



# PRIMAR RENC Update to MACHC25

Operated by the Norwegian Mapping Authority, Hydrographic Service

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# Content

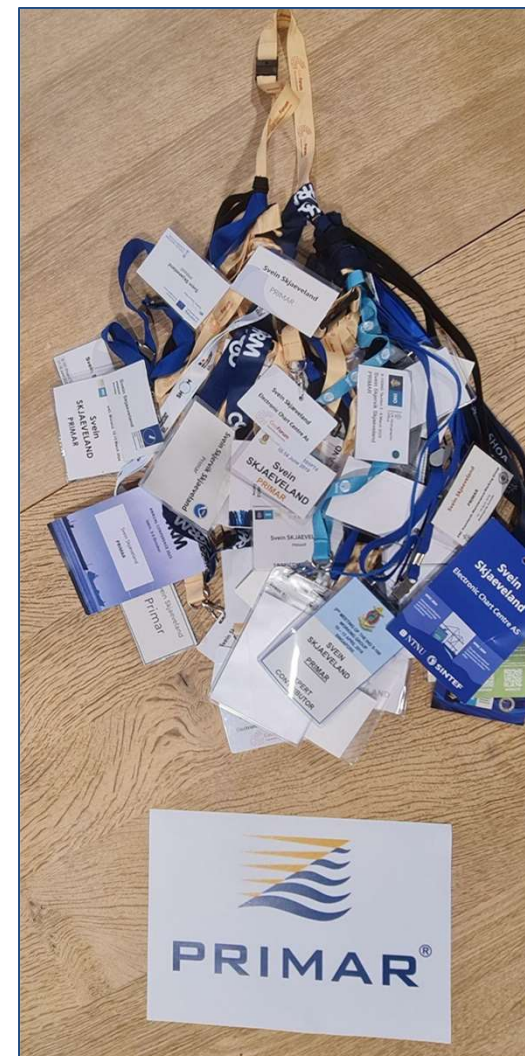
- PRIMAR activities 2024
- PAC31 summary and capacity building offerings
- PRIMAR projects 2025
- PRIMAR S-100 Strategy and Service
- PRIMAR Multi Fuel Services
- PRIMAR Navy / Governmental Services



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# PRIMAR 2024 Activity Overview

Activity	Date	Location	Format
DQWG19	25-26/03	N/A	VTC
TWCWG8	20-23/02	Monaco	VTC
IALA S-200 Seminar	19-23/02	France	Physical
WENDWG14	20-22/02	USA	Physical
S100TSM10	12-15/03	Monaco	Physical
EAtHC18	1-3/05	Morocco	Physical
NIOHC23	21-23/05	Thailand	Physical
HSSC16	27-31/05	Tokyo	Physical
S-101PT13	17-20/06	Sweden	Physical
WWNWSC16	2-6/09	Chile	Physical
MBSHC24	2-4/07	Romania	Physical
2nd IHO/IALA WS	9-13/09	Maryland USA	Physical
NIPWG11	24-25/09	Poland	Physical
ENCWG9	8-10/10	Denmark	Physical
ECS PT	11/10	Denmark	Physical
CIRM Annual Conference	14-17/10	Busan	Physical
8th Council Meeting	15-17/10	Monaco	Physical
Taiwan S-100 Workshop	22-25/10	Taiwan	Physical
S100WG9	4-8/11	Italy	VTC
TWCWG9	19-22/11	Monaco	Physical



