20th Conference of the Southern African and Islands Hydrographic Commission SAIHC20

HSSC16 Report

Agenda item 20-2.5





16th HSSC Meeting

Tokyo, Japan 27 - 31 May 2024 31 Member States – 6 NGIOs – PRIMAR – Expert contributors





S-100 Developments

Phase 1 Route Monitoring Mode

S-101 ENC
S-102 Bathymetry
S-104 Water Level
S-111 Surface Currents
S-124 Navigational Warnings
S-129 UKC Management

Critical Framework

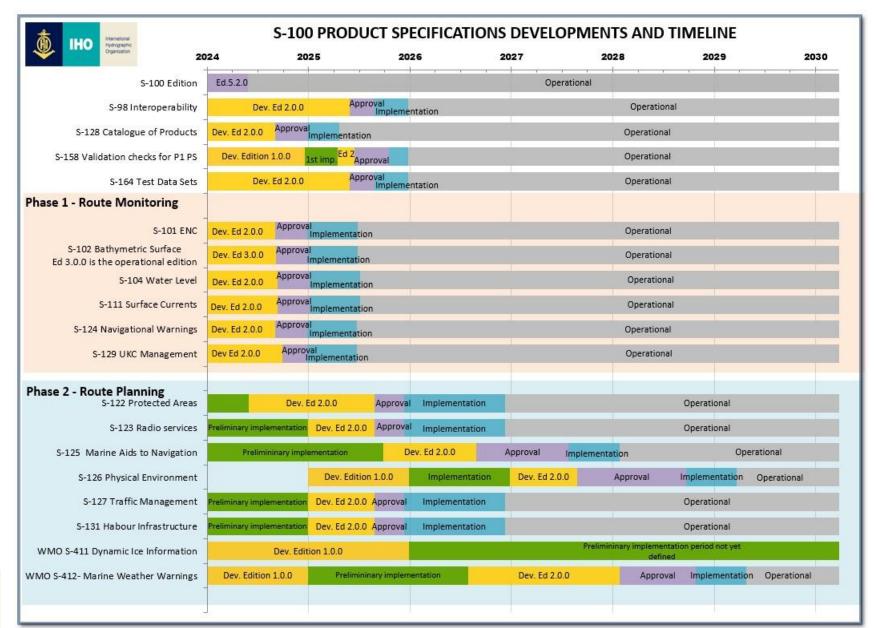
IHO Geospatial Information Registry S-98 Interoperability Specification S-100 Universal Hydrographic Data Model S-128 Catalogue of Nautical Products S-164 Test Data Set for S-100 and ECDIS Type Approval

- S-100 Edition 5.2.0 has been approved by IHO Members States
- All core phase 1 Product Specifications is in line with the S-100 Timeline and IHO CL for MS approval is expected to be issued in October 2024 with due date December 2024
- S-98 Interoperability PS and S-164 Tests datasets PS will be delayed and IHO CL expected for MS approval to be issued in May 2025 with due date August 2025 (agreed upon with IEC)
- S-411 Ice overlay and S-412 Weather and Waves Warnings are now part of Phase 2 PS and included in S-100 Timeline which will be presented to C8





S-100 Timeline



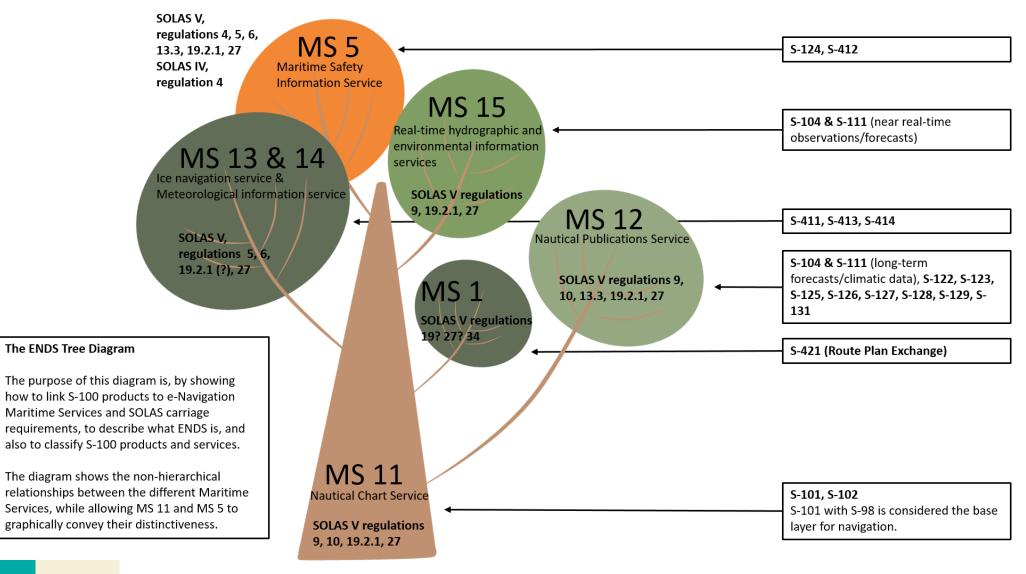


International

Hydrographic Organization



S-100 relation to IMO e-navigation and SOLAS









IHO Infrastructure Centre (1/2)

