



**PRIMAR**<sup>®</sup>

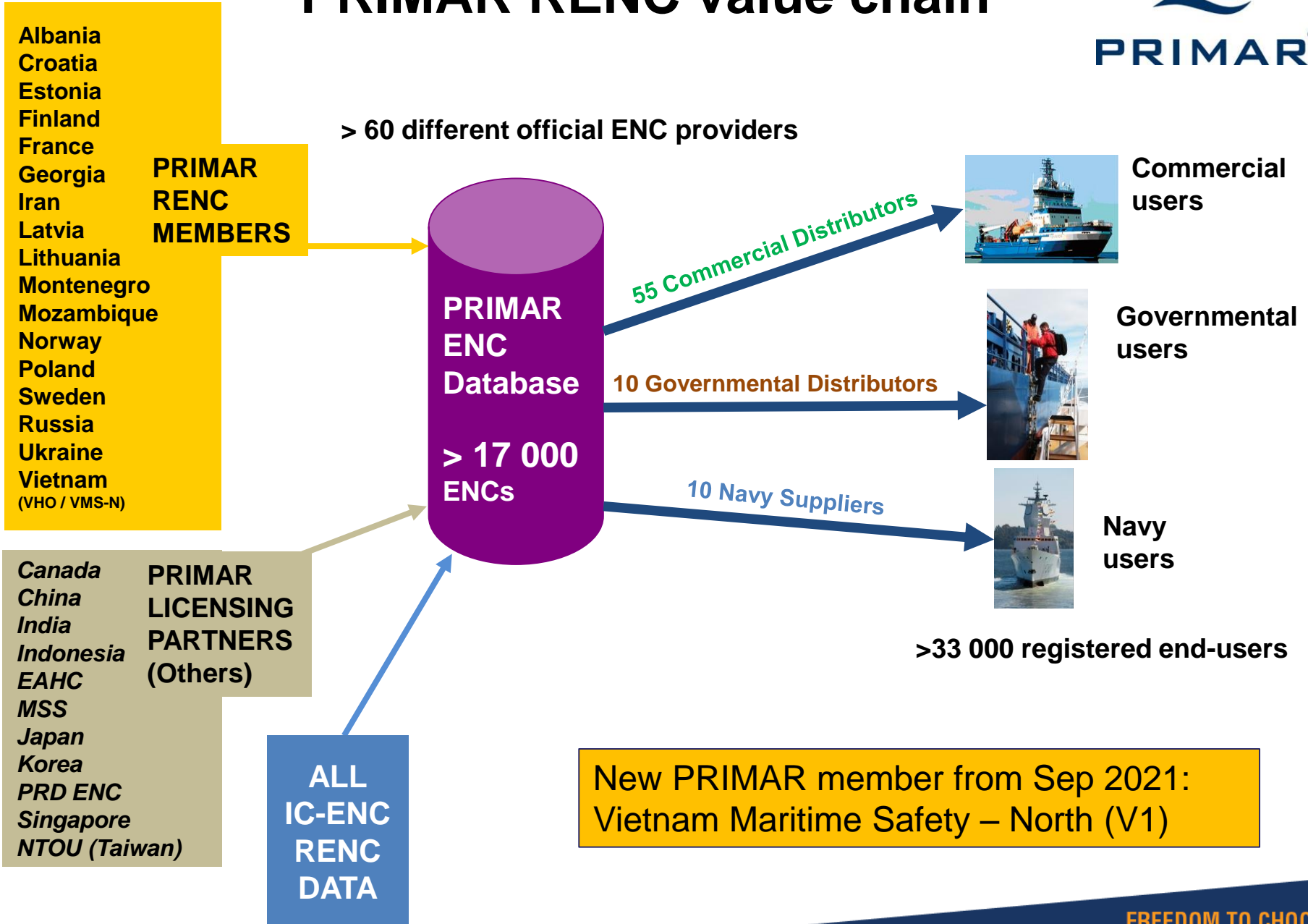
# **PRIMAR updates EAtHC 16**

**Hans Chr. Lauritzen**  
**Director PRIMAR**

# PRIMAR Updates 2021

- PRIMAR S-100 Development
- PRIMAR S-101 Conversion Task Force
- PRIMAR S-100 Service
- PRIMAR Training Portal