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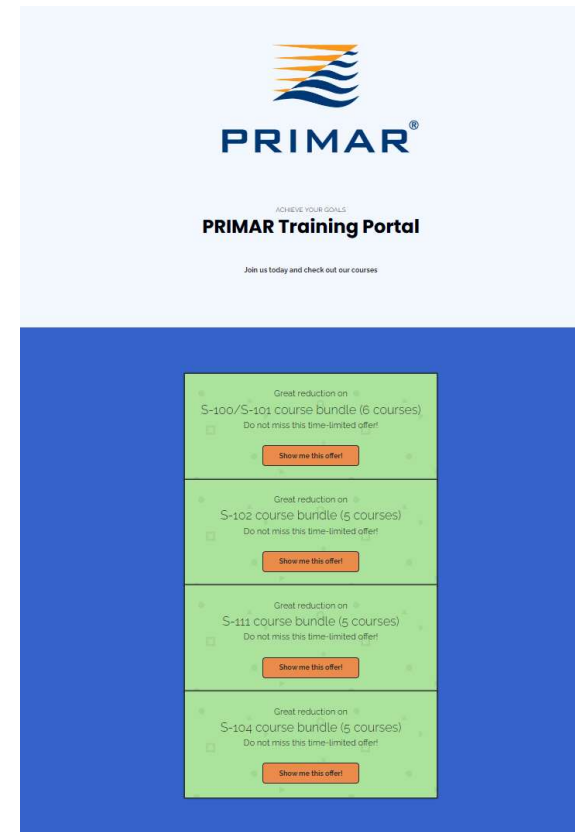
# PRIMAR Advisory Committee 31



- PAC 31 arranged in Helsinki, Finland 12. – 14. Nov.
- Decisions on budget and finances, strategy, projects and capacity building support.
- PAC approved updates to the PRIMAR Strategic Plan.
- PAC approved extension of ongoing S-100 development projects, and two new projects.
- PAC approved the introduction of a PRIMAR S-57 (non-SOLAS) service from 2025.
- PAC approved new license types for Web Chart Service and ENC onshore use from 2025.
- PAC approved the establishment of a PRIMAR S-100 CB fund. Initial funding USD 500 000.
- Criteria for support from the S-100 CB Fund to be finalized.

# PRIMAR S-100 Training Portal

- Capacity building content for PRIMAR Members.
- Exchange & knowledge sharing.
- Capacity Building offer to IHO.
  
- 2021: Training portal launched.
  - S-100
  - S-101 and conversion
  
- 2022 Continued development.
  - S-102
  - S-111
  
- 2023-2024 Continued development.
  - S-104 (Completed in 2024)
  - S-100 upgraded (5.0.0)
  - S-101 upgraded (1.1.0)



Launch of PRIMAR Learnworlds  
training portal June 2021

<https://primar.learnworlds.com>

# PRIMAR 2025 Planned Projects

PROJECTS 2025	Type
S-101 Adaptation 2025 (S-100 e5.2.0, S-101e2.0.0)	Extension
Baltic Sea Project Support (Phase 2)	Extension
MCP Compliant Services (SECOM)	Extension
Market Initiatives 2025	Extension
Update of Product Catalogue 2025	Extension
S-128 Catalogue of Nautical Products (Phase 3)	Extension
User and Rights Management in a Multi Product Delivery (Phase 2)	Extension
S-100 Explorer Development (Phase 2)	Extension
S-100 Chart Display Engine Update	New
Usage of Artificial Intelligence (Phase 1)	New

# PRIMAR S-100 Strategy

In its role as a RENC, PRIMAR will work towards the development of tools and services to facilitate efficient collection, validation and distribution of today's S-57 ENC product and all the S-100 products that are considered essential and identified by IHO as key for safe navigation.

