

**IMO
MARITIME SAFETY COMMITTEE
105th SESSION
20 – 29 APRIL 2022**

The IMO Maritime Safety Committee held its 105th session (MSC 105) remotely from Wednesday 20 through Friday 29 April under the Chairmanship of Mrs Mayte Medinah (United States) and her Vice-Chair, Commander Theofilos Mozas (Greece). The session was attended by Members and Associate Members of IMO; representatives from the United Nations Programmes and specialized agencies; observers from intergovernmental organisations with agreements of cooperation; and observers from non-governmental organisations in consultative status.

Three Working Groups (WG) and one formal Drafting Groups (DG) were formed and chaired as follows:

WG 1. MASS, Mr H. Tunfors (Sweden).

WG 2. Cost implications for MSI and SAR information providers, Mr T. Ski (Sweden).

WG 3. Safety of ships relating to the use of fuel oil, Mr C. Allgeier (Germany).

DG 1. Amendments, Mr N. Boldt (Germany).

ADDRESS BY THE IMO SECRETARY-GENERAL. Mr Kitack Lim, Secretary-General of IMO welcomed delegates to the meeting. He stated that the global maritime community remains seriously concerned about the safety and welfare of seafarers, the safety of ships and the impact on shipping operations resulting from the ongoing Ukraine conflict. This was exemplified by the death of two seafarers, damage to numerous ships and their crew, ships stranded, and some lacking food, fuel, fresh water, medicines, and other vital supplies. The IMO Emergency Task Force formed to deal with the fall-out and furthering of decisions taken by the 35th extraordinary session of the Council, has worked tirelessly to address associated safety and security issues. However, efforts to establish a safe blue maritime corridor continue to be hampered by risks constraining the option for ships to depart safely from ports in Ukraine.

Switching tacks, Mr. Lim observed that there have now been more than two years of extraordinary sacrifices and challenges presented by the COVID-19 pandemic in which seafarers have been especially affected. The IMO Secretariat is dealing with the challenges presented by crew changes, vaccinations and access to healthcare by means of a multi-pronged approach, including policy development, direct interventions by the IMO Seafarer Crisis Action Team [SCAT], also interagency and industry partnerships. New high-level initiatives are currently commencing within the UN, where an ad-hoc interagency task-force and joint action group have been established with participants from ILO, WHO, ICAO, IMO and relevant social partners seeking to review the true impact of COVID-19 on the world's maritime transport workers and the global supply chain.

Stating that IMO is actively pursuing a transition of the shipping sector into a sustainable greener future, he revealed that such a commitment is reflected in this year's World Maritime Theme: "New technologies for greener shipping". This will permit delving into specific topics related to innovation and the uptake of new technologies by focusing on the importance of clean maritime transport and the need to build back better and greener in a post-pandemic world.

Turning to some of the items on the agenda for this session, the Secretary-General lauded the successful conclusion of the regulatory scoping exercise on MASS and urged delegates to finalise a road map for the work to be carried out at this session so that a goal-based mandatory MASS Code can be adopted in 2025.

Concerning maritime security, he observed that global trends relating to piracy and armed robbery against ships have continued to fall, notably in the Gulf of Guinea, down from 90 incidents in 2020 to 38 in 2021. He also noted that UN Security Council Resolution 2608 (2021) authorising Member States to provide naval assets off the coast of Somalia expired on 31 March 2022, thus giving further cause for ships in that area to remain vigilant by setting appropriate security levels in accordance with the ISPS Code.

Completion of work on Model Regulations for domestic ferry safety by providing a suitable framework to ensure safe operation is also expected to complete at this session and which can be adapted by countries as necessary to suit national conditions and requirements. A Working Group will be established with the aim of finalising draft SOLAS amendments addressing the reporting of confirmed cases where fuel oil suppliers have failed to meet the flashpoint requirements, also action in confirmed cases of oil fuel deliveries not complying with the flashpoint requirements and documentation of the flashpoint of the actual fuel batch.

Offering best wishes to all for a productive session, he expressed hope for progress on the other substantive items on the agenda, such as:

- Amendments to mandatory and non-mandatory instruments, particularly those addressing GMDSS modernisation;
- Goal-based new ship construction standards; and,
- Actions requested of MSC emanating from the reports of several sub-committees.

DECISIONS OF IMO BODIES. The outcome of TC 71, C/ES.34, MEPC 77 and C 126 and decisions relevant to its work were noted by the Committee, which then agreed to take them into account under the relevant agenda items. Of particular note, the outcome of C/ES.35 and LEG 109 regarding the armed conflict between Russian Federation and Ukraine and any action the Committee wished to take in this regard were discussed under this item.

Ongoing military conflict between the Russian Federation and Ukraine and its effect on international shipping and seafarers. The Committee had for consideration, documents submitted to MSC by Ukraine, also the Russian Federation, relevant to the outcome of C/ES.35 and LEG 109. Two further late submissions were accepted (within the Committees rules of procedure) as exceptional cases: MSC 105/18/3 (Ukraine), inviting the Council and the Committee to take further action to address the ongoing armed conflict and its effect on shipping; and MSC 105/2/5 (Brazil et al) requesting urgent action regarding the evacuation of seafarers and ships from Ukrainian ports and additional ways to enhance the efforts to establish maritime safe corridors.

