REPORT ON THE 101ST SESSION OF THE IMO MARITIME SAFETY COMMITTEE
(MSC 101)

References:
A. IHO CL 34/2018 dated 11 June - Report on the 99th Session of the IMO Maritime Safety Committee (MSC 99);

Dear Hydrographer,

1. As announced in Reference A, the 101st session of the International Maritime Organization (IMO) Maritime Safety Committee (MSC 101) was held at the IMO Headquarters in London, United Kingdom, from 5 to 14 June.

2. The discussions on matters that may be of particular interest to IHO Member States are summarized in Annex A. The full report of MSC 101 (MSC 101/24) will be available on the IMODOCS website (https://webaccounts.imo.org/) when issued.

Dates for the next sessions of the MSC

3. The next session of the MSC is scheduled from 13 to 22 May 2020 (MSC 102) at the IMO Headquarters in London. Noting the concerns of the Chair of the NCSR Sub-Committee in respect to the workload of the NCSR and with the objective of clearing the backlog of outstanding planned outputs and to allow the Working Groups sufficient time to address all the topics with which they are tasked, the seventh session of NCSR should take place from 15 to 24 January 2020.

4. Dr Graham Allen, acting Director of the Nippon Foundation (NF)-GEBCO Seabed 2030 project, gave a presentation during one of the post plenary events, which was supported by an information document submitted to the MSC 101. He provided background on GEBCO and the Seabed 2030 project as well as highlighting the progress achieved by the Seabed 2030 to date and the next steps to increase the current global bathymetric coverage. He highlighted the recent success of the NF-GEBCO Alumni team in winning the Shell Ocean Discovery XPrize competition. He concluded with the actions that maritime administrations could take to support the project and thus contribute to achieving the goals of UN Sustainable Development Goal (SDG) 14 and the UN Decade of Ocean Science for Sustainable Development.

On behalf of the Secretary-General
Yours sincerely,

Abri KAMPFER
Director
Distribution:
- IHO Member States
- HSSC Observers
- Chair, HSSC
- Chair, NIPWG
- Chair, S-100WG

Annex A: Summary of the discussions at MSC 101
Summary of the discussions at MSC 101

Unsafe Mixed Migration by Sea

1. The MSC received reports on progress made with the Global Compact for Safe, Orderly and Regular Migration and the Global Compact on Responsibility-sharing for Refugees. The MSC received a number of reports from member States directly involved in operations, particularly those involved in the central Mediterranean Sea, and the efforts being undertaken to better facilitate multilateral cooperation and seek solutions to common problems by sharing experience and best practices. The Committee noted that since the launch of the Inter-agency platform for information-sharing on migrant smuggling by the Global Integrated Shipping Information System (GISIS), only seven incidents had been reported. Member States were encouraged to provide and update the information included in the appendix to MSC.1/Circ.896/Rev.2 on Interim measures for combating unsafe practices associated with the trafficking, smuggling or transport of migrants by sea.

2. The Committee invited the IMO Secretariat and participating UN Agencies to inform the MSC 102 on the progress made with the global compact for migration and the global compact on refugees.

Global Maritime Distress and Safety System (GMDSS)

3. The Committee approved and adopted the following resolutions and circulars:
   - MSC.1/Circ.1364/Rev.1/Corr.1 on Amendments to the Revised International SafetyNET Manual;
   - MSC.1/Circ.1611 on Interim guidance on technical requirements for Fleet Safety;
   - MSC.468(101) on Amendments to Promulgation of Maritime Safety Information (resolution A.705(17), as amended);
   - MSC.469(101) on Amendments to World-Wide Navigational Warning Service (resolution A.706(17), as amended); and
   - MSC.470(101) on Amendments to IMO/WMO Worldwide Met-Ocean Information and Warning Service – Guidance Document (resolution 1051(27))

4. During the extended discussions on resolution MSC.468(101) on the role of the International Mobile Satellite Organization (IMSO) and despite significant opposition from a number of Member States, including a number of NAVAREA Coordinator hosts, IMSO were able to include their proposed amendments, which purported to acknowledge the role of IMSO with respect to the discharge of their oversight responsibilities in accordance with resolution A.1001(25).

