**MSC 104 - 4 to 8 October 2021**

The 104th session of the Maritime Safety Committee was held remotely from 4 to 8 October 2021.

***Amendments to LL88 and IGC Code***

MSC 104 has adopted MSC.491(104) on amendments to chapters II and III of annex I of annex B to the 1988 Load Lines Protocol.

MSC 104 has also adopted MSC.492(104) on amendments to the IGC Code.

The objective of the output was to harmonize the existing requirements for watertight doors by reviewing the relevant mandatory requirements in the SOLAS, MARPOL and Load Line Conventions, as well as the IBC and IGC Codes, in order to address inconsistencies.

The draft amendments to the 1988 Load Lines Protocol and the IGC Code specify additional openings fitted with watertight closures which were excluded from the requirement of being located above the final damage waterline and, therefore, they would have no impact on existing ships.

MSC 104 agreed that the amendments should apply to new and existing ships upon their entry into force.

Having recalled that MEPC 76 had agreed to defer the consideration of similar amendments to MARPOL and the IBC Code to MEPC 77, in order to take into account the relevant outcome of MSC 104, the Committee agreed to advise MEPC 77 of the outcome of the discussion accordingly.

The draft amendments to chapters II and III of annex I of annex B to the 1988 Load Lines Protocol and to IGC Code should be deemed to have been accepted on 1 July 2023 and enter into force on 1 January 2024.

MSC 104 had for its consideration a proposal for inclusion of a requirement in SOLAS for hinged doors of "quick-acting or single-action type". Having recognized that this proposal would require thorough consideration by the relevant expert Sub-Committee, MSC 104 invited further submission to a next meeting for agreement on a new output.

***Amendments to the LSA Code on ventilation requirements for totally enclosed lifeboats***

SSE 7 had prepared draft amendments to the LSA Code and the Revised recommendation on testing of life-saving appliances (MSC.81(70)) on new requirements for the ventilation of survival craft.

It had decided to postpone further consideration until the draft amendments to the Revised recommendation were complete, so that they could be submitted to the Committee for consideration as a package, together with the draft amendments to the LSA Code regarding ventilation requirements for survival craft, for approval.

In order to facilitate the discussion and accommodate the concerns about a delayed four-year cycle, MSC 104 considered a proposal by the Secretariat for the introduction of an ad hoc mid-term amendment cycle under the exceptional circumstances clause in the Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments (MSC.1/Circ.1481), i.e. entry into force on 1 January 2026 for the draft amendments to mandatory instruments under the purview of the Committee that have been adopted before 1 July 2024, in order to minimize the disruption to the amendment cycle caused by the COVID-19 pandemic.

MSC 104 agreed to an ad hoc midterm amendment cycle under exceptional circumstances in accordance with the Guidance (MSC.1/Circ.1481), i.e. entry into force on 1 January 2026 for the draft amendments adopted before 1 July 2024, and instructed SSE 8 to finalize its work on the draft amendments on new ventilation requirements, with a view to approval by MSC 106 and to advise MSC on the most suitable date of application of the amendments.

***Measures to improve domestic ferry safety***

MSC 104 has approved the Model Regulations on Domestic Ferry Safety. It has requested the IMO Secretariat to prepare a draft MSC resolution on adoption of the Model Regulations on Domestic Ferry Safety for consideration by MSC 105.

It is to be recalled that MSC 103 approved in principle the basic structure of the Model Regulations on Domestic Ferry Safety. It decided that regardless of the language used in the adopted set of Model Regulations, these would be recommendatory in nature, and it would be the prerogative of the countries concerned to adapt the provisions of the model regulations into their respective national legislation as deemed appropriate.

These model regulations provide framework provisions on domestic ferry safety for incorporation into national law; and are drafted in a way to enable easy translation and incorporation into national law. They may serve as a basis for intergovernmental agreements, whether multilateral, bilateral or regional.

***Goal based new ship construction standards***

MSC 104 agreed with the recommendations of the auditors and confirmed that the non-conformities of IACS common structural rules identified during the first GBS maintenance audit in 2018 had been duly rectified and that IACS CSR demonstrated continued conformance with the IMO's goal-based ship construction standards for bulk carriers and oil tankers.

In light of the time constraints, all other topics related to GBS were differed to MSC 105 whereby the Chair would prepare a document for submission to MSC 105, proposing what action should be taken in relation to the documents, for final consideration and decision by MSC 105.

***Cyber risk management for ships and ports***

MSC 104 was asked to take note of the IAPH Cybersecurity Guidelines for Ports and Port Facilities, and to consider promoting them as appropriate and referencing them in the next version of the Guidelines on maritime cyber risk management (MSC-FAL.1/Circ.3/Rev.1).

MSC 104 has requested the IMO Secretariat to update the industry guidance listed in paragraph 4.2 of MSC-FAL.1/Circ.3/Rev.1 to include the IAPH Cybersecurity, noting that such inclusion should not be taken to mean that the Committee had endorsed every detail, but rather recognized the helpfulness of the IAPH Guidelines and promoted their availability.