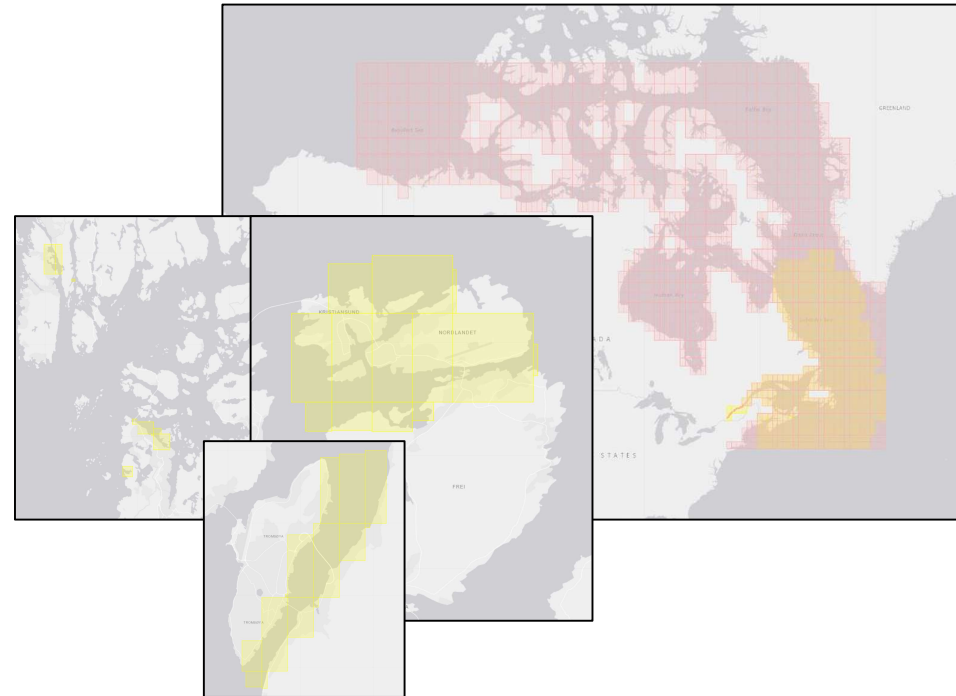
The following S-100 products are prioritized for implementation in PRIMAR in 2023 → 2030:

- S-101 Electronic Navigational Chart
- S-102 Bathymetric Surface
- S-104 Water Level
- S-111 Surface Currents
- S-124 Navigational Warnings
- S-128 Catalogue of Nautical Products

# PRIMAR S-100 Service



- The PRIMAR S-100 Service was launched July 2020.
- 356 S-102 and 1417 S-111 datasets from CHS and 92 S-102 datasets from NHS.
- Encrypted by S-100 Part 15.
- Automatic upload through CARIS cloud or manual through PRIMAR VPN.
- Push of data through the PRIMAR Remote Update Protocol.
- S-104 ready.



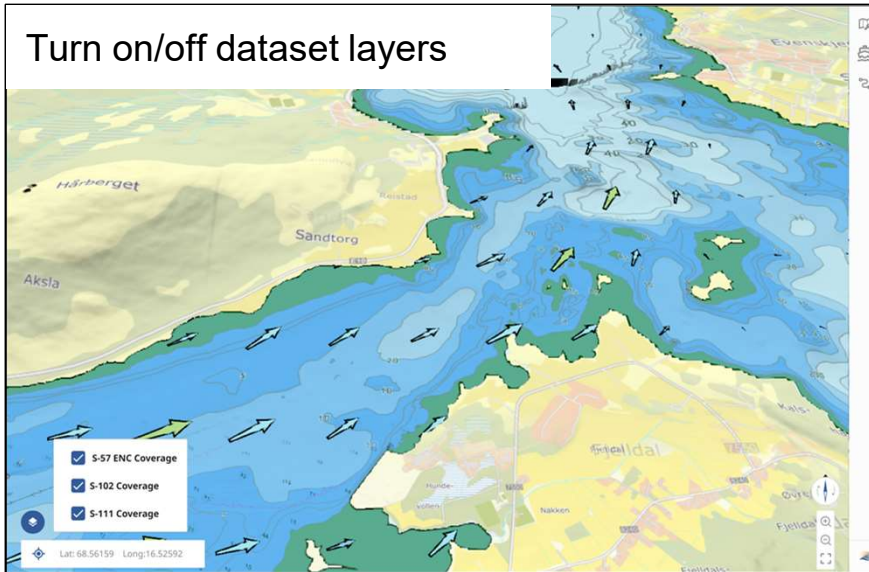
# PRIMAR S-100 Explorer development

- Display of different S-100 datasets. Web-based value added service.