5. Despite the need to highlight the draft status of the interim Iridium SafetyCast service manual and that it was being made available to facilitate the initial operational testing phase of the Iridium mobile satellite services, as articulated by the IHO and WMO in their joint submission MSC 101/11/1, the MSC agreed to circulate the interim Iridium SafetyCast service manual by means of a MSC circular, until such time as the full and mature document is finalized, consequently the Committee approved MSC.1/Circ.1613 on Interim Iridium SafetyCast service manual. A number of Member States expressed concern at the perceived authority of the manual with the removal of the term “draft” from the title.

6. The Committee noted the information provided by IMSO related to developments concerning the proposed acquisition of Inmarsat plc by the Connect Bidco Limited Consortium,
particularly with respect to the Consortium's commitment to continuing support for the recognized satellite communication services in the GMDSS.

7. The Committee agreed to include in its post-biennial agenda an output on Revision of the Criteria for the provision of mobile satellite communication services in the Global Maritime Distress and Safety System (GMDSS) (resolution A.1001(25)). It was further agreed that NCSR would consider this matter after the revision of SOLAS chapter IV had been completed. In addition, the Committee agreed that the assessment of the BeiDou Message Service System (BDMSS) should be conducted in accordance with existing requirements of resolution A.1001(25), taking into account the interpretation and/or exception following the assessment of Iridium, and that a transitional period should be arranged for the implementation of the revised provisions.

**Hydrography and Charting**

8. The MSC addressed various matters related to hydrography and nautical charting resulting from the 6th Session of the NCSR (NCSR 6) held in January this year. The main items included the establishment of new traffic separation schemes and associated measures “In the Sunda Strait” and “In the Lombok Strait” for dissemination by means of COLREG.2/Circ.74; the adoption of new and amendments to existing routeing measures other than traffic separation schemes as new precautionary areas “In Sunda Strait” and “In the Lombok Strait” with recommended directions of traffic flow, and amendments to the “Recommendations on navigation through the English Channel and the Dover Strait” to be published as SN.1/Circ.337. The Committee decided that the measures for “In the Sunda Strait” and “In the Lombok Strait” would come into force on 1 July 2020 and the amendments to the “Recommendations on navigation through the English Channel and the Dover Strait” would come into force 1 January 2020. The MSC also endorsed the publication of SN.1/Circ.232/Add.2, which advised the revocations of SN/Circ.232 and SN.1/Circ.232/Add.1 on “Traffic separation scheme off Ushant, associated inshore traffic zone, and Passage de Fromveur, Chenal du Four, Chenel de la Helle and Raz de Sein”, which were obsolete.

9. The MSC approved the MSC Circular (MSC.1/Circ.1609) on Guidelines for the standardization of user interface design for navigation equipment, S-Mode, was has effective date of 14 June 2019. The Committee also adopted the resolution MSC.466(101) on Amendments to the Performance standards for the presentation of navigation-related information on shipborne navigational displays and approved SN.1/Circ.243/Rev.2 on Guidelines for the presentation of navigation related symbols, terms and abbreviations, which will be applied to:

- radar equipment, electronic chart display and information systems (ECDIS) and integrated navigation systems (INS) installed after 1 January 2024; and
- all other navigational displays on the bridge of a ship installed after 1 July 2025.

Directions given by all three documents will affect the design of the ECDIS user interface from 2024 onwards.

10. The Committee adopted resolution MSC.467(101) on Guidance on the definition and harmonization of the format and structure of Maritime Services in the context of e-navigation and approved MSC.1/Circ.1610 on Initial descriptions of Maritime Services in the context of e-navigation.

11. The Committee endorsed the action taken by NCSR 6 in inviting the Facilitation Committee (FAL) to consider the descriptions of Maritime Services 4 (Port Support Service) and 8 (Vessel shore reporting) and provide comments and advice on the best way forward. Having noted the decisions of FAL 43 in this connection (FAL 43/20, paragraphs 7.21 to 7.23), in particular its decision to include the FAL Committee as an associated organ for output 2.11,
the Committee instructed NCSR 7 to report to FAL 44 on the outcome of its work on output 2.11 (Consideration of descriptions of Maritime Services in the context of e-navigation).

**Safety Measures for non-SOLAS Ships Operating in Polar Water**

12. In considering safety measures for non-SOLAS ships operating in Polar waters, the Committee approved the draft Assembly resolution urging the implementation of recommendatory measures for non-SOLAS ships operating in polar waters as well supporting measures aimed at reducing operational risks. The MSC agreed to task NCSR 7 to considered further making the application of chapter 9 and 11 of the Polar Code mandatory for non-SOLAS ships, whilst considering the consequences and feasibility of applying these chapters before commencing the development of amendments to mandatory instruments.