# PRIMAR RENC value chain



# PRIMAR S-100 Development Focus

**S-101** (ENC)

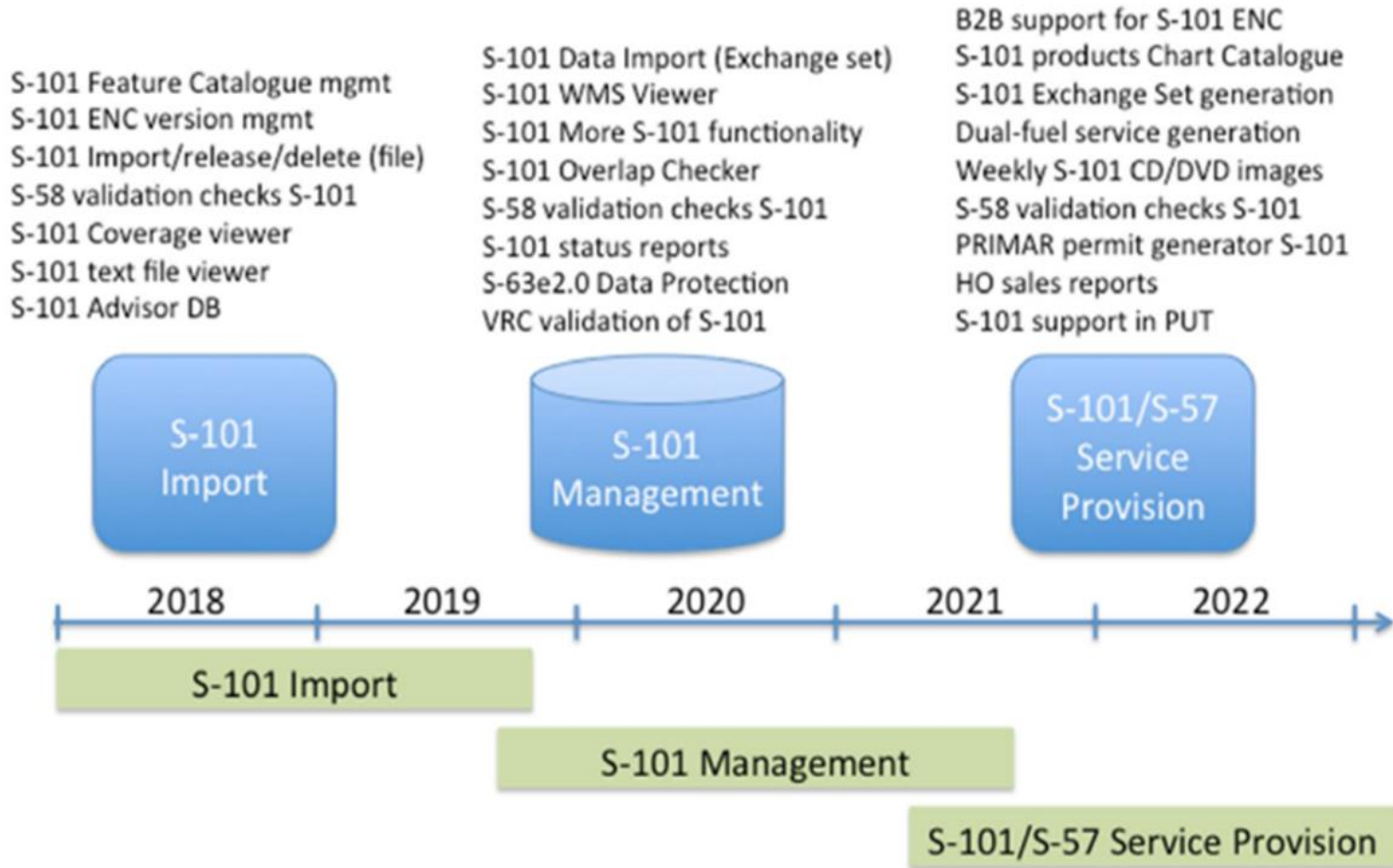
**S-102** (Bathymetry)