HSSC endorsed the proposals and recommendations from the ICE-PT:

- the name of the centre: "IHO Infrastructure Centre"
- Role: support the development, operation and management of IHO governed products and required
 IHO services with a common base infrastructure
- Initial focus will be to get S-100 operational with higher priority to 2 critical infrastructure components for the Centre
 - quality control and secure delivery of S-100 catalogues and S-164 test datsets
 - operative processes for the S-100 Part 15 security scheme
- IHO infrastructure centre should be an integral part of the IHO secretariat, led by the IHO Technical
 Director
- Republic of Korea suggested as the potential host country





IHO Infrastructure Centre (2/2)

Proposal to the council will include:

- approval for an interim status of the Centre followed by permanent establishment
- task for the ICE PT in liaison with HSSC and the IHO Secretariat to supervise the establishment of the IHO Infrastructure Centre according to the PT Timeline:





contribution

Tech specialists



Security Scheme PT

PT's main achievement :

- Addition clause to existing OEM and Data Server agreements to limit duration and allow termination
- New draft S-63/S-100 OEM and data server agreements

Approval process :

- Approval by HSSC Members by correspondence
- Signature of the acceptance of new agreements and implementation of the new process delegated to IHO Sec.
- → Collaboration required with S-100 ICE PT and the IHO Fund Generation PT (for online payment function needed to collect administration fees via the IHO Portal)





Dissemination of S-100 data

- Who will distribute S-100 products?
 - RENC/VAR for all S-100 products including "near real-time" products (e.g. S-104, S-111, S-124, S-412) or should some S-100 products be distributed by other data providers?
- Which technology should be used?
 - NAVDAT and VDES are mentioned for S-124
 - IP (internet) will most likely be required for heavier S-100 datasets.
- How can we secure the S-100 data dissemination?
 - Can SECOM be used for delivery of all S-100 products?
 - Can or should the concept of Maritime Connectivity Platform (MCP) be used?
- → Following a paper from Germany related to these open questions HSSC-16 tasked NIPWG, in liaison with other relevant IHO bodies, to recommend a way forward.
- → Similar open questions have been raised at IMO MSC and NCSR. MSC 109, in December 2024 will decide if a specific task should be given to NCSR to address S-100 implementation matters.
- → Increased need for coordination between IHO and IMO.





Highlights HSSC 16 – SENC delivery

- **HSSC** concluded that testing should focus on determining if S-100 Part15 is feasible for use for data distribution, ensuring that the digital signature is retained from the issuing data producer and verified in the end user system.
- **HSSC** tasked the **S-100WG** to report the testing result as guided by HSSC above (November 2024)





Highligths from HSSC16 (1/2)

- HSSC noted the request from CIRM that the IHO considers defining a retirement date for S-57 and inform the IMO of the outcome.
- ISO Cell has been tasked to secure a more structured testing and validation methods to meet end users needs (came from both MS and stakeholders)
- HSSC welcomed the offer from Canada and endorsed the proposal to designate the St-Lawrence River as an IHO Canada S-100 Sea Trial Area (2024-2025). To consider additional IHO Sea Trial Areas such as IHO Baltic Sea Trial Area, IHO UK-FR Channel Sea Trial Area.
- HSSC noted the documents MSC 108/12/04 (IHO) and MSC 108/12/05 (NZ) submitted for the MSC 108 meeting and invited Member States to consider future participation in national representation at IMO MSC and NCSR.





Highligths from HSSC16 (2/2)

- Hydrographic Dictionary WG has changed to a Correspondence Group
- MASS PT has been evolved to a working group MASS WG
- HSSC endorsed Ed. 2.0.0 of S-66 Facts about Electronic Charts and Carriage Requirements – merging S-66 and S-67 into one publication
- HSSC endorsed the Ed. 4.4.0 of **S-57, Appendix B.1, Annex A Use of the Object Catalogue (UOC)** for ENC.
- HSSC endorsed proposed Ed. 8.0.0 of S-58 ENC Validation Checks
- HSSC endorsed the standard S-44 Hydrographic Surveys edition 6.2.0
- IHO CL will be issued for MS approval of the standards above.





IHO Strategic Plan Votes at HSSC 16

Consumer confidence in S-100

Phasing out of existing products (S-57 ENC, paper charts, NAVTEX, printed nautical publications) (8)

S-100 Infrastructure Center is key to support S-100 (8)

Connect more to the IMO **E-Navigation Strategy**

Leave no one behind (8)

Enable IMO E-Navigation in accordance with their strategy,

Include SDG Goals and UNGGIM references – updated guiding principles measure to reference **UNIGIF-Hydro**

New Survey technology to include Al post processing, automated cartography etc.









Actions requested by SAIHC20

SAICH20 is invited to:

- a) Note the HSSC report
- b) Note the S-100 timeline for phase 1 approval and advise MS respond to the IHO CL in a timely manner to avoid delays in the approval process
- c) Take any other actions as considered appropriate



