



# 23<sup>rd</sup> Conference of the Mediterranean and Black Seas Hydrographic Commission

**MBSHC-23 (Hybrid Conference)**

## **HSSC Activities that may affect MBSHC S100 ROADMAP**

# HSSC 14

HSSC 14 meeting: 16 – 19 May 2022

Den Pasar (Bali – Indonesia)

Registration: In-person (expired initially)

VTC (No later than 15 May)

<https://iho.int/en/hssc14-2022>

Points to highlight of the meeting:

IHO will give consideration to the preparation of IHO Council meeting (C-6)

IHO Resolutions (action HSSC13/05)

IHO Work Programme for 2023

Inputs to the 3 year IHO Work Programme 2024-2026

Maintenance and monitoring of S-100 Roadmap (v 2.0) for this decade



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Ljubljana (30 March-1 April 2022)

# S-100 ROADMAP (2020-2030)

It comprises a transition plan aiming to the regular and harmonized production and dissemination of S-100 based products.

This task includes the engagement with IMO to regularly update on the status of S-100 framework and potential future impact on IMO instruments.

- 1. Operational infrastructure**
- 2. Technical standardization**
- 3. Coordinated implementation of services**
- 4. Synchronization with IMO**
- 5. Collaboration with industry**
- 6. Capacity building of hydrographic services**
- 7. Development of global distribution capability**



# 1. Operational infrastructure

IHO geospatial information registry

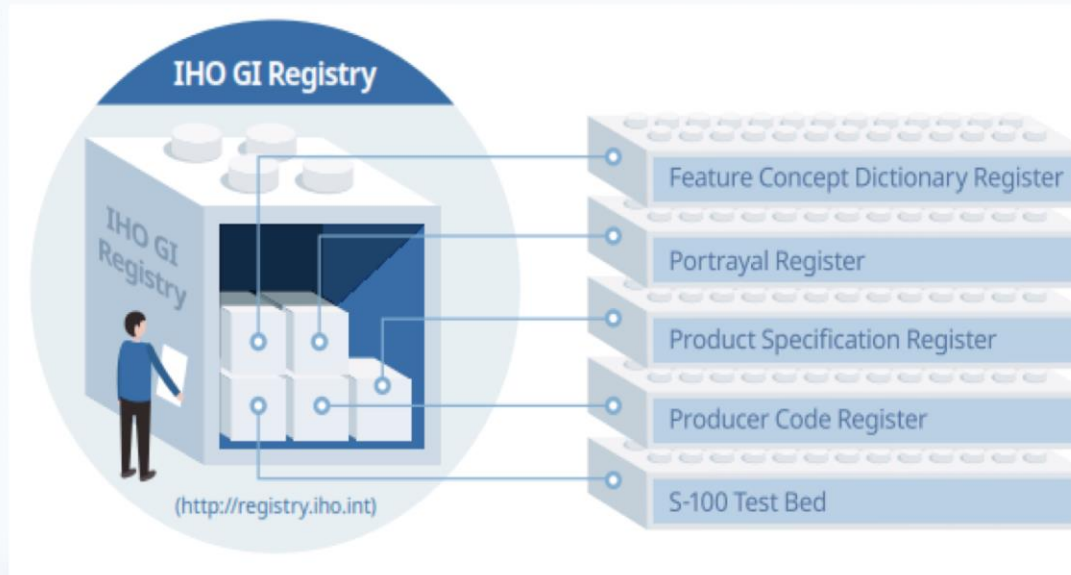
- Feature catalogue builder
- Portrayal catalogue builder
- Product specifications (PS) documents

## IHO – GI Registry

The Registry provides a the framework for managing several Registers (databases) that contain information about;

- Features,
- Portrayal elements,
- Data Producer Codes and
- Product Specifications and their associated catalogues and other resources.

<http://www.registry.iho.int>



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# 2. Technical standardization