**S-111** (Surface currents)

*S-104* (Water Level Information for Surface Navigation)

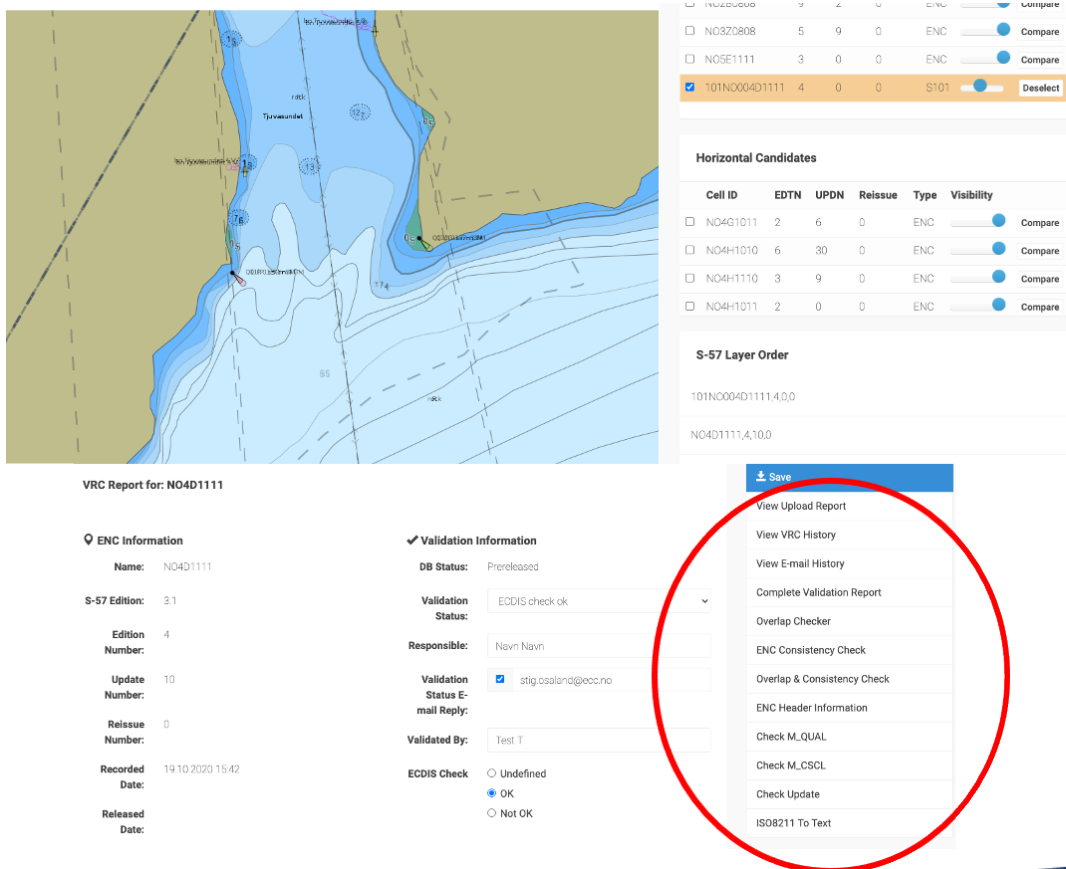
*S-129* (Under keel clearance management)

# PRIMAR S-101 Project Status



# S-101 Focus 2021

- Develop support for S-101 functionality in VPN for QC
- S-100 part 15 signature service for HO datasets
- Object Query and Spatial Search



The screenshot displays the PRIMAR system interface. On the left is a map of a coastal area with various navigational markers. In the center is a table of data with columns for Cell ID, EDTN, UPDN, Reissue, Type, and Visibility. On the right is a validation report for NO4D1111, including ENC Information and Validation Information. A red circle highlights a dropdown menu in the Validation Information section.

