

13TH MEETING OF THE HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE (HSSC-13) AND IHO STAKEHOLDERS' OPEN SESSION
Video-conference, 3 – 6 May

Contribution to the IHO Work Programme 2021	
Task 2.1.1	Organize, prepare, and report annual meetings of HSSC

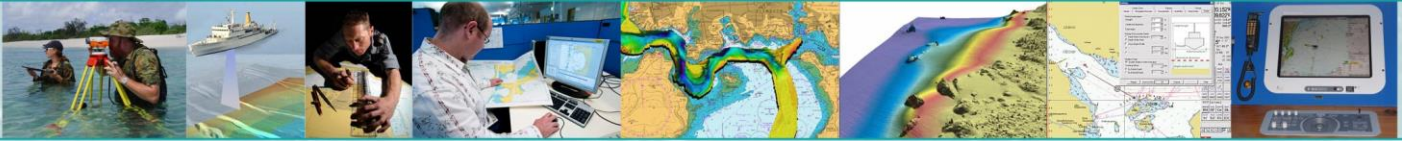
The 13th meeting of the Hydrographic Services and Standards Committee (HSSC) was held in a virtual format (VTC) from 3 to 6 May 2021 and included on 5 May a half-day Stakeholder's Open Session on the theme *“Requirements and suggestions for the S-100 Implementation Decade in Navigation Systems – An industry and user perspective”*.

The meeting was chaired by Mr Magnus Wallhagen (Sweden) and attended by 120 participants from 29 Member States, 5 Observing Organizations and 8 industry partners. The IHO Secretariat was represented by Director Abri Kampfer (HSSC Secretary), Assistant Directors Yves Guillam (HSSC Assistant Secretary), Yong Baek and Technical Standards Support Officer Jeff Wootton.

Dr Mathias Jonas, Secretary-General, opened the meeting and expressed his gratitude that the HSSC working groups and project teams have been able to remain as operational and productive as before the Covid pandemic began. He also encouraged the HSSC to continue on this way in support of the IHO overarching strategy for better standardization and improved services.

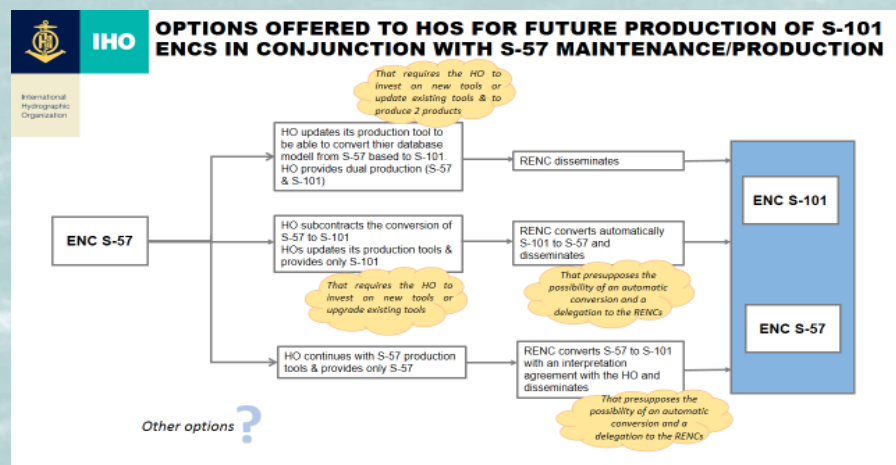


Some of the participants of the 13th Hydrographic Services and Standards Meeting.



The HSSC Chair started the meeting and indicated his intention to capture, from the reports of the Chairs of the HSSC Working Groups, the possible amendments to the Roadmap for the S-100 Implementation Decade to be submitted at the 5th meeting of the Council (C-5). These amendments include, as a minimum, the list of S-100-based products that are considered in priority to be interoperable in navigation systems and a Gantt-type diagram providing the key milestones in the development of product specifications/testing phases/availability of operational products.

Based on previous discussions related to the so-called “dual-fuel concept” [for supporting future S-100 ECDIS], it was agreed to inform the Council and IHO Member States on the various and cost-effective structural options offered to them to engage in the transition from S-57 ENC to S-101 ENC.

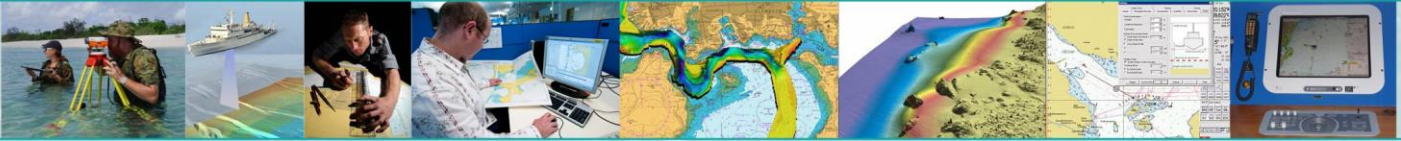


A preliminary “sketch”, by HSSC Vice-Chair, of options offered to HOs to engage in the transition to S-101 ENCS

Following a decision of the 4th meeting of the Council (C-4), the HSSC decided that a key topic on which the application of ISO 9001 Principles to HSSC activities in support of the Strategic Plan 2021-2026 should be experimented, was the development of Edition 2.0.0 of the product specification of S-101. Thanks to the HSSC Vice-Chair, S-101 Project Team Vice-Chair and the DQWG Chair, supported by Sweden subject matter experts, a HSSC ISO 9001 Cell was established with development monitoring and risk management objectives.