In considering the outcome of C/ES.35, it was noted that the Council had:

- Requested IMO committees to consider ways to enhance efforts towards supporting affected seafarers and commercial vessels, whilst considering the implications for the implementation of IMO instruments;
- Agreed to encourage establishment of a blue safe maritime corridor to allow the safe evacuation of seafarers and ships from the high-risk areas in the Black Sea and Sea of Azov; and,
- Invited the IMO Secretary-General to collaborate with the relevant parties towards initiation and implementation of such a corridor.

In this regard, the Secretary-General informed the Committee that he had written to the Ministers of Foreign Affairs of the Russian Federation and Ukraine, and to the littoral States, to share ideas on the establishment of a Blue Safe Maritime corridor. The Russian Federation claimed that it had instituted a humanitarian corridor to provide for the safe evacuation of ships once outside the territorial waters of Ukraine although in a separate briefing by the Special Advisor of the Secretary-General on Maritime Security, nothing was guaranteed between the port and the corridor commencement at the seaward end of territorial waters, leaving ships to 'run the gauntlet'.

In considering the impacts on shipping and seafarers of the ongoing military conflict, LEG 109:

- Included a new sub-item on the "Impact on shipping and seafarers of the situation in the Black Sea and Sea of Azov" in its agenda; and,
- Approved the *Guidance on the impact of the situation in the Black Sea and the Sea of Azov on insurance or other financial security certificates*.

The Committee considered the two late submissions, MSC 105/18/3 (Ukraine), suggesting a number of actions to address the impacts of the armed conflict on shipping, and MSC 105/2/5 (Brazil et al), requesting a number of actions to address the safety and security of ships and seafarers caught up in the conflict.

In the ensuing debate, many [polarised] views were expressed essentially by two factions, namely the Russian Federation, China and the Democratic Republic of Korea versus the remainder of the 110 delegations represented at the meeting, a number of whom did not take the floor on either side of the debate. Thirty-four delegations made statements and in respect of the Ukraine and Brazil et al submissions, the Committee noted, inter alia, the following views:

- Support for an MSC resolution;
- Urgency given to the establishment of safe maritime corridors and efforts to support safe evacuation of merchant ships and their crew;
- Any consequent amendments to the III Code and the IMO Member State Audit Scheme (IMSAS) needs to be considered very carefully;
- The Secretary-General should continue to seek assistance from other international organisations;
- In all actions to be taken, the mandate of the Committee needs to be respected.

Following the discussion, the Committee:

- Urged the Secretary-General and the Secretariat to continue their efforts regarding the establishment of safe maritime corridors and the safe evacuation of seafarers from the affected area as a priority;
- Established an ad hoc Drafting Group to craft an MSC resolution, taking into account the outcome of C/ES.35 and comments and decisions made in plenary, for consideration by the Committee; and,
- Invited the Council to consider the issue of reports on State's armed interference in maritime shipping, including ships, ports and security systems, and development of guidance relating to the prevention of such interference. Also, to consider the need for including any procedural matters in the conduct of audits under IMSAS.

Having received the report of the ad hoc Drafting Group, there was another lengthy discussion, with the overwhelming majority of the delegations that spoke supporting the adoption of the resolution as drafted. However, a small number of Member States expressed a litany of concerns, following which the Committee agreed that the Chair, in consultation with the Secretariat, would review the text of the draft resolution (MSC 105/WP.12) with a view to checking consistency of the terminology used, in respect to the decisions of C/ES.35 and the UN General Assembly Resolutions.

A revised draft resolution was subsequently presented to the Committee, including only minor editorial changes. However, the small number of Member States reiterated their previous concerns that:

- The purpose of the resolution was to facilitate the evacuation of seafarers and the main text of the draft resolution did not support this;
- It did not examine the issue of the blue safe corridor already established by the RF, and this needed to be considered as requested by C/ES.35;
- It contains inaccurate facts and exceeds the Organisation's mandate;
- It is not clear whether the UNCTAD report wording is consistent with the actual wording of the report, similarly with that of the UN General Assembly resolutions which should be checked;
- The term "war zones" is still being used and needs amending; and,
- Paragraph 5 implies that the evacuation of commercial ships and seafarers requires a ceasefire and withdrawal of RF forces from the region, which contradicts the fact that such evacuations have already taken place and could imply that no attempts at such evacuations should take place until a ceasefire and the withdrawal of the RF forces takes place.

The delegation of the RF specifically requested that the following views be reflected in the report:

- The draft resolution contains a number of terms which go beyond the UNGA resolutions, e.g. "war zone", "zone of hostilities";
- The draft resolution contains incorrect factual statements, e.g. shelling of ships;
- The reference to a naval blockade is inaccurate because a number of commercial vessels have safely been evacuated from the Sea of Azov by the RF;

- The reference to the global supply chain is not appropriate due to the unilateral sanctions imposed upon the RF;
- Operative paragraphs go beyond the remit of the DG; this was about the safe and secure evacuation of seafarers and ships, not what was called for under operative paragraph 5; and,
- That the RF cannot see the purpose of the resolution as drafted.