***Formal safety assessment***

MSC 101, having considered concerns from IACS on the risk matrix and risk assessment criteria in the Procedure for identifying safety issues developed by III 5, instructed the FSA Experts Group to review the criteria in the Procedure.

The FSA Experts Group agreed that the risk assessment criteria in the Procedure for identifying safety issues developed by III should be revised.

MSC 104 has noted the recommendations of the Group that the Revised FSA Guidelines may be amended at an appropriate time in the future, but that this does not warrant urgent action at this time.

***Draft international safety code for ships carrying industrial personnel (IP code)***

Report of HTW 7 highlighted that, in the provisions of the draft IP code, there were no requirements for crew members regarding crowd management training (as provided in section A-V/2, paragraph 3, of the STCW Code), taking into account that these ships could carry a large number of people (industrial personnel) and the risk of having to take actions promptly and coordinate an emergency situation.

Delegations shared the views of the submitters, to develop training for both seafarers working on board and industrial personnel working to close the gaps identified.

MSC 104 has instructed HTW 8 to consider this matter.

***Recognition of the Japanese QZSS as a component of the Worldwide Radionavigation System***

MSC 104 approved Recognition of the Japanese Quasi-Zenith Satellite System (QZSS), as a component of the Worldwide Radionavigation System.

***Draft amendments to SOLAS 1974 and related instruments concerning the modernization of the GMDSS***

MSC 104 has approved draft amendments to SOLAS chapters II-1, III, IV and V and consequential amendments to the 1988 SOLAS Protocol and the 1994 and 2000 HSC Codes.

MSC also approved, in principle a number of draft MSC resolutions, for adoption at MSC 105 in 2022:

* The promulgation and co-ordination of maritime safety information using high-frequency (HF) narrow-band direct-printing, by revising and superseding resolution A.699(17);
* The reception of maritime safety information and search and rescue related information by medium frequency (MF) by NAVTEX and HF equipment, by revising and consolidating resolutions A.700(17) and MSC.148(77), as amended;
* Search and rescue radar transponders, revising and superseding resolutions A.530(13) and A.802(19), as amended;
* Shipborne VHF, MF and HF radio installations capable of voice communication and digital selective calling, revising resolutions A.803(19), A.804(19) and A.806(19), as amended;
* Inmarsat-C ship earth stations capable of transmitting and receiving direct-printing communications, revising resolution A.807(19), as amended;
* Survival craft portable two-way VHF radiotelephone apparatus, revising resolution MSC.149(77);
* Shipborne integrated communication system when used in the GMDSS, revising resolution A.811(19);

In addition, from the date of entry into force of the related amendments to the 1974 SOLAS Convention, subject to the final adoption of the amendments and resolutions abovementioned by MSC 105, MSC 104 agreed, in principle, to:

* revoke resolutions: MSC.131(75), MSC.199(80) and MSC.247(83), and circulars: MSC/Circ.882, MSC/Circ.1038, MSC/Circ.1123, MSC.1/Circ.1382/Rev.2 and COMSAR/Circ.17;
* invite A 33 to revoke resolutions: A.334(IX), A.383(X), A.385 (X), A.421(XI), A.524(13), A.530(13), A.570(14), A.612(15), A.614(15), A.660(16), A.661(16), A.699(17), A.701(17), A.702(17), A.703(17), A.801(19), as amended, A.802(19), as amended, A.805(19) and A.814(19).

***VDR and S-VDR Performance standards***

MSC 104 has adopted:

* MSC.493(104) on Amendments to the Performance standards for shipborne simplified voyage data recorders (S-VDRs) (resolution MSC.163(78), as amended);
* MSC.494(104) on Amendments to the Performance standards for shipborne voyage data recorders (VDRs) (resolution MSC.333(90)).

***EPIRB-related guidelines***

MSC 104 approved:

* MSC.1/Circ.1039/Rev.1 on Guidelines for shore-based maintenance of emergency position-indicating radio beacons (EPIRBs);
* MSC.1/Circ.1040/Rev.2 on Guidelines on annual testing of emergency position-indicating radio beacons (EPIRBs).

***Model agreement for the authorization of ROs acting on behalf of an Administration***

MSC 102 and MEPC 75 had considered a draft MSC-MEPC.5 circular on Model agreement for the authorization of recognized organizations acting on behalf of the Administration proposing either the deletion of, or amendments to, paragraph 6.5.5 of the draft Model agreement to address vague and undefined expressions.

Having noted that the text of paragraph 6.5.5 of the draft Model agreement was identical to that of paragraph 5.3.2.4 of the recommendatory part 3 of the Code for recognized organizations (RO Code), both Committees had instructed III 7 to further consider the text of paragraph 6.5.5 only, taking into account the amended text proposed.

