Governmental perspectives – Sweden

Technical seminar on SECOM and MCP

2025-10-10

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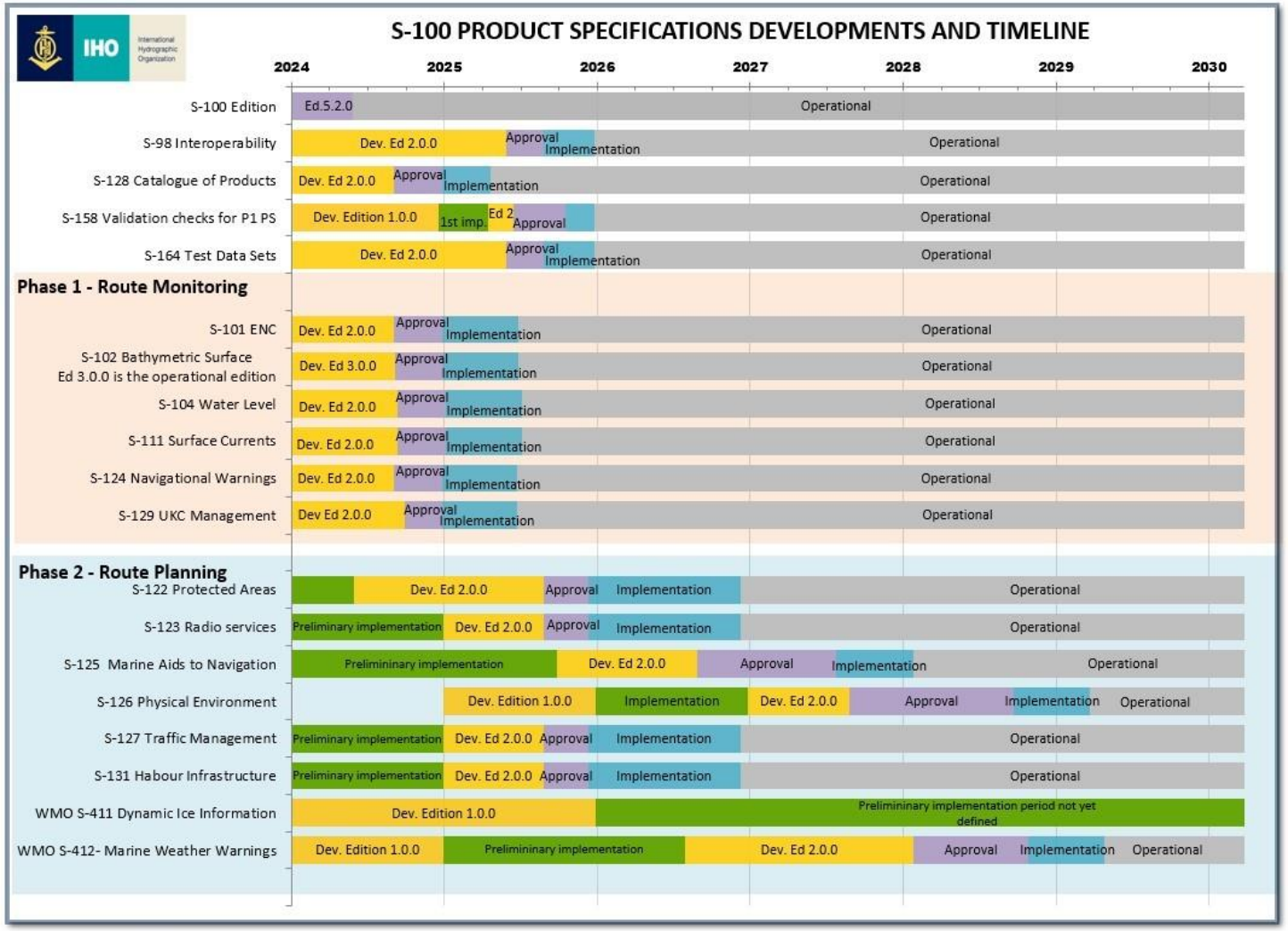
General



This S-100 timeline is updated: 02 07 2024

- National development follows IHO's timeline for Hydrographic products (IMO Maritime Services 11 & 12)
- Prioritized Development areas: S-100, remote pilotage
- Involvement in IHO Infrastructure centre, where the IHO MCP is being established
- Engaged in IMO NSCR work on "Guidance to Establish a Framework for Data Distribution and Global IP-based Connectivity between Shore-based Facilities and Ships for ECDIS S-100 Products"
- VTS systems prepared for S-421
- SECOM development

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Projects - a part of our development

- Baltic Sea E-nav - Baltic Sea coastal states (except Russia). Harmonized implementation of first S-100 standards (2023-2026), EU Interreg BSR
- MaDaMe – Impact on standardization (S-124, S-125, S-212), (2023-2026) EU Interreg BSR
- Remote Pilotage (Navigationsstöd från land) – Proof of concept (Swedish Transport Administration funding) 2022-2026
- NELSON – Further development and implementation of Remote pilotage (2025-2028) EU CEF
- Dynamic Navigation in (a b)ÖKS: further development and implementation of dynamic S-100 standards (S-104, S-111, S-124). Pre-project running now (together with Danish Geospatial Agency). Main project with partners from SE, DK & NO 2026-2029. EU Interreg ÖKS