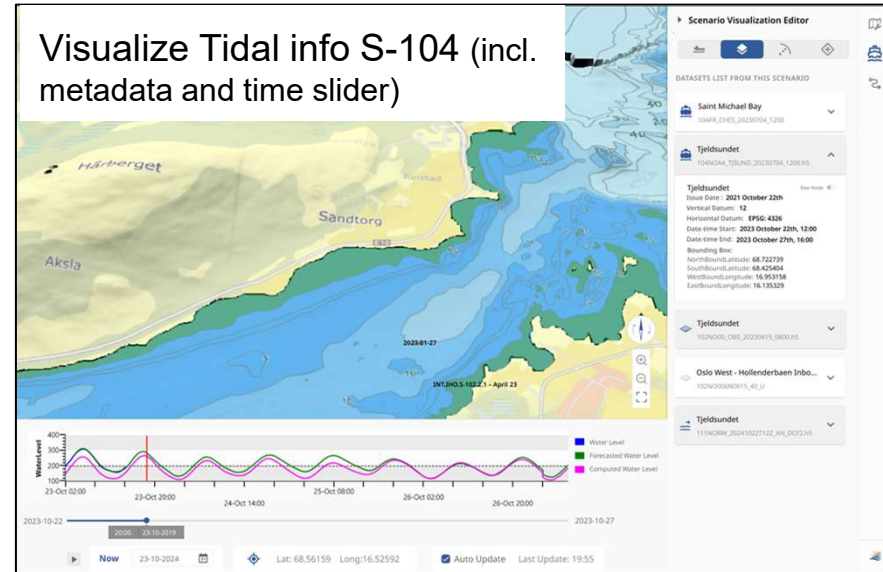


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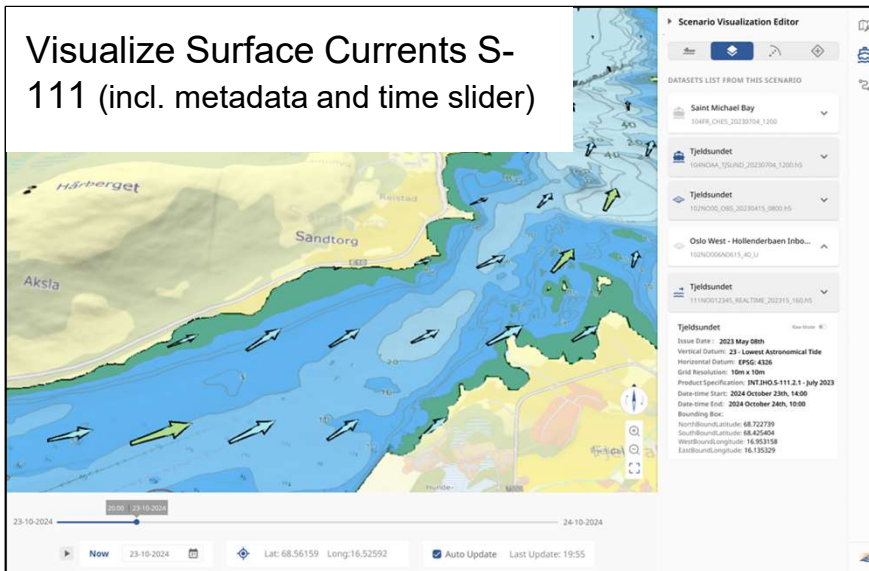
Turn on/off dataset layers



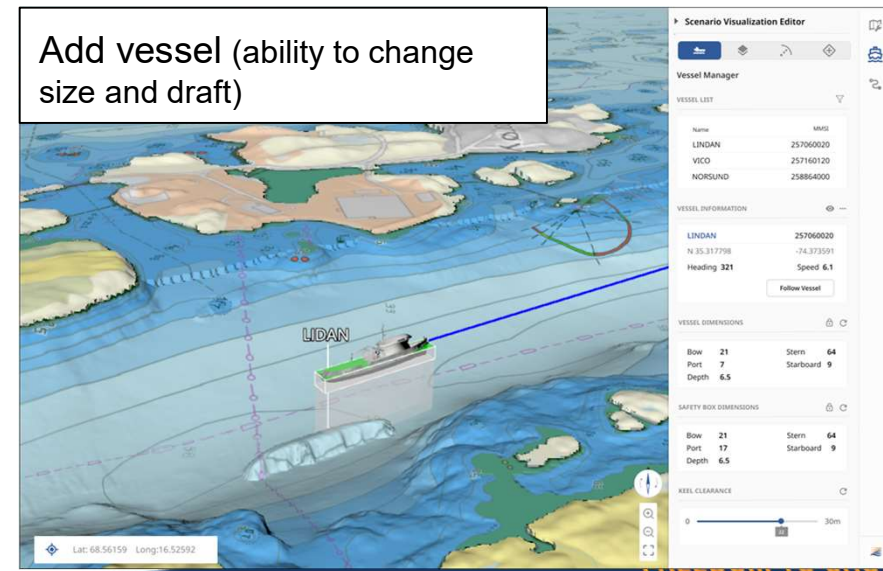
Visualize Tidal info S-104 (incl. metadata and time slider)