Given that the overwhelming majority of members continued to support the revised draft resolution, the Committee approved it in general and adopted resolution MSC.495(105) on *Actions to facilitate the urgent evacuation of seafarers from the war zone area in and around the Black Sea and the Sea of Azov as a result of the Russian Federation aggression against Ukraine.*

CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS.

Following a general discussion, the Committee established the Drafting Group (DG) on Amendments to Mandatory Instruments and instructed it, taking into account comments made and decisions taken in plenary, to prepare the final text of the documents listed in their terms of reference. Having considered the DG report, the Committee approved it in general and took action as follows:

- Adopted draft MSC resolutions on amendments to the 1974 SOLAS Convention, the 1988 SOLAS Protocol, the 1994 and 2000 HSC Code, the IMSBC Code, the IMDG Code, the 1983 and 2008 SPS Code, the 1979, 1989 and 2009 MODU Code;
- Adopted the draft MSC resolution on Performance standards for the promulgation and coordination of maritime safety information (MSI) using high-frequency narrow-band direct-printing;
- Adopted the draft MSC resolution on Performance standards for the reception of MSI and SAR related information by MF (NAVTEX) and HF;
- Adopted the draft MSC resolution on Provision of radio services for the Global Maritime Distress and Safety System (GMDSS);
- Adopted the draft MSC resolution on Performance standards for SAR radar transponders;
- Adopted the MSC resolution on Performance standards for shipborne VHF radio installations capable of voice communication and digital selective calling ;
- Adopted the draft MSC resolution on Performance standards for shipborne MF and MF/HF radio installations capable of voice communication, digital selective calling and reception of MSI and SAR related information;
- Adopted the draft MSC resolution on Performance standards for Inmarsat-C ship earth stations capable of transmitting and receiving direct-printing communications;
- Adopted the draft MSC resolution for the avoidance of false distress alerts;
- Adopted the draft MSC resolution on Performance standards for survival craft portable two-way VHF radiotelephone apparatus;
- Adopted the draft resolution on Amendments to the *Performance standards for radiocommunication equipment*;
- Adopted the draft MSC resolution on Performance standards for a shipborne integrated communication system (ICS) when used in the GMDSS;

- Approved the draft MSC.1/Circ.803/Rev.1 on Participation of non-SOLAS ships in the GMDSS and guidance on the development of training materials for GMDSS operators on non-SOLAS ships;
- Approved the draft MSC circular on Guidance for the reception of MSI and SAR related information as required in the GMDSS;
- Approved the draft MSC.1/Circ.1600/Rev.1 on Guidance for conducting the refined MHB (CR) test;
- Approved the draft MSC.1/Circ.1395/Rev.5 on Lists of solid bulk cargoes for which a fixed gas fire-extinguishing system may be exempted or for which a fixed gas fire-extinguishing system is ineffective;
- Approved the draft MSC circular on Amendments to the *Revised emergency response procedures for ships carrying dangerous goods*;
- Approved the draft MSC.1/Circ.1361/Rev.1 on Revised recommendations on the safe use of pesticides in ships applicable to the fumigation of cargo transport units;
- Agreed the Group's assessment that there are no capacity-building implications nor a need for technical cooperation and assistance at this stage resulting from the amendments to the mandatory instruments submitted for adoption at this session;
- Noted the Group's view that re-assessment of the capacity-building implications and technical cooperation and assistance needs of the amendments to SOLAS and HSC could be required when new equipment/system (e.g. NAVDAT and VDES) are introduced in the future;
- Noted the Group's discussion on undertaking the assessment of capacity-building implications;
- Approved the draft amendments to the appendix to the annex to the 1978 SOLAS Protocol and draft MSC resolution with a view to adoption at MSC 106;
- Noted Group consideration concerning modification of the draft Record of Equipment for the Industrial Personnel Safety Certificate (Form IP) and invited submissions to MSC 106 for further consideration of the matter; and,
- Authorised the Secretariat to effect any minor editorial corrections that may be identified.

MEASURES TO IMPROVE DOMESTIC FERRY SAFETY.

The Committee recalled that MSC 104 had approved the draft Model Regulations on Domestic Ferry Safety with a view to adoption at this session. In this regard, having considered document MSC 105/4 (Secretariat) containing the draft MSC resolution on adoption of the Model Regulations on Domestic Ferry Safety, there was general support for the adoption of the Model Regulations, which could be voluntarily and practically incorporated into national legislation, in order to reduce accidents related to domestic ferry safety. Subsequently, the Committee adopted the resolution on *Model Regulations on Domestic Ferry Safety* and invited the Technical Cooperation Committee to assist with the development of an explanatory manual for the model regulations and related online training material.

DEVELOPMENT OF FURTHER MEASURES TO ENHANCE THE SAFETY OF SHIPS RELATING TO THE USE OF FUEL OIL.

Background. It was recalled that MSC 103 re-established the Correspondence Group on Development of Further Measures to Enhance the Safety of Ships Relating to the Use of Fuel Oil and submit its report to this session.