**Maritime Autonomous Surface Ships (MASS)**

13. The Committee noted the progress of the regulatory scoping exercise. The MSC encouraged IMO Member States to contribute to the first step of the regulatory scoping exercise and invited Member States to submit the results of the first step to the intersessional Working Group. The Committee approved the terms of reference for the intersessional Working Group and approved the draft interim guidelines for MASS trials and the associated MSC circular (MSC.1/Circ.1604).

14. A number of overarching principles and objectives were identified and agreed:

- Risk management, which included risk analysis and control together with appropriate emergency plans and measures;
- Compliance with mandatory instruments;
- Manning and qualifications of personnel involved in MASS trials to include onboard and remote operators and any other personnel involved in the trial being conducted;
- Human element including monitoring infrastructure and system-human interface;
- Infrastructure for safe conduct of trials to be established to provide for safe, secure and environmentally sound conduct of MASS trials, which should be undertaken as part of the risk management;
- Communications and data exchange, including redundancy, should be addressed by appropriate means;
- Reporting requirements and information sharing to relevant authorities to enable dissemination to relevant third parties, including highlighting the reporting requirements of IMO instruments and the encouragement of publishing results and lessons learnt from individual trials; and
- Additionally trial awareness, including impacts on third parties, cyber risk management and the scope and objectives for each individual trial should considered and published.

15. The Committee confirmed the definition of MASS as a ship which, to a varying degree, can operate independent of human interaction. The MSC also confirmed the agreed degrees of autonomy were considered as:

- Level 1 - Ship with automated processes and decision support;
- Level 2 - Remotely controlled ship with seafarers on board;
- Level 3 - Remotely controlled ship without seafarers on board; and
- Level 4 - Fully autonomous ship.

16. A number of IMO Member States highlighted the need to have prior permission from the coastal state for vessels in level 3 and 4 of autonomy to operate in their waters.
Maritime Security

17. The Committee agreed that aspects of cyber risk management, including physical security aspects of cyber security, should be addressed in Ship Security Plans under the International Ship and Port Facility Security (ISPS) Code. The MSC also confirmed that resolution MSC.428(98) on *Maritime cyber risk management in Safety Management Systems (SMS)* sets out the Organization’s requirements for Administrations to ensure cyber risks were appropriately addressed in existing SMS, verified by an endorsed Document of Compliance and Safety Management Certificate, and that in the Ship Security Plan, reference should be made to cyber risk management procedures found in the SMS.

Piracy and Armed Robbery

18. The Committee requested Member States to continue to report incidents of piracy and armed robbery to the Secretariat using the reporting form in MSC.1/Circ.1333/Rev.1 on *Recommendations to Governments for preventing and suppressing piracy and armed robbery against ships*. Member States were also reminded to provide and keep updated the information related to their National Point(s) of Contact for communication of information on piracy and armed robbery in the Contact Points module of the Global Integrated Shipping Information System (GISIS). The MSC noted the decision by the industry group related to the review and revision of the High Risk Area (HRA) to amend the geographic boundaries and to reduce the area for piracy in the Indian Ocean, so as to better reflect the threat of piracy in the region whilst retaining the primary objective to ensure the safety and security of seafarers.

Conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) under UNCLOS

19. The Committee noted information provided by the Secretariat (MSC 101/23/2) on the status of the development of an international legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ), including the outcome of the second session of the Intergovernmental Conference (IGC-2) that took place from 25 March to 5 April 2019, which has a direct impact on the work of the Committee concerning navigational issues; and requested the Secretariat to continue to update the Committee on the ongoing United Nations work on BBNJ.

Advancing international collaboration for quiet ship design and technologies to protect the marine environment

20. The Committee considered document MSC 101/23/5 informing of the initiatives taken by several stakeholders, particularly Canada, to address underwater noise emitted from commercial ships, which is a stressor for marine species and ecosystems.

21. Having noted Canada’s intention to hold policy discussions with interested Member States on the contents of a new output proposal for MEPC 75, aiming to address the identified policy needs related to underwater vessel noise, the Committee invited interested Member States and other parties to contact Transport Canada if they wished to support this work.