against oil fuel suppliers in all confirmed cases of deliveries of oil fuel that do not comply with the above-mentioned requirements;
 - ✓ Encourage the widest possible application of the latest edition of relevant industry standards for marine distillate fuels (ISO 8217:2017 and any subsequent revision thereof, and ISO/PAS 23263 (currently under development)) and guidance to enhance the safety of ships related to supply and use of oil fuel; and
 - ✓ Inform the IMO, for transmission to Parties and IMO Member States of confirmed cases where oil fuel suppliers had delivered oil fuel having properties (e.g. stability, compatibility, cold flow, acid number, ignition and combustibility quality, cat fines, low viscosity, pour point and unusual components) that jeopardized the safety of ships or personnel; or adversely affected the performance of the machinery
- The Committee established a correspondence group to progress the above work leading up to the next session.
- The Committee agreed to develop a platform on GISIS for reporting of non-compliance of flashpoint requirements, with a preference to integrate it to the existing GISIS platform for MARPOL Annex VI.
- In association with the above, the Committee developed an action plan for the next three meetings to address the development of mandatory requirements to enhance the safety of ships relating to the use of oil fuel and development of guidelines for ships to address situations where independent test results indicating that non-compliant oil fuel was delivered.
- Noting the likelihood of the introduction of new fuel grades related to the implementation of the 2020 sulphur limit the Committee agreed to instruct SDC 7 to further consider a unified interpretation of fuel oil service tank arrangements under SOLAS regulation II-1/26.11. IACS advised that additional consultation within their members would be necessary and that the fuel oil service tank arrangements provided in UI SC 123 may require further consideration.

Maritime Autonomous Surface Ships (MASS)

- Methodology – The framework was approved by the Committee, which also encouraged active participation in the current regulatory scoping exercise (RSE) on the use of MASS. The Committee reviewed the status report wherein the initial review of IMO instruments

has been completed and an updated list of statutory instruments provided to address gaps in rules or regulations. Further comments can be provided by interested parties during an intersessional meeting that will be held 2 to 6 September 2019.

- Interim Guidelines for MASS Trials – principles which were tentatively agreed at MSC 100 were confirmed by the Committee. Interim Guidelines on MASS trials currently under development are intended to be a single document for Administrations, industry and other relevant stakeholders, are intended to be goal-based and are not intended to be overly prescriptive, and should be specific for each trial to be conducted (e.g. mooring, navigation).

Adopted Amendments

- Amendments to the 2008 SPS Code – the Committee adopted revisions of the Record of Equipment and SPS certificate under the *2008 Code of Safety for Special Purpose Ships*. Resolution MSC.464(101). The amendments take effect for certificates renewed on or after 1 January 2020.
- IGF Code Revision – The Committee adopted revisions to the Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels, IGF Code, which will apply to new cargo ships ≥ 500gt and passenger ships using low-flashpoint fuels. Resolution 458(101). The following dates are assigned to define new ships:
 - a building contract placed on or after 1 January 2024; or
 - in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2024; and
 - regardless of the building contract or keel laying date, the delivery is on or after 1 January 2028.

The revisions include the following provisions:

- ✓ where cargo tank insulation and location make the probability for the tank contents to be heated up due to an external fire very small, higher loading limits than calculated using the reference temperature may be permitted, but not more than 95%.
- ✓ Gaseous fuel pipes, except fully welded fuel gas vent pipes led through mechanically ventilated spaces, which pass through enclosed spaces, except piping in fuel preparation rooms or spaces surrounding all tank connections and valves, shall be protected by a secondary enclosure which may be a ventilated duct or a double wall piping system.
- ✓ Exhaust systems of internal combustion engines of piston type shall be equipped with explosion relief systems unless designed to accommodate the worst-case overpressure due to ignited gas leaks or justified by the safety concept for the engine.
- ✓ Crediting the use of fuel storage hold spaces as a cofferdam for type C tanks that are not located directly above category A machinery spaces or other rooms with high fire risk.
- FSS Code Revision - The Committee adopted amendments to the FSS Code which clarify the location of the valve that isolates the inert gas main from the external supply of inert gas. Resolution MSC.457(101).
- LSA Code Revision - The Committee adopted amendments to paragraph 6.1.1.3 of the LSA Code. Resolution MSC.459(101). The revision permits, on cargo ships, the dedicated rescue boat to be manually launched (in lieu of being fitted with stored mechanical power) provided its mass does not exceed 700 kg in fully equipped condition without the crew and that a means is arranged to bring and hold the craft against the ship's side so