Visualize Surface Currents S-111 (incl. metadata and time slider)

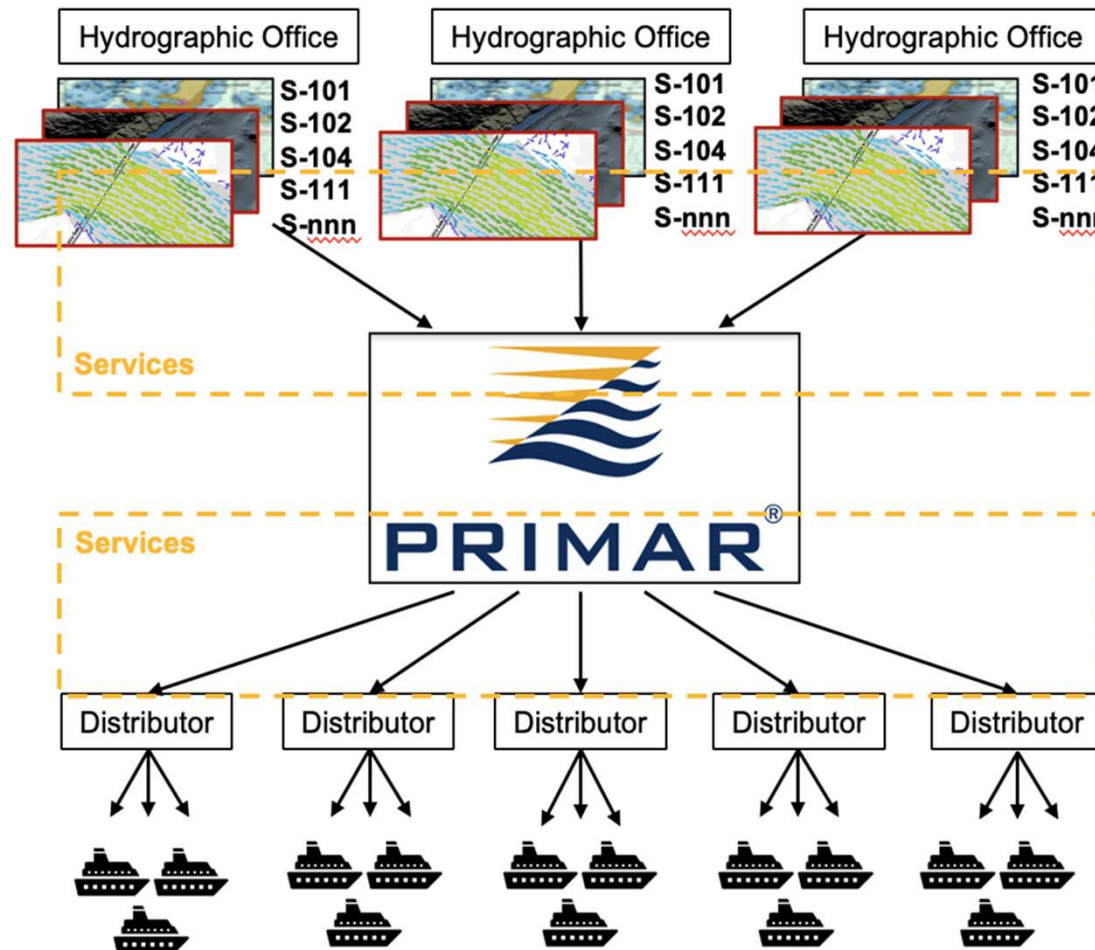


Add vessel (ability to change size and draft)