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The red thread

- Bigger data volumes
- Need for real-time distribution
- A maritime universe with interoperable services where connectivity is key; not only for hydrographic products/services, but for all IMO Maritime Services in the context of e-navigation
- Collaboration between international organizations for a harmonized approach

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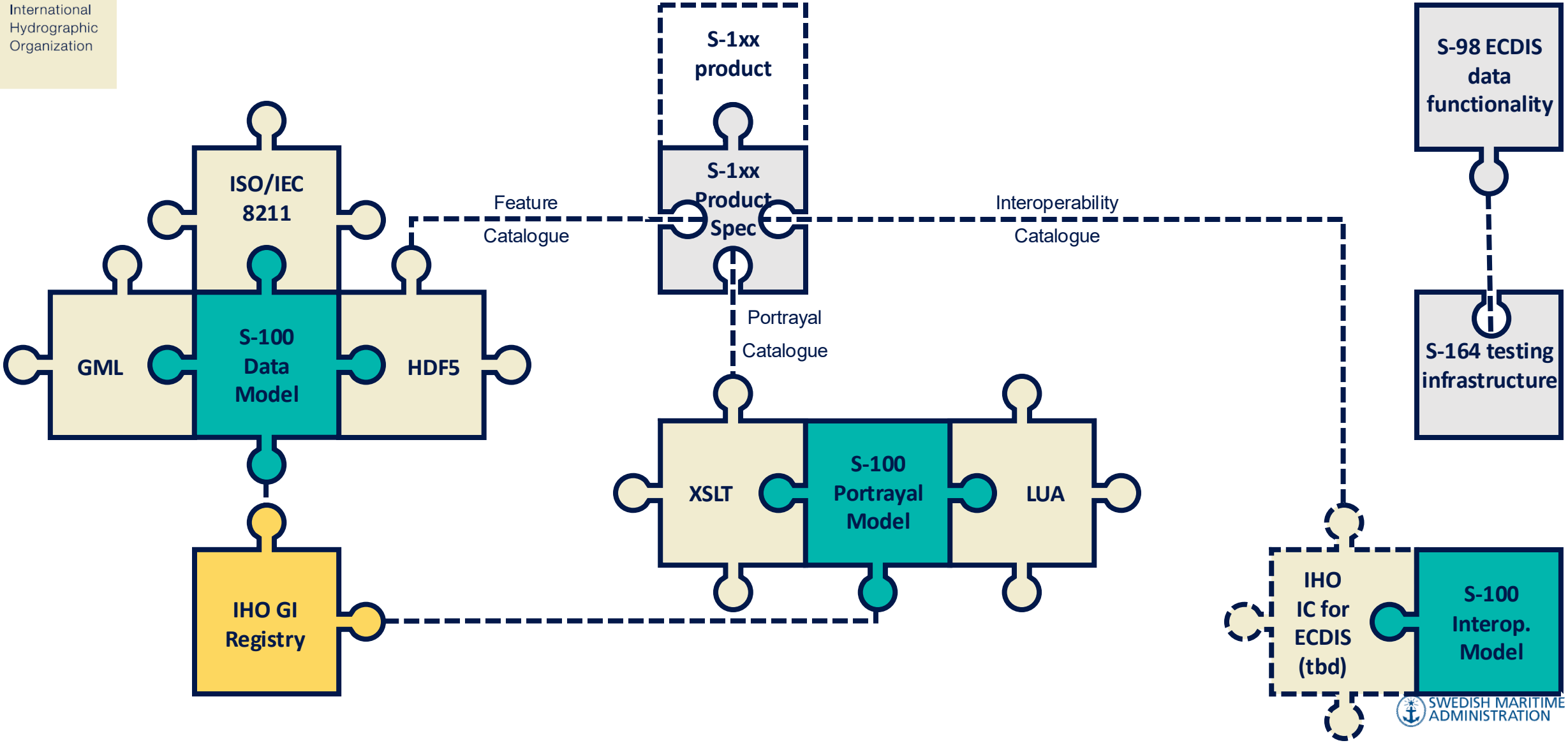
S-100 ARCHITECTURE (SIMPLIFIED)



International Hydrographic Organization

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Optional S-98 ed.2 SECOM “requirement” for S-124 and S-129

20.4.3 Automatic Update

a) **Reception of Updates.** The ECDIS must be capable of receiving official updates, as S-100 Part 17 exchange set. For such updates of S-124 and S-129 datasets, the ECDIS should be capable of being interfaced to a SECOM (IEC 63173-2) based telecommunication network. This capability should include at least :

i. User selection of data services from a list provided by a SECOM service registry,

ii. Management of information about the data services selected in item (i), for example SECOM subscription status, and

iii. Acknowledge receipt of datasets.

NOTE (informative): The bi-directional transfer of S-421 based route plans using SECOM is described in IEC 61174, IEC 63173-1 and IEC 63173-2.

Needs to be tested for type approval (if implemented) → corresponding tests in S-164 ed. 2

i. Service discovery
ii. Service management (subscription)
iii. Reception acknowledgement

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S-164 ed. 1.9 *IHO Test Data Sets for ECDIS*

IHO will host the components needed to test items i-iii against:

- Specialized S-124 SECOM service with predictable behaviour (164secom.iho.int)
- MCP backend to enable this service (note that this is not a full fletched operational MCP!):
  - Minimalist Maritime Service Register (listing just one SECOM service)
  - Minimalist Maritime Identity Register (handling identities of above SECOM service and tested systems)

- If everything goes according to plan: tests to be published in S-164 during 2026.