



2nd SESSION OF THE ASSEMBLY

REPORT OF THE HSSC Outcome of the 12th HSSC meeting in October 2020

1. Chair: Mr Magnus WALLHAGEN (Sweden)
Vice-Chair: Vacant

2. Membership:
See [HSSC Membership List](#).

3. Meetings:
HSSC-12 VTC 19-22 October 2020

Introduction

1. This document provides some highlights on the IHO Work Programme 2, especially the achievements and developments since the last report to the Council in 2019 as well as the main outcome of the 12th meeting of the Hydrographic Services and Standards Committee (HSSC-12) held in a virtual format on 20 and 21 October 2020. HSSC-12 was attended by 109 registered participants from 34 Member States and 5 Observing Organizations.

Updates impacting the S-100 Implementation Strategy (*A-2 / PRO 2.1 refers*)

Activities of the Working Groups and Project Teams

2. New documents which are essential in the development of the S-100 Implementation Road Map are under development. This includes in particular the “Interoperability Specification” for S-100 based navigation systems (S-98). Ed. 1.0.0 of S-98 is planned to be submitted for endorsement in 2021. A proposed incremental approach for additional Product Specifications (currently excluded) was approved.
3. An amendment to the S-100 Implementation Road Map based on the list of products planned to be covered by S-98 needs to be considered (Action HSSC12/11).
4. To ensure alignment of the operational version of S-101, HSSC agreed to delay the publication of S-100 Edition 5.0.0 until 2022 and HSSC WGs were tasked to consider aligning all product specifications, with an initial priority list (S-101, S-102, S-104, S-111, S-122, S-123, S-124, S-129), to Edition 5.0.0 by 2023. HSSC also noted the progress

made on the development of S-100 Test Data Set and allocated S-164 number for the S-100 equivalent of S-64 - *IHO Test Data Sets for ECDIS*.

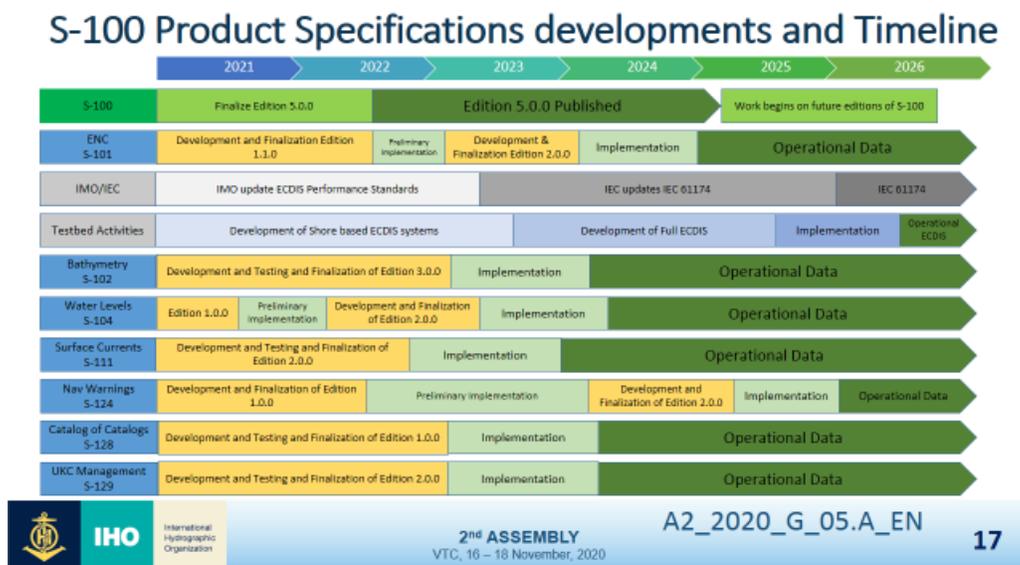
Dual-Fuel Concept (A-2 / PRO 2.2 refers)

5. The Dual-Fuel Concept, needed for the transition from S-57 ENC's to S-101, was discussed and the basic principles (*Essential Principles of Operation*) were agreed.
6. The S-100WG/S-101PT is tasked to liaise with Stakeholders to prepare a governance document that formalizes the guiding principles of Dual-Fuel Concept for incorporation into the S-100 Implementation Road Map.

M-3, IHO Resolutions (A-2 / PRO 2.3 refers)

7. There was general agreement that the revision of some IHO Resolutions is an important driver for the effective implementation of S-100. Thus when the operational implementation of S-100 becomes mature enough, it is recommended that proposed amendments to the Resolutions eventually complemented by other new Resolutions (such as WEND100) will be submitted to the Council for endorsement as appropriate, and for subsequent approval by Member States.
8. It is noted that the product specifications and publications covering the provision of nautical information under the remit of the NIPWG will need to be aligned with the latest version of S-100. This will require some significant effort. The S-131 Product Specification - *Marine Harbour Infrastructure* - is currently under development in close liaison with the International Harbour Master Association and with the International PortCDM Council.

Timelines



Report on the Future of the Paper Nautical Chart

9. The recommendations from the final report on the “Future of the Paper Nautical Chart”, August 2020, were endorsed. It was agreed to add a work item in the programme of work of the NCWG to develop ways to enable or enhance HOs’ ability to produce paper charts or raster chart images directly from S-101.

Achievements and Highlights

10. The guidance on producing and maintaining High Density ENC (HD ENC), Ed.1.0.0, January 2020, is now available as Annex A to S-65.
11. Investigations for the possible development of a new Edition of S-63 - *IHO Data Protection Scheme* - compliant with IMO cyber security measures and IEC 63154 ED1 are in progress.
12. The HSSC approved the completion of the task by the DQWG on the conditional visualization of quality of bathymetric data and commended the WG for the publication of S-67 Ed.1.0.0 Mariners’ Guide to Accuracy of Depth Information in ENCs.
13. The HSSC paid tribute to the memory of Dr Kurt Hess (US), an active Member of the TWCWG, who passed away in June 2020. The target dates for the publication of the S-104 – *Water Level Information* – were also approved.
14. The HSSC commended the Hydrographic Survey Project Team (HSPT) for the excellent work done to achieve the publication of Edition 6.0.0 of S-44, IHO Standards for Hydrographic Survey and approved the establishment of a new Working Group, the Hydrographic Surveys Working Group.

Conclusion

15. The HSSC thanks the Member States for their active and continuous support and involvement in the activities of the Working Groups and Project Teams.

Recommendations and call for directions

The Assembly is invited:

- **To note** the Updated HSSC Report.
- With reference made to A2 / PRO 2.1, **to approve** the HSSC proposal to add 3 annexes to the S-100 Implementation Strategy, related to the IHO Work Programme 1, 2 and 3, to be updated annually and reported to the Council.
- **To task** HSSC [and IRCC] to implement the recommendations on the Future of the Paper Nautical Chart as appropriate.
- With reference made to A2 / PRO 2.2, **to task** the HSSC to prepare a synoptic Dual Fuel Concept summary report on the various options offered to HOs for considering the development of their production of S-101 ENCs (Report to be made by HSSC at C-5, 2021).
- With reference made to A2 / PRO 2.3, **to approve** the proposed HSSC way forward that when the operational implementation of the S-100 concept becomes mature enough,

proposed amendments to the Resolutions, eventually complemented by other new Resolutions (such as a result of WEND100), will be discussed and submitted to relevant IHO organs for subsequent approval by MS.