

**14<sup>TH</sup> MEETING OF THE HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE**

Denpasar-Bali, Indonesia, 16-19 May 2022,

**Paper for Consideration by HSSC****IMO activities affecting HSSC (including e-navigation)**

<b>Submitted by:</b>	IHO Secretariat
<b>Executive Summary:</b>	This paper summarizes discussions and decisions taken by the IMO since HSSC-13 and related items that may be relevant to the work of HSSC.
<b>Related Documents:</b>	MSC.232(82), Revised Performance Standards for Electronic Chart Display and Information Systems (ECDIS) NCSR7/22/5, Report on monitoring of ECDIS issues by IHO NCSR8/13/1, Report on monitoring of ECDIS issues by IHO MSC 104/12, Report of the eighth session of the Sub-Committee MSC 104/18, Report of the Maritime Safety Committee on its 104th Session NCSR9/16/2, Proposed amendments to Resolution MSC.232(82)
<b>Related Projects:</b>	HSSC Work Programme Maintenance of IHO Publications and Services related to ENC and ECDIS Development of the S-100 framework.

**Introduction**

1. The principal IMO activity since HSSC-13 that may affect the work of HSSC arose from the 104<sup>th</sup> Session of the Maritime Safety Committee held remotely from 4 to 8 October 2021. The IHO, as an accredited observer to the IMO, was formally represented by the Secretariat.
2. The Committee approved, in general, the report of the 8<sup>th</sup> session of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 8/14/1 and MSC 104/12) and took actions relevant for activities under the HSSC program of work.
3. The Committee recalled that MSC 103 had approved the outcome of the regulatory scoping exercise (RSE) for the use of MASS, disseminated by means of MSC.1/Circ.1638, and had invited Member States and international organizations to submit output proposals on the best way forward to address MASS in the IMO regulatory framework to MSC 104, taking into account the outcome of the RSE. Several proposals were submitted for new outputs related to MASS and after discussion the Committee decided to request the Chair to prepare, together with the Secretariat, a road map, including scope, steps and timelines for detailed consideration at MSC 105 (20 – 29 April 2022).
4. Furthermore 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. There was agreement that the first step in this new output would be the finalization of a road map to have a common understanding of the following steps; and, time allowing, the Committee could also embark on the development of instruments already at MSC 105. The ultimate goal would

be the preparation of a mandatory instrument to address MASS operations. A Working Group on MASS will be re-established at MSC 105 to commence the work on the new output, including finalization of the aforementioned road map.

5. Having agreed to the recommendation by NCSR 8 on the proposed changes to six outputs, the Committee approved the biennial agenda of the NCSR Sub-Committee and the provisional agenda for NCSR 9. Most notable for the IHO was that The Revision of ECDIS Guidance for good practice (MSC.1/Circ.1503/Rev.1) and amendments to ECDIS performance standards (resolution MSC.232(82)) will be discussed under Agenda Item 16 of NCSR 9 to be held in June 2022.

6. The IHO committed in document NCSR 8/13/1 to, in preparation for NCSR 9 and to assist the revision process, submit draft amendments for MSC.232(82) and MSC.1/Circ.1503/Rev.1 to NCSR 9 for consideration by the Sub-Committee. The Sub-Committee noted the information provided in documents NCSR 8/13/1 (IHO) reporting on ECDIS issues, and NCSR 8/13/3 (Canada) supporting the recommendations made in document NCSR 8/13/1, and invited interested Member States and international organizations to contribute to the work of IHO in the preparation of amendments to resolution MSC.232(82) and MSC.1/Circ.1503/Rev.1.

7. At HSSC-13 it was agreed upon a drafting group consisting of a subset of the HSSC Chair Group (DTech, HSSC Chair and Vice-Chair, S-100 WG Chair, ENCWG Chair and NIPWG Chair) with confirmed participation from CIRM, IEC and INTERTANKO. The drafting group met virtually a couple of times since HSSC-13 and expanded the group to include members from Industry, Germany and Sweden. It was noted that an IMO Member State (China) had commenced with a revision of MSC.1/Circ.1503/Rev.1 and in order not to duplicate effort, the drafting group focussed on the preparation of amendments to resolution MSC.232(82) only. The submission, co-sponsored by CIRM and INTERTANKO, was submitted as NCSR9/16/2 before the deadline and is enclosed for reference. The drafting group acknowledged that the IMO timelines did not allow for wider circulation and discussion within HSSC prior to the submission.

8. As can be seen in the attached proposed redline version of MSC.232(82), amendments are proposed in several paragraphs as a consequence of the introduction of S-100. An initiative from Sweden and EU MS, to amend MSC.232(82) to also facilitate a standardized digital exchange of vessels' route plans (MSC 104/15/7), was also considered and proposed changes has been included. Some notable changes are:

- The introduction of the term Electronic Navigational Data Service (ENDS), which means a special-purpose database compiled from nautical chart and nautical publication data, standardized as to content, structure and format, issued for use with ECDIS by or on the authority of a Government, authorized Hydrographic Office or other relevant government institution, and conforming to IHO standards; and, is designed to meet the requirement of marine navigation and the nautical charts and nautical publications carriage regulations V/19 and V/27 of the 1974 SOLAS Conventions, as amended. The navigational base layer of ENDS is the Electronic Navigational Chart (ENC). This is to facilitate the implementation of S-100.
- The term SENC will be replaced with the term *system database*.
- The possibility to use dynamic water level adjustment.
- The introduction of a standardized digital exchange of vessels' route plans and the usage of a standard service interfaces including information security protection (SECOM - IEC 63173-2) to allow for secure machine-machine communication.

The above is not an exhaustive list of proposed amendments. Please see the enclosed reference for the full range of proposed changes.

9. The IHO Secretariat thanks the drafting group members for their active and valuable contributions.

#### **Action required of HSSC**

10. The HSSC is invited to:

- a. **Note** this report;
- b. **note** that the IMO Working Group on MASS will be re-established at MSC 105;
- c. **note** the proposed revision of MSC232(82) - ECDIS performance standards submitted by IHO, CIRM and INTERTANKO to NCSR 9;
- d. **encourage** Hydrographic Offices at their NCSR pre-meeting preparations and in general engagement with their national maritime administrations to propose support for the proposed revision of MSC232 (82) - ECDIS performance standards as critical to the success of the Roadmap for the S-100 Implementation Decade;
- e. **encourage**, in general, that Hydrographic Offices maintain liaison with their national Maritime Administrations to ensure that the IHO views and interests are acknowledged in their country's views on and contribution to, the progress of outputs affecting the provision of hydrographic services and maritime safety information;
- f. **Take any other actions** considered necessary.