Cell ID	EDTN	UPDN	Reissue	Type	Visibility
<input type="checkbox"/> NO320808	5	9	0	ENC	<input type="radio"/> Compare
<input type="checkbox"/> NO5E1111	3	0	0	ENC	<input type="radio"/> Compare
<input checked="" type="checkbox"/> 101N0004D1111	4	0	0	S101	<input type="radio"/> Deselect

**Horizontal Candidates**

Cell ID	EDTN	UPDN	Reissue	Type	Visibility
<input type="checkbox"/> NO4G1011	2	6	0	ENC	<input type="radio"/> Compare
<input type="checkbox"/> NO4H1010	6	30	0	ENC	<input type="radio"/> Compare
<input type="checkbox"/> NO4H1110	3	9	0	ENC	<input type="radio"/> Compare
<input type="checkbox"/> NO4H1011	2	0	0	ENC	<input type="radio"/> Compare

**S-57 Layer Order**

101N0004D1111,4,0,0  
NO4D1111,4,10,0

**VRC Report for: NO4D1111**

**ENC Information**

Name: NO4D1111  
S-57 Edition: 3.1  
Edition Number: 4  
Update Number: 10  
Reissue Number: 0  
Recorded Date: 19.10.2020 15:42  
Released Date:

**Validation Information**

DB Status: Prereleased  
Validation Status: ECDIS check ok  
Responsible: Navn Navn  
Validation Status E-mail Reply:  stig.osaland@ecc.no  
Validated By: Test T  
ECDIS Check:  Undefined  OK  Not OK

**Dropdown Menu (circled in red):**

- Save
- View Upload Report
- View VRC History
- View E-mail History
- Complete Validation Report
- Overlap Checker
- ENC Consistency Check
- Overlap & Consistency Check
- ENC Header Information
- Check M\_QUAL
- Check M\_CSCL
- Check Update
- ISO8211 To Text

*Currently working with member nations to get their S-101 test data into the PRIMAR system and run all QC and validation tests*

- Additional QC tests
- More testdata

# S-101 signature service for HOs

- All S-10x datasets MUST be digitally signed
- PRIMAR develops online service where HO signs own S-101 data before uploading into PRIMAR.
- S-101 datasets will contain both HO and PRIMAR signatures when distributed
  - Recipient can authenticate distribution chain
- Dissemination/training of HOs

# PRIMAR S-101 Conversion Task Force

- Collective and coordinated PRIMAR approach to start working with HO's on S-101 ENC conversion and validation.
- Cooperation with 4 software manufacturers.
- Project results
  - Share experiences and establish PRIMAR and HO guidelines for data conversion and validation.
  - Create S-101 test data.
  - Input to HO strategy on dual-fuel and S-101 production.
  - Feedback to IHO S-57 to S-101 Conversion WG.