Outcome of MEPC 77. MEPC 77 invited the Committee to note the status of its work in relation to flashpoint of fuel oil, in particular that:

- Concerning a proposed amendment to appendix to MARPOL Annex VI to include flashpoint as mandatory information in the bunker delivery note, it was deemed preferable to await MSC's deliberations; and,
- With regard to updating and improving the MARPOL Annex VI GISIS module, the Secretariat was requested to proceed with the recommended improvements, which included the addition of a voluntary checkbox for flashpoint in the regulation 18.9.6 tab of the module.

Report of the Correspondence Group. The Committee noted the CG report, together with two documents commenting on the report, one by IBIA (MSC 105/5/1) and the other by China (MSC 105/5/2).

Establishment of the Working Group. Following discussion in plenary, the Committee established the WG and furnished it with appropriate terms of reference.

Report of the Working Group. Having considered the WG report (MSC 105/WP.10), the Committee approved it in general and in particular:

- Approved the draft amendments to SOLAS chapter II-2 in relation to flashpoint;
- Noted the WG's deliberations on the draft guidelines for ships for ships to address situations where they have indicative test results suggesting that the oil fuel supplied may not comply with flashpoint requirements;
- Noted the deliberations of the WG on measures related to oil fuel parameters other than flashpoint;
- Invited interested Member States and international organisations to work with ISO on the matters of repeatability and reproducibility values for the fuel flashpoints;
- Endorsed the revised action plan for measures to enhance the safety of ships relating to the use of oil fuel;
- Invited MEPC 78, as a matter of urgency, to note the draft SOLAS amendments with regards to flashpoint and the revised action plan for developing measures to enhance the safety of ships related to the use of oil fuel; and,
- Re-established the CG on Oil Fuel Safety to which interested Member States were invited to nominate fuel oil experts for participation in the Group and instructed the coordinator (Germany) to submit a written report to MSC 107.

GOAL-BASED NEW SHIP CONSTRUCTION STANDARDS.

Documents not considered at previous sessions due to lack of time, were subsequently dealt with by correspondence. The Committee noted that the Secretary-General had received requests to conduct the third maintenance audit from all 13 ROs (Recognised Organisations) currently verified against the GBS.

DEVELOPMENT OF A GOAL-BASED INSTRUMENT FOR MARITIME AUTONOMOUS SURFACE SHIPS.

Background. The Committee recalled that MSC 103 had approved the outcome of the regulatory scoping exercise (RSE) for the use of MASS, providing an assessment of the degree to which the existing regulatory framework under the purview of the Committee might be affected in order to address the MASS operations; and guidance to the Committee on how to identify, select and decide on future work on MASS so as to facilitate the preparation of, and requests for, new outputs.

It was also recalled that LEG 108 had completed its RSE and that the Intersessional WG on MASS established by the Facilitation Committee finalised its RSE with a view to approval at FAL 46 in May 2022. Further, MSC 104 had agreed to include in the 2022-2023 biennial agenda of this session, a new output on “Development of a goal-based instrument for MASS” with a target completion year of 2025 and that finalisation of a road map would be necessary to have a common understanding of the work to be undertaken.

Development of a goal-based MASS instrument. Seven documents were submitted in respect of this item which led to a discussion of the draft road map and in particular as to whether the work should be commenced on a mandatory or non-mandatory Code. Also debated was the scope of work on MASS, e.g. cargo ships (leaving out passenger ships for the time being) or encompassing all ships operating autonomously.

Establishment of a Joint MSC-LEG-FAL Working Group. Document MSC 105/7/4 submitted by the Chairs of MSC, LEG, and FAL proposed the establishment of a Joint MSC-LEG-FAL Working Group on MASS to consider common gaps and themes identified during the RSEs conducted by the three committees. Additionally, the United Arab Emirates proposed the development of a comprehensive IMO road map, taking into account the maps developed by the three committees.

MASS Working Group. Having established the MASS WG and given appropriate instructions in addition to taking account of comments and decisions made in plenary, the WG completed its deliberations and rendered its report. The Committee approved the report in general and in particular:

- Noted that in spite of the short period for gaining experience in the application of a non-mandatory Code, the Group agreed to work towards the entry into force of a mandatory MASS Code by 1 January 2028;
- Noted that the draft road map should be considered as a living document for updating and modification at future sessions of the Committee;
- Approved the road map for developing a goal-based Code for MASS

- Agreed to the holding of the first meeting of the Joint MSC/LEG/FAL MASS Working Group remotely from 6 to 8 September 2022 subject to concurrent approval by FAL 46 and C 127;
- Agreed to the terms of reference for the Joint WG;
- Noted the lack of agreement on a base document for development of the Code at this session but that all relevant documents submitted to MSC 105 would be submitted to the intersessional correspondence group;
- Established an intersessional correspondence group having approved the group's terms of reference;
- Agreed that the intersessional group should submit a written report to MSC 107 and the group coordinator provide an oral status report to MSC 106; and,
- Authorised virtual meetings of the intersessional group.

Establishment of a MASS Correspondence Group. In considering whether to establish an intersessional CG, the Committee noted several concerns regarding the limitation in the draft terms of reference to initially focus on developing provisions for cargo ships only, with a view to considering application to passenger ships at a future stage. In recalling its earlier decision, the objection was dismissed by the Chair, following which the MASS CG was established under the coordination of the Marshall Islands having received the group's terms of reference.