Having considered the relevant outcome of III 7 and having noted, in particular, that III had aligned paragraph 6.5.5 of the draft Model agreement with paragraph 5.3.2.4 of part 3 of the RO Code with respect to the scope of the ″statutory certiﬁcation and services″ as deﬁned in the RO Code, MSC 104 approved, subject to MEPC's concurrent decision, the draft MSC-MEPC.5 circular on Model agreement for the authorization of recognized organizations acting on behalf of the Administration.

***Remote surveys***

MSC 104 has agreed to include a new output on "Development of guidance on assessments and applications of remote surveys, ISM Code audits and ISPS Code verifications", in the biennial agenda of the III Sub-Committee for 2022-2023 and the provisional agenda for III 8, with a target completion year of 2024.

SDC 7 discussed IACS’ proposal of amendments to the 2011 ESP Code, allowing for the use of remote inspection techniques (RITs). While the use of RITs for survey sunder the 2011 ESP Code had been generally supported, SDC 7 decided that the matter required a broader consideration by the Organization, which might consider taking a holistic approach in regulating RITs.

MSC 102 discussed proposal for the development of guidance on the implementation of remote surveys.

A few limited survey items, such as review of documents, for which IMO instruments do not explicitly require the presence of surveyors, could have been verified utilizing a remote methodology without the surveyor's physical attendance. Thus, the need for discussion on remote surveys at the IMO level had not been significant in the past.

However, the recent advancement in information and communication technologies has resulted in situations that some recognized organizations (ROs), with the permission of their flag States, individually conduct remote surveys to enhance the efficiency of ship surveys. The trend is now being accelerated by the restrictions imposed by some governments on access to ships due to the COVID-19 pandemic.

In light of the lock-down caused by the COVID-19 pandemic, it was inevitable for some flag States and their ROs to carry out remote surveys as an alternative method to maintain the validity of certificates of their registered ships. Considering technical innovation, however, it is likely that the use and the scope of remote surveys will continue to expand even after the termination of the current pandemic.

Under such circumstances, the lack of uniform guidance on the remote surveys and the subsequent lack of understanding thereto by concerned parties, including surveyors, shipowners and shipboard crew, may bring about negative impacts on the quality of ship surveys and/or inspections, undermining the safety of ship and life at sea. Hence, after the end of the current pandemic or where it is found that the survey quality is compromised due to remote surveys, there may be room for controversy as to whether the remote survey is a valid and acceptable solution from the perspective of the port State control (PSC) regime.

Even though remote surveys may be further supplemented by the use of other modern technologies such as remote inspection techniques, the Republic of Korea is of the view that, based on "Guidelines for Use of Remote Inspection Techniques for Surveys" (IACS recommendation 42), from which the relevant text below is quoted, the term "remote survey" should be distinguished from the term "remote inspection technique".

The allowable methodology or scope of the remote survey, however, is neither defined in the IMO instruments nor has been openly discussed at the IMO level. In this regard, it is noteworthy that, in consultation with IACS, the Secretary-General issued Circular Letters No.4204/Add.19/Rev.1, 2 and 3 to provide the "Guiding principles for the provision of technical and implementation advice to flag States when considering whether to permit statutory certificate extension beyond three months".

***Maritime autonomous surface ship - MASS***

MSC 103 approved the outcome of the regulatory scoping exercise (RSE) for the use of MASS. Subsequently, the Committee invited Member States to submit output proposals on the best way forward to address MASS in the IMO regulatory framework, taking into account the outcome of the RSE.

Having noted the various submissions, MSC 104 has decided to include in the biennial agenda of the Committee for 2022-2023 and the provisional agenda for MSC 105 a new output on "Development of a goal-based instrument for maritime autonomous surface ships (MASS)", with a target completion year of 2025.

It has requested the Committee’s Chair to prepare, together with the IMO Secretariat, a road map, including scope, steps and timelines, as well as the coordination of work with other IMO bodies, for detailed consideration at MSC 105.

The first step in this new output would be the finalization of a road map to have a common understanding of the following steps, noting that the ultimate goal would be the preparation of a mandatory instrument to address MASS operations.

***Outcome of the second meeting of the International Quality Assessment Review Body (IQARB) in the trial phase***

MSC 104 has noted the information provided about the developments at IQARB's second meeting and requested the Secretariat to continue keeping it regularly updated on any developments during the trial phase.

***IMO/IACS cooperation on the IACS Quality System Certification Scheme (QSCS)***

MSC 104 has noted the information provided by the IMO observer on IACS QSCS concerning the developments in the Scheme during March 2019 to February 2021 and actions taken by IACS for promoting the IACS policy and objective of continued improvements to the Scheme.

The Committee requested the Secretariat to continue IMO's participation in IACS QSCS as per the current agreement between IMO and IACS and to provide a report to MSC 105.

***Ongoing work within IACS***

MSC 104 has noted the information on the work carried out on developing IACS requirements concerning the longitudinal strength requirement of large containerships and invited IACS to provide an update after finalization of this work, expected in late 2022.