# PRIMAR S-100 Distribution

Project kick-off - June 4 2018

**Participants:** PRIMAR, ECC, Canadian Hydrographic Service (CHS) and Teledyne CARIS

## **Project goal.**

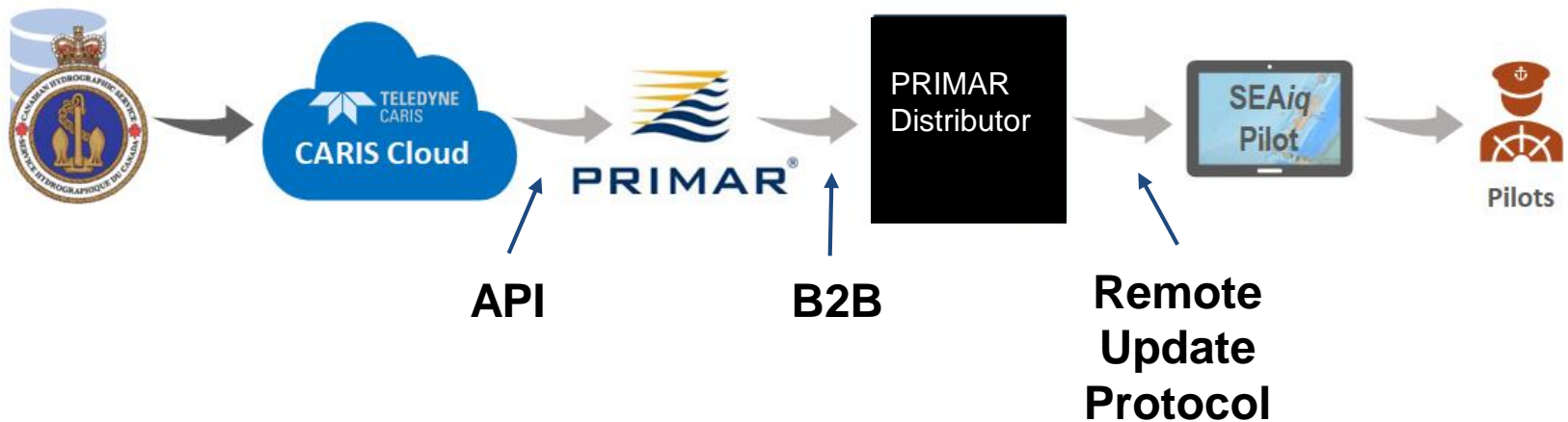
1. Reduce the survey-to-bridge turn-around time
2. Demonstrate the full value chain

**Dataformats:** Start with S-102, continue with S-111 & S-104 with the ambition to use S-100 Part 15 encryption on all S-100 dataformats.

# What have we achieved?

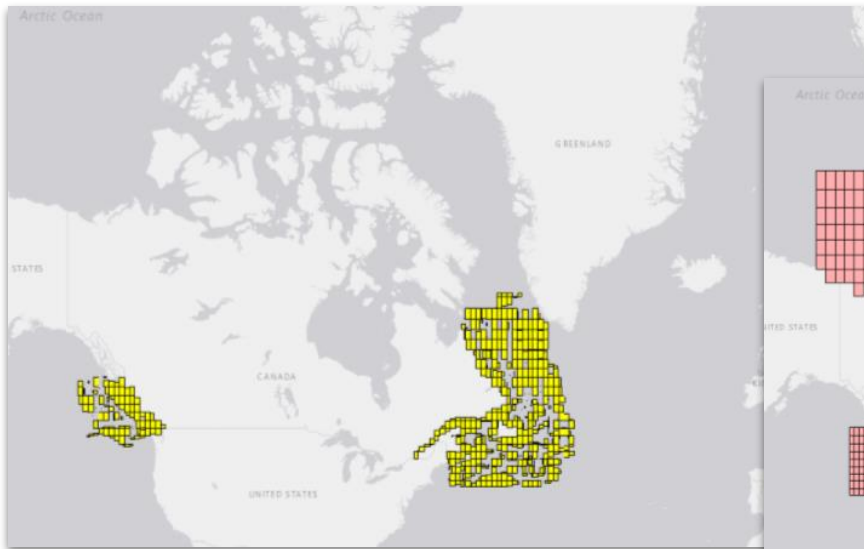
The full value chain.