S-100 implementation priorities

S-100 timeline for the prioritized IHO PS

Parallel production S-101 / S57 ENC

Route monitoring mode

Route planning mode

First step

Next step

**Navigational  
Route Monitoring Mode**  
S-98 Edition 1.0.0

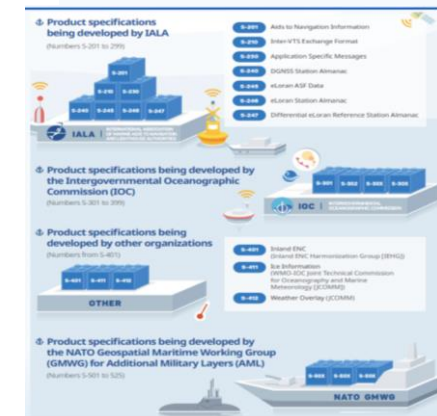
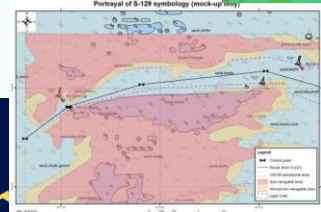
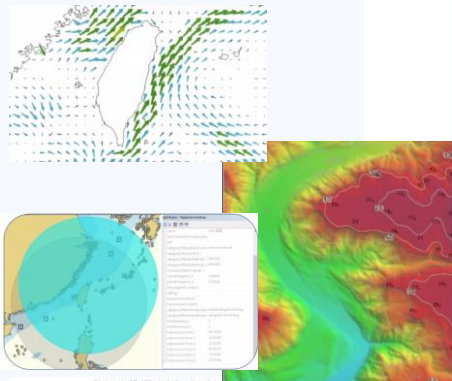
**Navigational  
Route Planning Mode**  
Future S-98 Editions

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

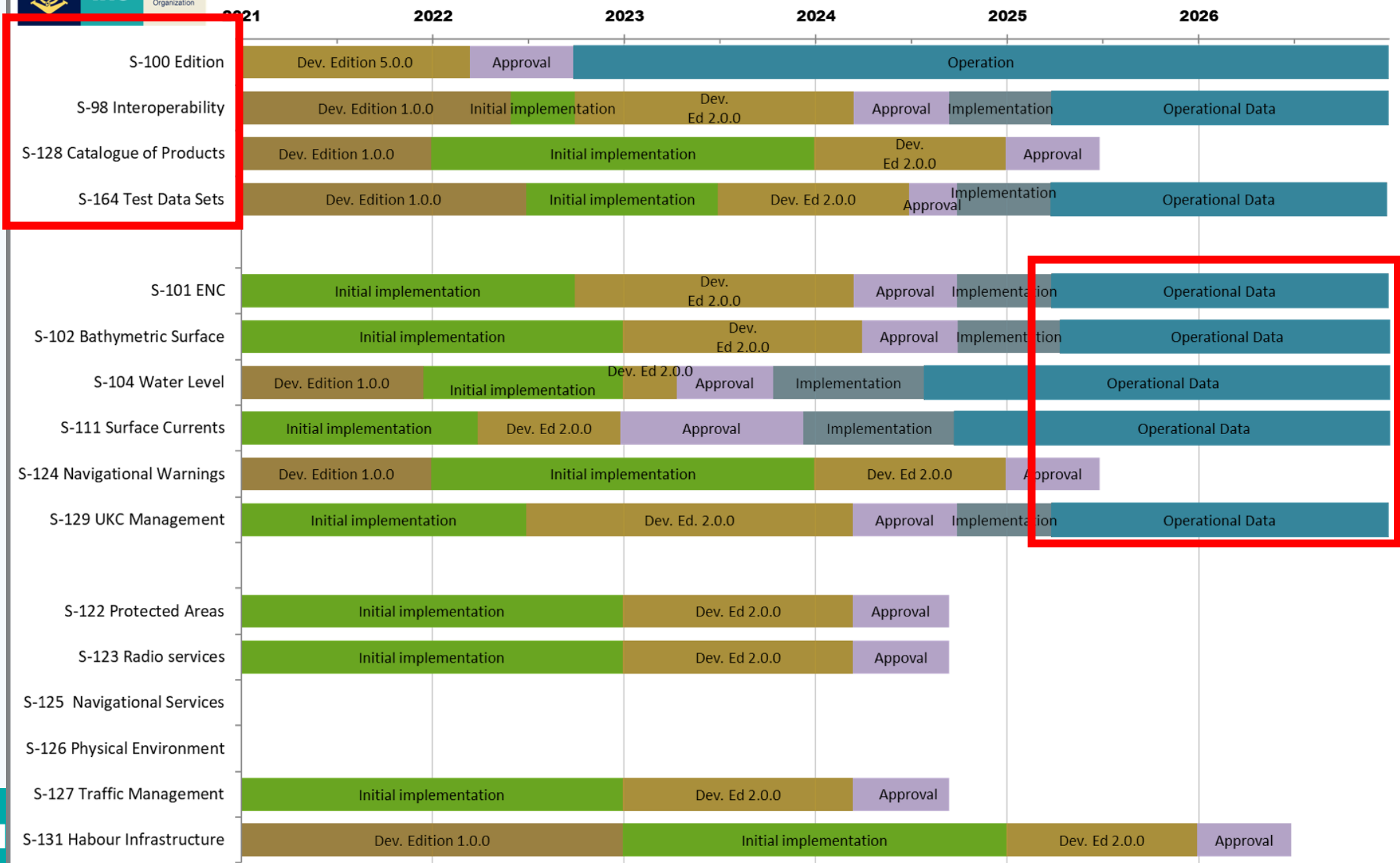
S-122 Marine Protected Areas  
S-123 Marine Radio Services  
S-125 Marine Navigational Services  
S-126 Marine Physical Environment  
S-127 Marine Traffic Management  
S-131 Marine Harbour Infrastructure