ITEMS DEFERRED TO FUTURE SESSIONS.

Due to time constraints, the Committee postponed consideration of the following items and their associated submissions:

- Measures to Enhance Maritime Security;
- Piracy and Armed Robbery against Ships;
- Unsafe Mixed migration by Sea; and,
- Formal Safety Assessment.

COST IMPLICATIONS FOR MSI AND SAR INFORMATION PROVIDERS CONCERNING THE RECOGNITION OF MULTIPLE GMDSS MOBILE SATELLITE SERVICES.

The Committee considered document MSC 105/12 by Australia presenting the report of the intersessional CG, including conclusions and recommendations related to:

- The mandatory use of all recognized mobile satellite services (RMSSs) that provide services within the service area for dissemination of information by Maritime Safety Information (MSI) and search and rescue (SAR) information providers; and,
- Options to address cost implications for information providers concerning the dissemination of information over multiple RMSSs.

A further five documents commenting on the CG report were also considered along the above lines as follows.

Mandatory use of all recognized mobile satellite services. The Committee debated the mandatory use of all RMSSs that provide services within a specific service area for the purpose of disseminating MSI and SAR related information to ships navigating within those areas, taking into account the relevant part of the CG report and commenting documents. A number of delegations did not agree with the conclusion and recommendation of the CG that the Committee should confirm the mandatory use of all recognised services by information providers, and averred that such recognition did not necessarily guarantee a better service to the mariner.

Following a robust discussion, the Committee:

- Acknowledged the efforts and contribution of NAVAREA and METAREA Coordinators and SAR authorities to provide timely information to ships;
- Agreed that dissemination of MSI and SAR related information was an integral service of the GMDSS and critical to preserving the safety of life at sea and, once recognized by the Organisation, must be used by all information providers covering its service area;
- Instructed the NCSR Sub-Committee to continue considering technical solutions for the dissemination and reception of MSI and SAR related information over multiple services, including interoperability issues and broadcast monitoring, with a view to addressing the operational and financial burden of disseminating the information to ships;
- Urged MSI and SAR information providers to expedite the use of all mobile satellite services recognized by the Organisation, to keep the information updated in the GMDSS Master Plan module of GISIS; and,
- Also instructed NCSR to consider any necessary amendments to existing MSI related instruments, including SOLAS, in order to clarify the understanding of dissemination of information through all recognized mobile satellite services.

Options to address cost implications for information providers. With regard to options in addressing cost implications for information providers concerning the dissemination of information over multiple RMSSs as reported by the CG, the Committee referred the matter to the WG for further consideration and advice, as appropriate.

Report of the Working Group. The Committee approved the report of the WG in general and took action as follows, starting with the general consideration of the report, when the following comments were made:

- The Group had given only initial consideration to the options to address cost implications. More work would still be required which could include a combination of several options;
- NCSR should be instructed to consider cost options, identify advantages and disadvantages and provide a scoring;
- Consideration of options should continue in parallel with technical considerations; however, the scoring of options would not favour coastal States responsible for dissemination of MSI and SAR related information, in particular developing countries;

- The need to prioritise consideration of technical issues, including interoperability and interconnectivity issues, was emphasized;
- While the importance of safety of life at sea was recognized, information providers should not be made responsible for bearing additional costs due to the recognition of new mobile satellite services;
- It was important to note the offer by Iridium that they will continue to defer charging MSI information providers facing financial difficulties until the cost issues are resolved; and,
- While the offer by Iridium is greatly appreciated, it is just a temporary measure. Recalling previous decisions of the Committee, the Chair stated that this is not a political issue, rather an issue of safety of life at sea that has technical and financial implications.

Noting that the WG had not been able to conclude on any particular option to address cost implications for MSI and SAR information providers concerning the dissemination of information over multiple RMSSs, the Committee:

- Invited information providers to explore cost reduction options, taking also into account the offer by Iridium;
- Invited Member States, if necessary, to request technical assistance from the IMO Secretariat, as appropriate;
- Invited active participation at NCSR 9 concerning technical solutions for the dissemination of MSI and SAR related information over multiple RMSSs, including interoperability and interconnectivity issues;
- Also invited interested parties to actively participate in further deliberations on cost implications, including financial assistance and considering the need, if necessary, to establish a mandatory fund;
- Invited RMSS providers to make technical presentations at NCSR 9;
- Agreed that resolution A.707(17) should be revised, taking into account current RMSSs and anticipate the recognition of services by further providers;
- Referred document MSC 105/12/3 (China) to NCSR 9 for technical consideration, as appropriate, including the addressing of interconnectivity issues; and,
- Did not approve “scoring” options.

IMPLEMENTATION OF IMO INSTRUMENTS.

The Committee recalled that MSC 104 had considered matters emanating from III 7 and approved in general, the report of the seventh session, taking action as indicated below.

Extension of the mandatory carriage requirement for electronic inclinometers.

Noting that this output is already on the agenda of NCSR 9, the Sub-Committee was instructed to consider the proposed extension to the mandatory carriage of electronic inclinometers to all SOLAS ships of more than 3.000 GT. The decision by MSC 101 that the new mandatory requirements should not apply retroactively to existing ships was re-affirmed.