S-100 Producer    S-100 Cloud    S-100 RENC    S-100 Distributor    S-100 Application    S-100 User

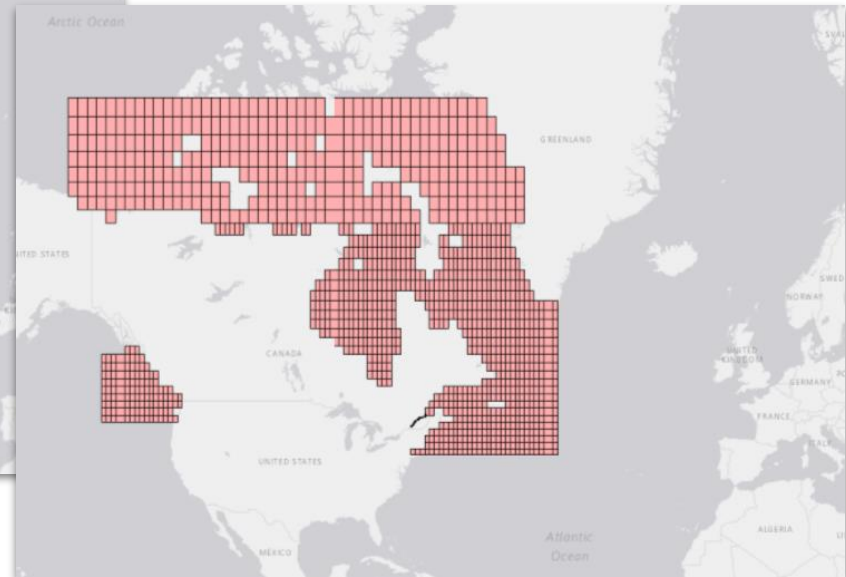


# What have we achieved?

## S-100 Data in the PRIMAR Service



1308 S-102 datasets covering  
Canada



1347 S-111 datasets covering  
Canada

## What have we achieved?

**S-100 Part 15 support** in the PRIMAR Service in place. **PRIMAR VPN** supports upload of S-102 and S-111 datasets.

**13 OEM's** (end user system manufacturers) have received their S-100 Part 15 M\_ID & M\_KEY from the IHO data protection scheme administrator.

**SEAiQ** so far the only one capable of handling S-100 Part 15 and S-102/S-111 dataformats. **Njord Pilot** (SevenCs) in a test phase.

A lot of useful information and feedback to the IHO S-100 standardization working groups.

## S-100 Price and License Model

- The same license and pricing model as for ENC has been used for the S-100 products.
- Component price model (3-10x) for 3-12 month subscriptions).
- Canada allows 3, 6, 9 and 12 months for its S-100 products, in addition to 3 month trial license.

# PRIMAR S-100 User Interfaces

PRIMAR Chart Catalogue with full support for registration, ordering and reporting.

PRIMAR B2B Protocol ready for S-100 product and end user administration.