+ S-100 Products used in  
Monitoring Mode

S-128 Catalogue of Nautical Products



# S-100 PRODUCT SPECIFICATIONS DEVELOPMENTS AND TIMELINE





# 3. Coordinated implementation of services

## S-101 ENC:

- Coverage should not be a problem.
- IHO will assess the progress of the transition in collaboration with IMO and industry stakeholders (ECDIS devices already installed are not ready for S-101 ENC, identical coverage has to be provided for S-57 ENC and S-101 ENC, encryption aspects...) to check whether there is dependency to S-57 or not in order to consider the prolongation of time.
- New ECDIS systems will have to process both formats in parallel: S-57 & S-101.
- Regular native production for IHO MS: 2025

## S-1xx family product specifications:

These services will not be mandated by IMO initially, but they will be available at the option of users through compatible systems.

No need for industry to wait for the final implementation of a S-101 ENC enabled ECDIS

# 4. Synchronization with IMO

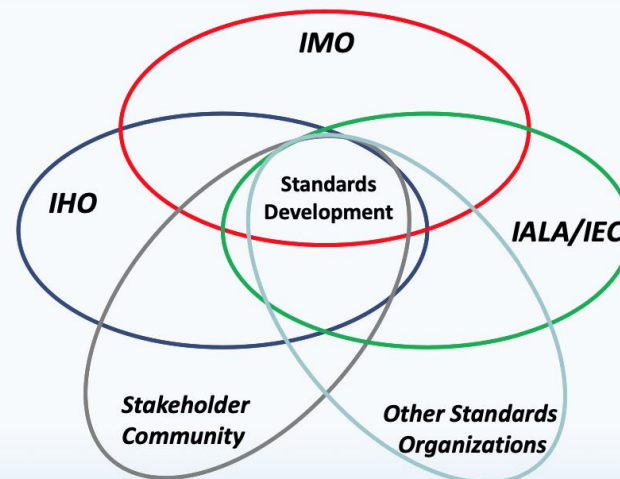
## S-101 ENC:

Assure IMO that S-57 /S-101 ENCs fulfill requirements for ENC as defined in IMO ECDIS instruments

Advice IMO that S-101 ENCs are cyber secure, improve the clarity of portrayal and open the door for the implementation of the e-navigation service concept.

## S-1xx & S-Xxx family product specifications:

No need for synchronization with IMO (content of these datasets are not mandated requirements).





# 5. Collaboration with industry

## **S-101 ENC:**

ECDIS industry has to be made aware of start date S-101 ENC (including encryption) provision service in 2026.

Close cooperation with IEC for S-101 ENC based tests.

## **S-1xx family product specifications:**

ECDIS and industry has to be made aware that provision of such datasets start according to individual commitment of MS (different speed).

## **S-Xxx product specifications developed and maintained by other domains:**

It can be expected that industry will develop compatible applications not limited to ECDIS and Surface navigation.



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## 6. Capacity building for Hydrographic offices

- CBSC will assess the needs and assist offices with the transition of ENC production to S-101.
- Producer nations with technology & expertise are encouraged to share their advances with the IHO CB strategy.

## 7. Development of global distribution capability

Application of WEND-100 principles envisions a new generation of global service delivery networks, analogous to the current RENC arrangements.

Last WENDWG meeting in february 2022.

The **WENDWG** agreed:

- More work is necessary for route monitoring, route planning, regional versus oceanic for S-102, S-104 and S-111, S-129 options.
- To make a distinction in the non-SOLAS use case between navigation use and other use than navigation.



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# Actions to be taken by the MBSHC

The MBSHC is invited to:

- Note the presentation.
- Take any other action deemed necessary.

## Thank you

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