22th Conference of the South West Pacific Hydrographic Commission SWPHC22

HSSC16 Report





SWPHC22 Pre-meeting, 4 Feb 2025

VTC

16th HSSC Meeting

Tokyo, Japan 27 - 31 May 2024 31 Member States – 6 NGOs – 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 03/25 has be sent in January for MS approval.
- 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 has been presented to C8 in October 2024.





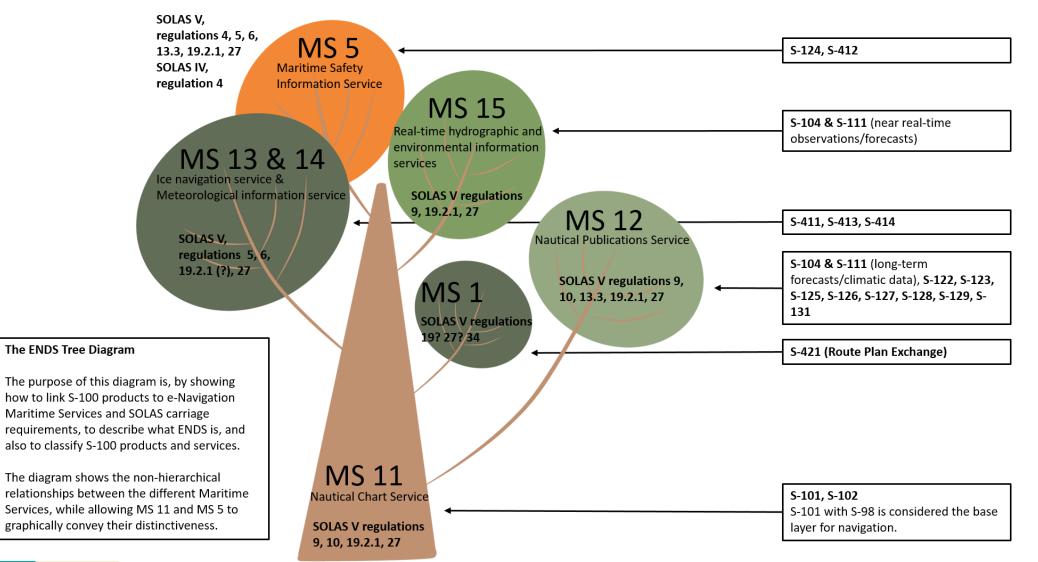
S-100 Timeline

Organization 20	24 2	2025 20	026	2027	2028	2029	2030
S-100 Edition	Ed.5.2.0			Operational			
S-98 Interoperability	Dev. Ed 2.0.	0 Approval Impleme	entation	-1. 	Operational		
S-128 Catalogue of Products	Dev. Ed 2.0.0 Appro	val Implementation			Operational		10 11
S-158 Validation checks for P1 PS	Dev. Edition 1.0.0	1st imp. Ed 2 Approval			Operational		
S-164 Test Data Sets	Dev. Ed 2.0.		entation	-h	Operational		
Phase 1 - Route Monitoring							
S-101 ENC	Dev. Ed 2.0.0 Appro	val Implementation			Operational		
S-102 Bathymetric Surface Ed 3.0.0 is the operational edition	Dev. Ed 3.0.0 Appro	wal Implementation			Operational		
S-104 Water Level	Dev. Ed 2.0.0 Appro	Implementation			Operational		
S-111 Surface Currents	Dev. Ed 2.0.0 Appro	wal Implementation			Operational		
S-124 Navigational Warnings	Dev. Ed 2.0.0 Appro	Implementation			Operational		
S-129 UKC Management	Dev Ed 2.0.0 Appr	roval Implementation			Operational		
Phase 2 - Route Planning							
S-122 Protected Areas	Dev	7. Ed 2.0.0 Approva	al Implementation		1	Operational	
S-123 Radio services	Preliminary implementation	Dev. Ed 2.0.0 Approve	al Implementation			Operational	
S-125 Marine Aids to Navigation	Prelimininary im	iplementation [Dev. Ed 2.0.0	Approval Implem	entation	Ope	rational
S-126 Physical Environment		Dev. Edition 1.0.0	Implementation	Dev. Ed 2.0.0	Approval li	mplementation	Operational
S-127 Traffic Management	Preliminary implementation	Dev. Ed 2.0.0 Approval	Implementation			Operational	
S-131 Habour Infrastructure	Preliminary implementation	Dev. Ed 2.0.0 Approval	Implementation			Operational	
WMO S-411 Dynamic Ice Information	Dev. E	dition 1.0.0		Pre	imininary implementatio defined	n period not yet	
MO S-412- Marine Weather Warnings	Dev. Edition 1.0.0	Prelimininary implem	mentation	Dev. Ed 2.0.0	Approval	Implementation	Operational



IHO 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 datasets
 - 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



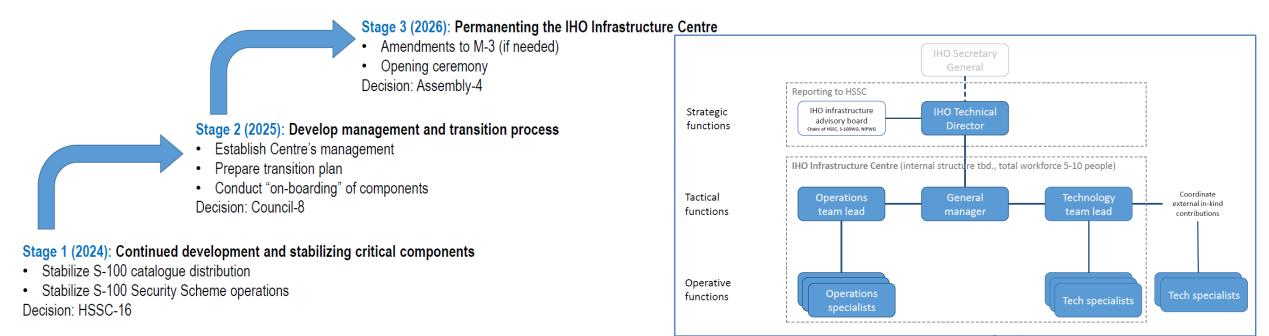




IHO Infrastructure Centre (2/2)

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 :



Governance & Composition





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.
- \rightarrow Similar open questions have been raised at IMO MSC and NCSR.
- → Increased need for coordination between IHO and IMO.







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.
- HSSC welcomed the offer from Canada and endorsed the proposal to designate the St-Laurent 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. 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

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

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

> > (7)

Leave no one behind (8)

Consumer confidence

in S-100

Phasing out of existing products (S-57 ENC,

paper charts, NAVTEX,

printed nautical publications) (8)

International

Hydrographic Organization Connect more to the IMO E-Navigation Strategy (21)

> Enable IMO E-Navigation in accordance with their strategy (5)

New Survey technology to include Al post processing, automated cartography etc. (7)





Actions requested by HSSC16

SWPCH22 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