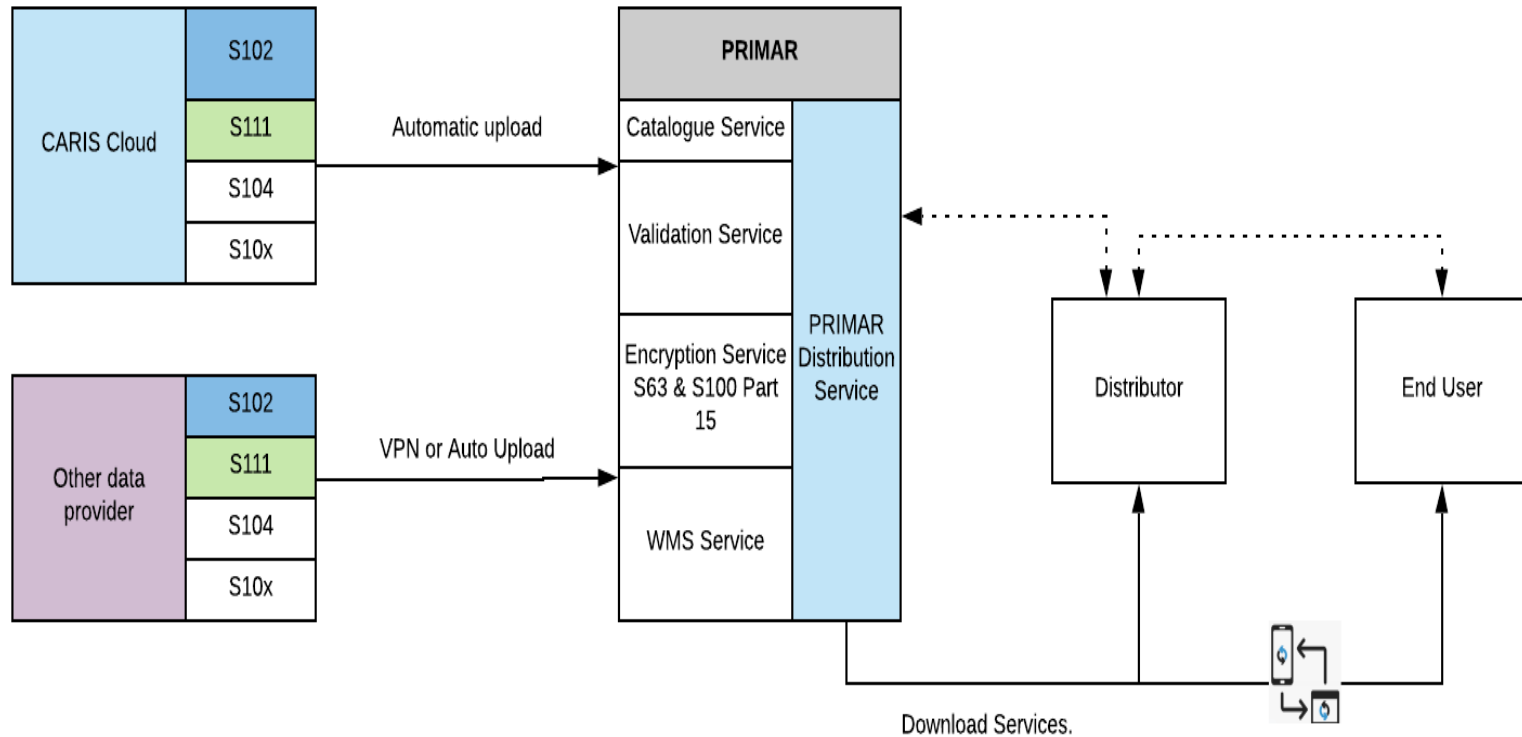
PRIMAR Remote Update Protocol ready for S-100 product distribution.

# S-100 RENC – PRIMAR

PRIMAR S-100 Service

Automatic cloud upload or manual/auto VPN upload.

Updates are pushed automatically to the end user.

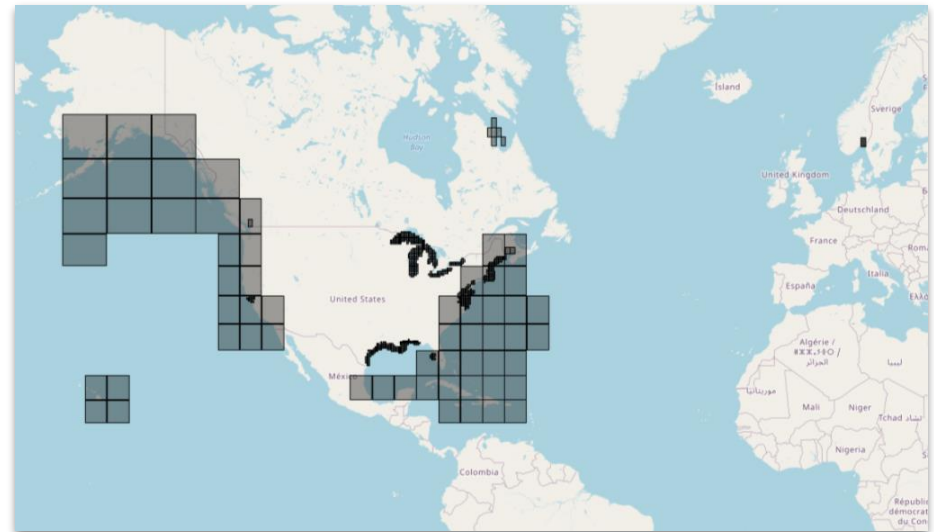


# On the horizon

Implementation of S-104 support

S-111 data from NOAA and Norway already in the PRIMAR Test environment, planned to become official data from NOAA by the end of 2021. S-102 and S-104 will follow.