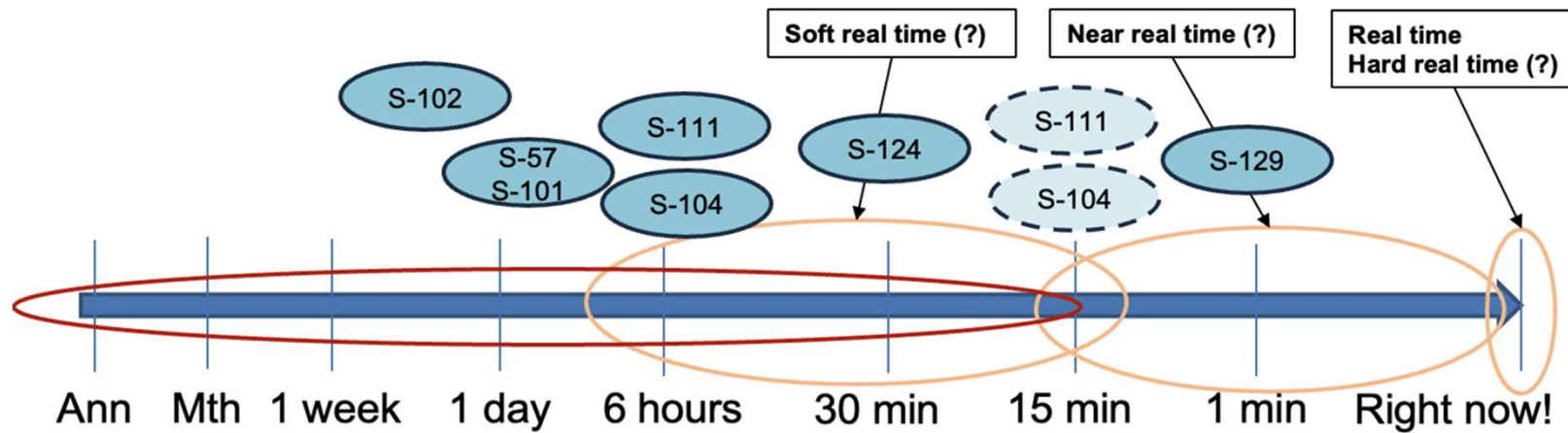
# Multi product delivery - What do we mean?

Multi-product delivery is the intake and distribution of various S-100 data products, in addition to S-101 and S-57.



# Multi product delivery

Some of these datasets are more dynamically updated than others; this could impact how they need to be handled.