that persons can embark safely. The application is defined as applicable to rescue boats installed on board ships on or after 1 January 2024.

- IBC Code Revisions - the Committee adopted a comprehensive set of revisions for the carriage requirements of products in Chapter 17 of the IBC Code, primarily as a consequence of the revised Chapter 21 on the criteria for assigning carriage requirements for products subject to the IBC Code. Resolution MSC.460(101). Additionally, specific products are now required to undergo prewash procedures under MARPOL Annex II. Chapter 15 was revised to require hydrogen sulphide detection equipment shall be provided on board ships carrying bulk liquids prone to formation. Similar amendments were approved for the BCH Code. Entry into force of the amendments is 1 January 2021.
- Amendments to the 2011 ESP Code – the Committee adopted to amendments to the *International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011* (2011 ESP Code). Resolution MSC.461(101). In addition to numerous editorial revisions providing consistent terminology, the more substantive amendments are:
 - ✓ clarify the responsibilities and working arrangements where the 2011 ESP Code requires at least two exclusive surveyors to attend on board at the same time to perform the required survey;
 - ✓ provide consistency with IMO goal-base standards, GBS, regime (e.g., number and location of thickness measurements to be taken, acceptance criteria for corrosion and renewal of structure and longitudinal strength evaluation);
 - ✓ clarify specific elements that are subject to close-up survey in tanks on one side of the ship;
 - ✓ specify conditions for using hydraulic arm vehicles or aerial lifts for the close-up survey

The Committee decided to make updates to the 2011 Code instead of creating a new 2019 version. Entry into force date of the amendments is 1 January 2021.

Approved Amendments

- Mooring – The Committee approved amendments to SOLAS regulation II-1/3-8 addressing:
 - ✓ inspection and maintenance of equipment and lines that will apply to all new and existing ships with an effective date of 1 January 2024. New requirements that will affect the design of new ships were also developed. If adopted at MSC 102 in May 2020, these amendments will apply to new ships constructed on or after 1 January 2024;
 - ✓ design requirements to improve personnel safety and safe mooring of ships for new ships of 3,000 gt or above along with their mooring equipment and ropes/wires) are to be included in a Towing and Mooring Arrangement Plan described in the new design guidelines. It is noted that the approval of the plan is not required.
 - ✓ mooring equipment and lines of all ships will be subject to inspection and maintenance requirements.

Two MSC Circulars including guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fitting for safe mooring, as well as the for inspection and maintenance of mooring equipment including lines were approved. And an update to MSC.1/Circ.1175/Rev.1 Guidance on Shipboard Towing and Mooring Equipment was approved. The new and updated circulars will be go into effect on 1 January 2024.

- Watertight Bulkheads – The Committee approved draft amendments to parts B-1 and B-2 to B-4 of SOLAS chapter II-1 on watertight integrity. The previous amendments to SOLAS chapter II-1 parts B and B-1 (MSC.216(82) and (MSC.421(98))) contained inconsistencies in parts B-2 to B-4. Since the probabilistic method does not account for a bulkhead deck to provide the uppermost watertight boundary, the upper boundary of the buoyant volume may be used. However, the watertight integrity requirements contained in parts B-2 to B-4, make reference to the bulkhead deck which caused confusion when conducting a probabilistic damage stability assessment. These draft amendments provide clarity and may subsequently affect the subdivision arrangements of some vessel designs. If adopted at MSC 102 in May 2020, these amendments will apply to ships constructed on or after 1 January 2024.