More download services will soon be available



The project and collaboration with CHS and Teledyne Caris will continue in 2021 and at least until the end of 2022, hopefully with a growing S-100 product type coverage available from PRIMAR.



# S-100 Free Trial For End-Users

- [www.primar.org](http://www.primar.org)
- «S-100»
- «S-100 Free Trial»

- 3 Month Free Trial for End-Users

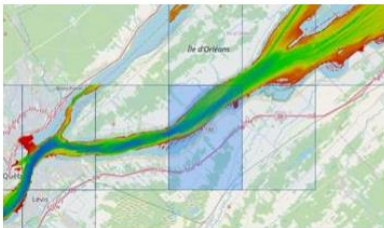
## S-100 FREE TRIAL

PRIMAR, In conjunction with the Canadian Hydrographic Services and SEAiq, are pleased to announce the opportunity to test S-100 Products for a 3 month free trial period.

Taking part in the trial could not be easier, simply follow the steps as set out in our "[How to Guide](#)".

The test contains ENCs, S-102 and S-111 data for St Lawrence River, Vancouver Harbour and St John Harbour, all situated in Canada.

The trial subscription can contain one, two or all three of the areas - the choice is yours!



St Lawrence River



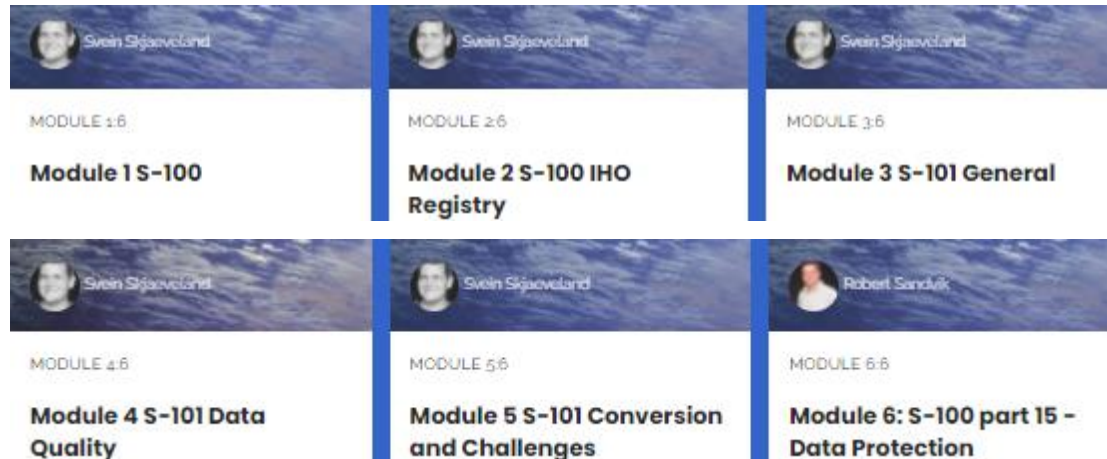
St John Harbour



Vancouver Harbour

# PRIMAR Training Portal

- Online education platform released Spring 2021
  - Hundreds of people worldwide undergo training
- Training available on S-100 and S-101 ENC
  - Combination of free and paid training courses
  - Access to free software and PRIMAR test data



# S-100 Part 15 (Data Protection)

JOIN TODAY

## S-100 Data protection source code and testdata

Links to verified source code and testdata supporting S-100  
Data Protection

[Register for free!](#)

Format

**Online  
resource  
library**

Test data

**ENC  
S-102  
S-111**

Source code

**S100 part 15  
Permits  
PRIMAR API**

Format

**Online  
download**

Duration

**Minutes**

Price

**It is FREE**

# PRIMAR Training Portal



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<https://primar.learnworlds.com>



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