Interim guidance on control and compliance measures to enhance maritime security. The Sub-Committee was authorized to review this guidance with a view to inclusion as a new appendix to the *Procedures for port State control* in a future version .

Analysis of consolidated audit summary reports (CASRs). With regard to the analysis of the four CASRs under the IMO Member State Audit Scheme (IMSAS), the Committee, subject to concurrent decision by MEPC 78:

- Endorsed the outcome of the analysis on the four CASRs regarding the five main areas of recurrent findings and highest numbers of references recorded against the specific provisions of mandatory IMO instruments, and four main causal areas;
- Initiated a review of the appropriateness and effectiveness of the identified provisions, notably SOLAS regulation IV/5 (Provision of radiocommunication services) to NCSR, SOLAS regulation XI-1/6 (Additional requirements for the investigation) to III, and STCW regulations 1/7 (Communication of information) to HTW;
- Referred an identified 10 provisions to TCC for consideration of possible additional technical assistance;
- Concurred with the format of the tracking log provisions recommended by the Committees and the format of the overall feedback; and,
- Agreed to report to the Council on the outcome of the Committees' consideration of the four CASRs.

List of certificates and documents required to be carried on board ships, 2022. The Committee approved, concurrently with LEG 109 and subject to concurrent decision by MEPC and FAL, the draft joint circular FAL.2-MEPC.1-MSA.1-LEG.2 on *List of certificates and documents required to be carried on board ships, 2022*, noting that the items related to amendments to MARPOL Annexes I, IV and VI regarding measures to reduce carbon intensity of international shipping and unmanned non-self-propelled (UNSP) barges, are in square brackets pending acceptance of the associated amendments to MARPOL Annexes I, IV, and VI.

Alignment and integration of actions in favour of both seafarers and fishers. This stems from the fact that both seafarers and fishers are often confronted with the same kinds of problems, which have become even more serious in the context of COVID-19.

CARRIAGE OF CARGOES AND CONTAINERS.

Report of CCC 7. The Committee approved, in general, the report of the seventh session of the Sub-Committee on Carriage of Cargoes and Containers, most notably:

- Approved an MSC circular on *Interim guidelines for the safety of ships using fuel cell power installations*;
- With regard to the application of high manganese austenitic steel for cryogenic service, the Committee approved draft amendments to: the IGC and IGF Codes; an MSC circular on *Amendments to the 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; also, an MSC circular on Revised guidelines on the application of high manganese austenitic steel for cryogenic service.

Guidelines for the implementation of inspection programmes for cargo transport units (CTUs). The Committee approved an MSC circular on *Guidelines for the implementation of inspection programmes for CTUs*. Having noted a statement by WSC appreciating IMO's involvement in the International Plant Protection Convention (IPPC)'s activities regarding container cleanliness, the Committee reiterated the importance of IMO's involvement in the work of IPPC regarding the pest risks associated with the movement of CTUs and their cargoes.

Unified interpretations of the IGC Code. The Committee approved an MSC circular on *Amendment to MSC.1/Circ.1625 on Unified interpretations of the IGC Code*.

Development of safety requirements to support achievement of the decarbonisation goal. Two documents were submitted under this item by IACS, both discussing an approach to address the multidimensional challenge posed by the pace of development of technology, decarbonisation ambition and the necessary detailed requirements and regulations to deliver a safe zero-CO₂-emitting ship.

Following discussion, CCC 8 was instructed to further consider the two IACS documents and matters related to the development of safety requirements to support the achievement of the decarbonisation goal, in the context of its work on the development of the IGF Code and safety provisions for alternative fuels, advising the Committee on how best to proceed.

SHIP DESIGN AND CONSTRUCTION.

Report of the eighth session of SDC. The Committee approved, in general, the report of the eighth session of SDC and took action as indicated hereunder.

New SOLAS chapter XV. The Committee approved the draft new SOLAS chapter XV on *Safety measures for ships carrying industrial personnel*, making the new draft International Code of Safety for Ships Carrying Industrial Personnel (IP Code) mandatory.

New International Code of Safety for Ships Carrying Industrial Personnel (IP Code). Having approved the new SOLAS chapter XV, the Committee considered the associated (IP Code) draft MSC resolution and agreed to incorporate consequential changes to the draft Record of Equipment for the IP Code Certificate (Form IP) by deleting the carriage requirements for radio installations, SAR locating devices and two-way VHF apparatus following the adoption of amendments to SOLAS certificates.

Having considered the advice of the Drafting Group (DG 1) concerning IP Code Certificates, the Committee approved, in principle the draft resolution on *Adoption of the International Code of Safety for Ships carrying Industrial personnel (IP Code)* with a view to adoption in conjunction with the associated SOLAS chapter XV.

Explanatory notes to the interim guidelines on the second generation intact stability criteria. Having approved the Explanatory Notes, the Committee noted that while the work under the related output had been completed, SDC 8 had invited all involved to further study the application of the Interim Guidelines.

Draft amendments to the 2011 ESP Code. These were approved by the Committee.