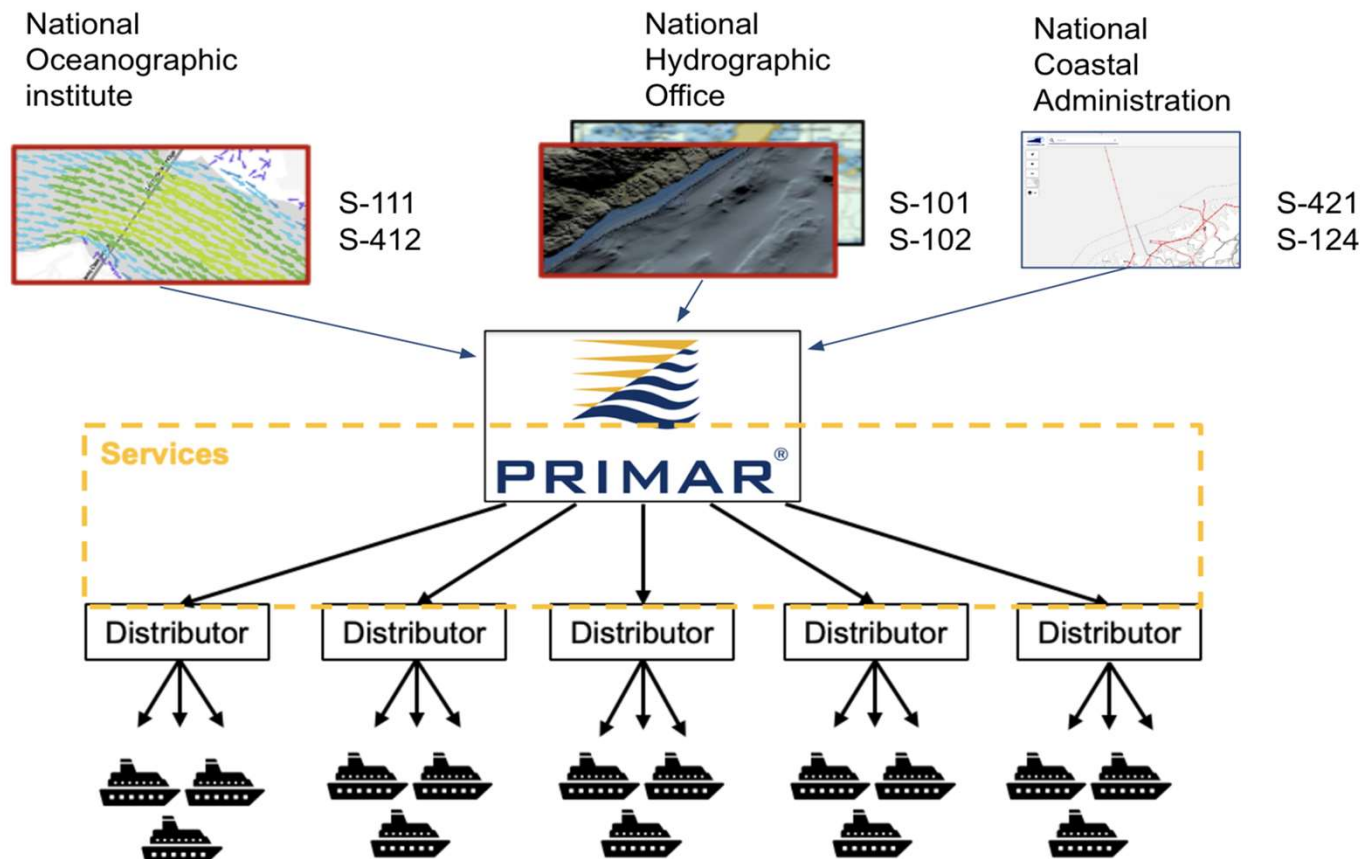


## Automation is Key!

- Automated quality assurance (QA) processes.
- Automatic release of products that pass QA.
- Seamless data flow through the service.
- Pausing only if issues are detected.
- Automated feedback reports to data producers.

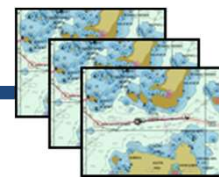
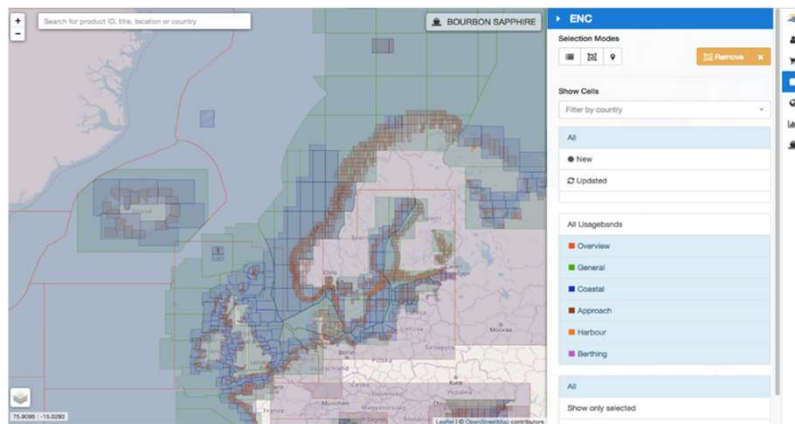
# Multi product delivery

- Not all of these new datasets will necessarily come directly from a hydrographic office.
- PRIMAR needs to handle data from multiple providers and ensure they can deliver data in a simple, secure, and efficient way.



## PRIMAR Navy / Governmental Supplier Services

- Supply ENCs to your Navy / Governmental users.
- Access to PRIMAR global ENC and S-100 database.
- Easy operation from the PRIMAR Product Catalogue.  
Register and add users, Create ENC portfolios, Activate area of interest, View orders/reports, View licensee status, Download ENC updates and permit files etc.



**Navy  
users**



**Thank you for your attention**  
**Questions?**

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