Before the review of the different reports from the Working Groups, the HSSC Chair also considered the new Strategic Performance Indicators (SPIs) of the Strategic Plan 2021-2026 allocated to HSSC. Their implementation is planned to be reported at C-5 together with recommendations on SPIs metrics, 2021 estimated values and 2026 targets.

Singapore provided an update on the forthcoming establishment of the Joint IHO-Singapore Innovation and Technology Laboratory (Lab), the creation of which was decided at A-2. The HSSC working groups welcomed the opportunities offered by the Lab to test and experiment different projects. HSSC is planning to play an important role in the governance of the IHO projects handled by the Lab.



The HSSC agreed on the establishment of two new Project Teams:

- The first, following a decision from A-2, aiming to develop the S-130 Product Specification and Dataset - *Polygonal demarcations of global sea areas*.
- The second, following a proposal by the United Kingdom, Norway and Singapore, to address Maritime Autonomous Surface Ships (MASS) requirements on navigation data and services.

Beyond the traditional progress reports provided by the working groups and project teams on the development and maintenance of standards in their remit, which were very satisfactory, strategic discussions took place during the meeting, in particular:

- On the principles to outsource the development of a high-level governance document on the dual-fuel concept or to make it internally with IHO Members limited resources;
- On the proposed limitation of the scope of S-102 - *Bathymetric Surface* to navigation systems and the ambiguity caused by the current Edition number 2.0.0 of S-102 product specification, while the product specification is not at the operational level yet;
- On the possible forthcoming issues raised by the SENC delivery concept if applied to S-100 products in particular for the sake of cyber security.

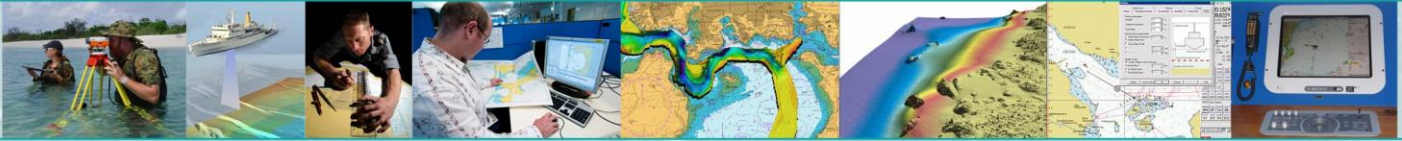
With regard to cyber security, the ENCWG recommended not to develop a new Edition of S-63, but to prepare a new IHO ECDIS Cyber Security Guideline.

As part of its comprehensive report and achievements, the NIPWG informed the participants that the development of S-131 – *Marine Harbour Infrastructure* – product specification in liaison with IHMA¹ and the International PortCDM Council was quite promising and could become an important driver for improving the relationship between the Hydrographic Offices of the IHO Member States and their Port Authorities. Part of the project is the proposed development of a technical interface between the parties based on the S-131 Data Model, certainly a good potential candidate for testing and experimentation by the Lab.

The NCWG Chair highlighted the recommendations made in the report on the “Future of the Nautical Paper Chart” that was endorsed by A-2. He provided the status of their implementation and announced in particular the establishment of a Baseline Symbology Project Team, led by Canada, aiming to support the automated production of paper charts from S-101 data.

The new established Hydrographic Survey Working Group reported on the outcome of their kick-off meeting held the week before HSSC-13 and informed on the arrangements agreed in the HSWG to address their objectives.

¹ The International Harbour Masters Association.



The IHO Stakeholders' Open Session was supported by 5 enlightening presentations aiming to provide the state-of-the-art of technology and innovation in support of hydrographic activities. The presenters also shared their vision on the new challenges for the validation of S-100 based products and their use on board ships. They also raised the awareness of HSSC Members and Working Groups on the best way to manage the transition in order to ensure that the regulatory environment can be formed to allow the benefits of S-100 to be realised in a safe and timely manner.



Compilation of some key topics and issues addressed at the IHO Stakeholders' Open Session

At the end of the meeting, the Chair on behalf of HSSC Members thanked the outgoing Chairs (Ms Gwenaele Jan (France), TWCWG, Mr Jens Schröder-Fürstenberg (Germany), NIPWG, Mr Rogier Broekman (Netherlands), DQWG) for their outstanding commitments and achievements for many years.

The Committee welcomed the confirmation from Indonesia for its offer to host HSSC-14 in Den Pasar, Bali, Indonesia in May 2022. The confirmation by Finland, for hosting HSSC-15 in Helsinki, in May 2023 was also noted.