Miscellaneous

- Ro-Ro Spaces – The Committee approved interim guidelines on minimizing the incidence and consequences of fires on ro-ro spaces and special category spaces of new and existing ro-ro passenger ships. The purpose of the circular is to provide interim recommendations for new and existing ships pending approval and adoption of associated SOLAS amendments currently being developed.
- Polar Ships – The Committee considered proposals to amend the Polar Code, to mandate Part I-A, chapters 9, 10 and 11 and to require application of these requirements to non-SOLAS vessels operating in polar waters. The committee decided to refer these issues to the NCSR sub-committee for further consideration.

The Committee drafted an Assembly interim resolution on the safety of non-SOLAS vessels in Polar Waters. The Committee also approved a circular providing guidance on the navigation and communication equipment that is intended to be used on ships operating in polar waters.

- Loss of Containers - After discussing the mandatory reporting of containers lost at sea and ways of communicating their location which was requested of the MSC by the MEPC 74 in May, the Committee encouraged the submittal of papers on this topic to the next CCC sub-committee session.
- Goal-based ship construction standards (GBS) – The Committee noted receipt of submittals by IACS members related to the next maintenance audits as well as the status of observations from prior GBS audits. The maintenance audits will be undertaken and reported to the Committee in due course. The Committee confirmed the timetable and schedule of activities for the implementation of the GBS verification scheme. Generic guidelines for developing Goal-based standards – The Committee finalized amendments to the Generic guidelines for developing goal-based standards. The Committee concluded on the scope of GBS Auditor information to be made available to all Member States and international organizations in GISIS.
- Draft Industrial Personnel Code (IP Code) – The Committee considered the confusion, ambiguity and differing interpretations among delegations on the use of an aggregated number of “*passengers*”, “*special personnel*” and “*industrial personnel*” in the draft IP Code under development. The Committee confirmed that the IP Code is to be developed so that it applies when aggregated total number of “*passengers*” plus “*industrial personnel*” plus “*special personnel*” the carried on board exceeds 12. The SDC Sub-Committee has been tasked to review the case where special personnel are carried, and the minimum training aspect of the “*special personnel*” and if that minimum training should be equivalent to that of the “*industrial personnel*”.

- Cyber Security – The Committee endorsed the third version of the Industry Guidelines on Cyber Security on Board Ships which are intended to raise the understanding and awareness of cyber risk management. It is not intended to be technical guidance for ship personnel, instead it includes information on the response to and recovery from cyber incidents and includes information for ship owners and operators on how to comply with resolution MSC.428(98) Maritime Cyber Risk Management in Safety Management Systems (SMS). This guidance is also aligned with MSC-FAL.1/Circ.3 and is provided in annex 2 of the guidelines.

In addition, the Committee also discussed inconsistencies in the implementation of MSC.428(98) and encouraged Administrations to include cyber risks in safety management systems. It was noted that while regulations in SOLAS chapter XI-2 and part A of the ISPS Code include cyber risk management elements, a separate cyber security management system from that of the safety management system is not necessary.

- Domestic Ferries – Due to the noted high number of casualties from domestic ferry operations, the Committee agreed to a new work item related to the improvement of domestic passenger ship safety. It was agreed that the outcome would be a non-mandatory instrument, not intending to infringe upon the domestic regulations of the individual Member States.

The Committee consider the proposed plan drafted by the Secretariat that included evaluating existing IMO provisions relevant to domestic ferry safety, in particular GlobalReg₁ and *Guidelines on the safe operation of coastal and inter-island passenger ships not engaged on international voyages*, and included the following as a starting point:

- ✓ Collection and analysis of best practices;
- ✓ Development of model regulations on domestic ferry safety;
- ✓ Incorporation of the model regulations in domestic law;
- ✓ Development of online training material on domestic ferry safety.