Correspondence Group on Revision of the 1979, 1989 and 2009 MODU Codes. The Committee noted a request by a significant number of delegations to replace the Russian Federation as the coordinator of the CG on Revision of the MODU Codes established at SDC 8, since the ongoing conflict between the Russian Federation and Ukraine impeded the continuation of business as usual. The Russian Federation, supported by a number of delegations, expressed the opinion that coordinators of CGs, as well as Chairs of other technical bodies, were selected based on their skills and proficiency in the subject matter, regardless of nationality, and replacing them at this stage would impact negatively on the delivery of the mandate. They also highlighted that political considerations should not drive the decisions of IMO, as a specialized technical agency. Notwithstanding this line of reasoning and given the views of the great majority of delegations, the Committee instructed the Secretariat to identify a suitable alternative coordinator.

HUMAN ELEMENT, TRAINING AND WATCHKEEPING.

Urgent matters emanating from HTW 8. The Committee considered urgent matters emanating from HTW 8 and took action as follows.

Intersessional drafting groups for model courses. The Committee approved the holding of virtual meetings of three drafting groups to take place during 2022, to consider draft model courses for validation at HTW 9, subject to Council's endorsement.

Holistic approach on the human element. The Committee invited all relevant IMO bodies to assess their respective involvement in the human element within their remit and report back to the Committee with a view to devising an outline for a holistic approach on the human element, taking into account resource and budgetary implications within the Organisation.

Revised checklist for considering and addressing the human element. The Committee approved the draft revised checklist for considering and addressing human element issues and associated draft amendments to the Organisation and method of work of the MSC and MEPC and their subsidiary bodies subject to the concurrent decision of MEPC 78.

Coordination of the Correspondence Group on Maritime Training. The Committee noted a request by a significant number of delegations to replace the Russian Federation as coordinator of the CG on Maritime Training established at HTW 8, employing the same argument as that for replacing the coordinator of the MODU Codes. In this instance, taking into account that only urgent matters emanating from HTW 8 had been considered

at this session, the Committee agreed that the current coordinator of the CG on Maritime Training would continue their work until MSC 106, when the full report of the Sub-Committee will be considered.

Terms of reference of the Joint ILO/IMO Tripartite Working Group (JTWG) to identify and address seafarers' issues and the human element and related documents. The Committee noted that the first meeting of the JTWG, expected to take place during the second half of 2022, will deal with the guidelines for port State and flag State authorities on how to deal with seafarer abandonment cases and a second meeting, on the issue of fair treatment of seafarers detained on suspicion of committing maritime crimes, will take place in 2024. Having considered document MSC 105/2 (Secretariat) providing the terms of reference (TORs) of the JTWG, it was noted that, as this is a multi-committee group, the Council should be invited to nominate IMO's eight Government representatives, taking into account that all IMO Members may attend as observers.

The Committee approved the method of work and TORs of the JTWG to identify and address seafarers' issues and the human element, subject to endorsement by the Council. Related documents considered by the Committee were submitted by Australia et al and France et al. The former proposed mandating the JTWG to consider sexual assault and harassment in the maritime sector whilst the latter proposed implementation of mechanisms for the notification and control in cases of bullying and harassment. Having recognised the need for joint action with ILO to tackle bullying and harassment in the maritime sector, including sexual assault and sexual harassment, with the objective of ensuring a safe workplace, the Committee proposed a suitable form of words to convey this sentiment for endorsement by the Council. Member States and international organisations were then invited to submit relevant information on these matters directly to the JTWG.

Proposed amendments to Model Course 1.21. The Committee considered document 105/16/4 (Domenica et al.) proposing a revision of Model course 1.21 to include elements of psychological safety, to deal with trauma and trauma response, and to seek an increase in priority for a comprehensive revision of the course. In discussion, a number of views were expressed following which, taking into account the actions already prescribed in relation to the JTWG of identifying and addressing seafarers' issues and the human element, the Committee:

- Confirmed that the JTWG should consider the development of training provisions addressing bullying and harassment in the maritime sector, including sexual assault and sexual harassment; and,
- Instructed the HTW Sub-Committee to develop and finalise, as a matter of priority, STCW training provisions addressing bullying and harassment in the maritime sector, including sexual assault and sexual harassment, as part of the new output on "Comprehensive review of the 1978 STCW Convention and Code" approved at this session, taking into account the work to be done in coordination with the JTWG.

Approval of competent persons. In brief, one competent person was nominated by the UK and accepted whilst three former competent persons from Liberia were withdrawn.

WORK PROGRAMME.

Proposals for new outputs. The Committee recalled that, owing to time constraints, MSC 104 did not consider 20 proposals for new outputs, deferring them to this session. The following decisions were made:

- Revision of paragraphs 6.5.1 and 6.5.5 of the 2009 MODU Code – Approved, assigned to SSE;
- Enclosed spaces containing a nitrogen receiver or a buffer tank of nitrogen generator systems – Approved, assigned to SSE;
- Review and update of SOLAS regulation II-2/9 on containment of fire – Approved, assigned to SSE;
- Guidelines for the use of Electronic Nautical Publications (ENPS) – Approved, assigned to NCSR;
- Comprehensive review and revision of the 1978 STCW Convention and Code – Approved, assigned to HTW;
- Standardised digital exchange of vessels' route plans – The Committee agreed to include in its post-biennial agenda an output on “Amendments to the revised ECDIS performance standards to facilitate a standardised digital exchange of ships route plans”, assigning the task to NCSR;
- Traditional and non-traditional propulsion and steering systems – Approved, assigned to SSE as the coordinating organ, in association with NCSR and SDC;
- Safety of ships using ammonia as fuel, Approved – assigned to CCC;
- Carriage of liquefied hydrogen in bulk – The Committee agreed to include in the biennial agenda for CCC 8 an output on “Revision of the interim recommendations for carriage of liquefied hydrogen in bulk”;
- Seafarers' hours of work and rest hours, and fatigue – The Committee agreed to include in its post-biennial agenda an output on “Scoping exercise and enhancement of the effectiveness of provisions on fatigue and seafarers' hours of work and rest”, assigning HTW with follow-up actions in coordination with ILO;
- Upgrading VDR on existing ships – Not approved;
- Standards for Mobile Offshore Wind Power Service Operation Units – Not approved;
- Mandatory root cause investigation – Approved, assigned to III;
- Revision of the Guidelines for the application of plastic pipes on ships (resolution A.753(18)) – Approved, assigned to SSE;
- Fire risk of ships carrying new energy vehicles – Following discussion, the Committee agreed to include in its post-biennial agenda an output on “Evaluation of adequacy of fire protection, detection and extinction arrangements in vehicle, special category and ro-ro spaces in order to reduce the fire risk of ships carrying new energy vehicles” – Assigned to SSE; and,
- Postponement of outstanding proposals and future proposals for new outputs – A total of six more proposals for new outputs originally received at MSC 104 and from III 7 to MSC 106 had to be postponed due to time constraints.

Intersessional meetings. The Committee approved, subject to endorsement of the Council, the holding of:

- An intersessional meeting of the E&T Group for the IMSBC Code in 2022 to take place immediately after CCC 8;
- Virtual meetings of three drafting groups during 2022, to consider draft model courses for validation at HTW 9;
- An intersessional working group on revision of SOLAS chapter III and the LSA Code, to finalise the draft risk indexing and scoring as well as further developing the hazard identification matrix reporting to SSE 9; and,
- A meeting of the Joint MSC-LEG-FAL MASS Working Group.

ANY OTHER BUSINESS.

The Committee recalled that MSC 104 had considered, under this agenda item, documents related to:

- The impact of the COVID-19 pandemic on safety-related matters;
- Assembly-related matters; and,
- Matters emanating from MSC 102 and MSC 103 postponed for consideration at MSC 104, but had postponed consideration of ISO matters, as well as all remaining documents submitted to MSC 104 to this session.

Matters postponed by MSC 104. Having recalled that proposed actions on matters postponed by MSC 104 for consideration at this session had been arranged by correspondence, and having noted that the proposed actions had been approved under the opening agenda item, the Committee took action as outlined below.

Preventing the loss of containers at sea. The Committee noted the information in document MSC 104/17/4 (Austria et al.) and invited Member States to participate in the joint industry project called Top Tier JIP, as appropriate.

Implementation of the Polar Code. Submitters of documents (WWF, FOEI and Pacific Environment) were invited to liaise with interested Member States to submit a relevant proposal for a new output aimed at addressing the identified gaps and challenges experienced with the implementation of the Polar Code. The Committee was reminded that ICS and OCIMF had produced, in 2019, Guidelines for the development of a Polar Water Operational Manual which is free of charge and available on the ICS website.

Two-way communication service demonstration for Cospas-Sarsat distress beacons using the SAR/Galileo return link service. The Committee noted the information in document MSC 104/INF.4 (Austria et al.) on the preliminary results of the demonstration of a two-way communication service on Cospas-Sarsat distress beacons to be provided by the Galileo system by using the SAR return link.

Forecast system for integral maritime safety (SIPSEM). Document MSC 104/INF.12 (Columbia) provided a tool to keep an up-to-date system for the forecast of the oceanographic and meteorological conditions in the areas under Colombian jurisdiction which was duly noted.

Application of an intelligent lifebuoy for maritime SAR. China, in document MSC 104/INF.16, provided information on the application of a remote-controlled intelligent lifebuoy for maritime search and rescue.

Introduction of communication technology support in remote PSC. The Committee noted the information in document MSC 104/INF.17 (China) on the application and practice of prevailing communication technology used in the process of remote PSC inspections, with a view to enhancing their applicability and effectiveness, providing a practical foundation for the further revision of procedures for PSC.

Expression of condolences. The Committee noted with great sadness, the passing away of Mr Kees Metselaar, the long-time Head of the Netherlands delegation to meetings of the Maritime Safety Committee.

Expressions of appreciation. The Committee expressed its sincere thanks and appreciation to Mrs Turid Stemre of Norway, the outgoing Chair of the SDC Sub-Committee, for having guided instrumental work of the Organisation so successfully and efficiently for the past 30 years and wished her well for her impending retirement.

DATES OF FUTURE MEETINGS.

MSC 106 is scheduled to take place from the 2nd until the 11th November 2022, and MSC 107 has been tentatively scheduled from the 31st May until the 9th June 2023.

End

Captain Paddy McKnight