

PRIMAR 2019 – WENDWG10

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PRIMAR's Vision

IN ORDER TO ENHANCE SAFETY AT SEA AND PROTECT THE MARITIME ENVIRONMENT, PRIMAR'S VISION IS TO BE THE MOST EFFICIENT MODEL FOR THE PROVISION OF ENC SERVICES AND MARITIME GEOSPATIAL DATA WORLDWIDE.

Targets for 2019

- Continuously provide the world's most efficient ENC quality control and validation services
- Increased ENC coverage
- Strategic focus – PRIMAR's role in the future
- Financial sustainability
- Technology development – S-100 focus
- Visibility

ENC QC AND VALIDATION SERVICES



The PRIMAR ENC validation statistics for 2019 are as follows:

New ENC	New Editions	Reissue	Cancel cell	Updates
890	5 398	755	1 069	23 052

The below table shows the development of the PRIMAR ENC database during 2019:

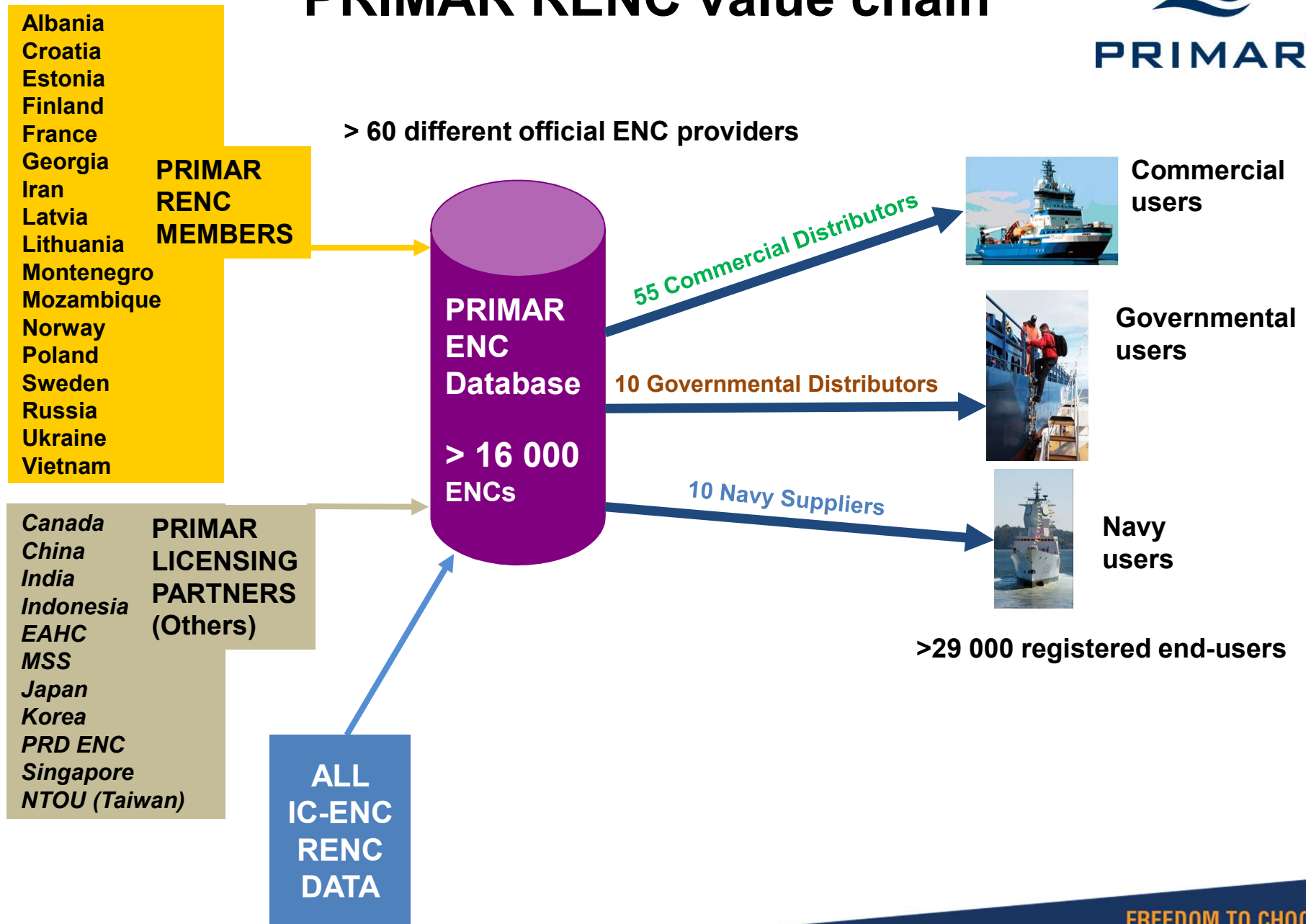
Date	Total no of ENCs	Overview	General	Coastal	Approach	Harbor	Berthing	Updates
01.01.19	15 215	178	611	2 509	4 690	5 873	1 354	40 379
01.07.19	15 653	179	630	2 551	4 835	6 000	1 458	43 083
31.12.19	16 092	179	645	2 611	4 949	6 160	1 548	45 496

ENC QC AND VALIDATION SERVICES

- PAC 24 approved to introduce KPIs for ENC validation in PRIMAR. The following validation completion times was achieved in 2019:

Type of data	Validation KPI (95%)	2019 Average Achieved
ENC Update	1 day	6 hrs.
ENC New Edition	2 days	3 hrs.
New ENC	3 days	4 hrs.

PRIMAR RENC value chain



FREEDOM TO CHOOSE



PRIMAR®

2019 Capacity Building / training

- Two ENC validation workshops conducted in Stavanger, Norway. Participants from Vietnam and Albania.
- S-101 course/seminar conducted in Stavanger, Norway.



2019 Financial Issues

- New financial model introduced in 2019
- 100% royalty payback on ENC price set towards PRIMAR.
- Transaction fee national transactions: \$1,5
- Transaction fee national services to non-PRIMAR members: \$2,3

2019 Financial Issues

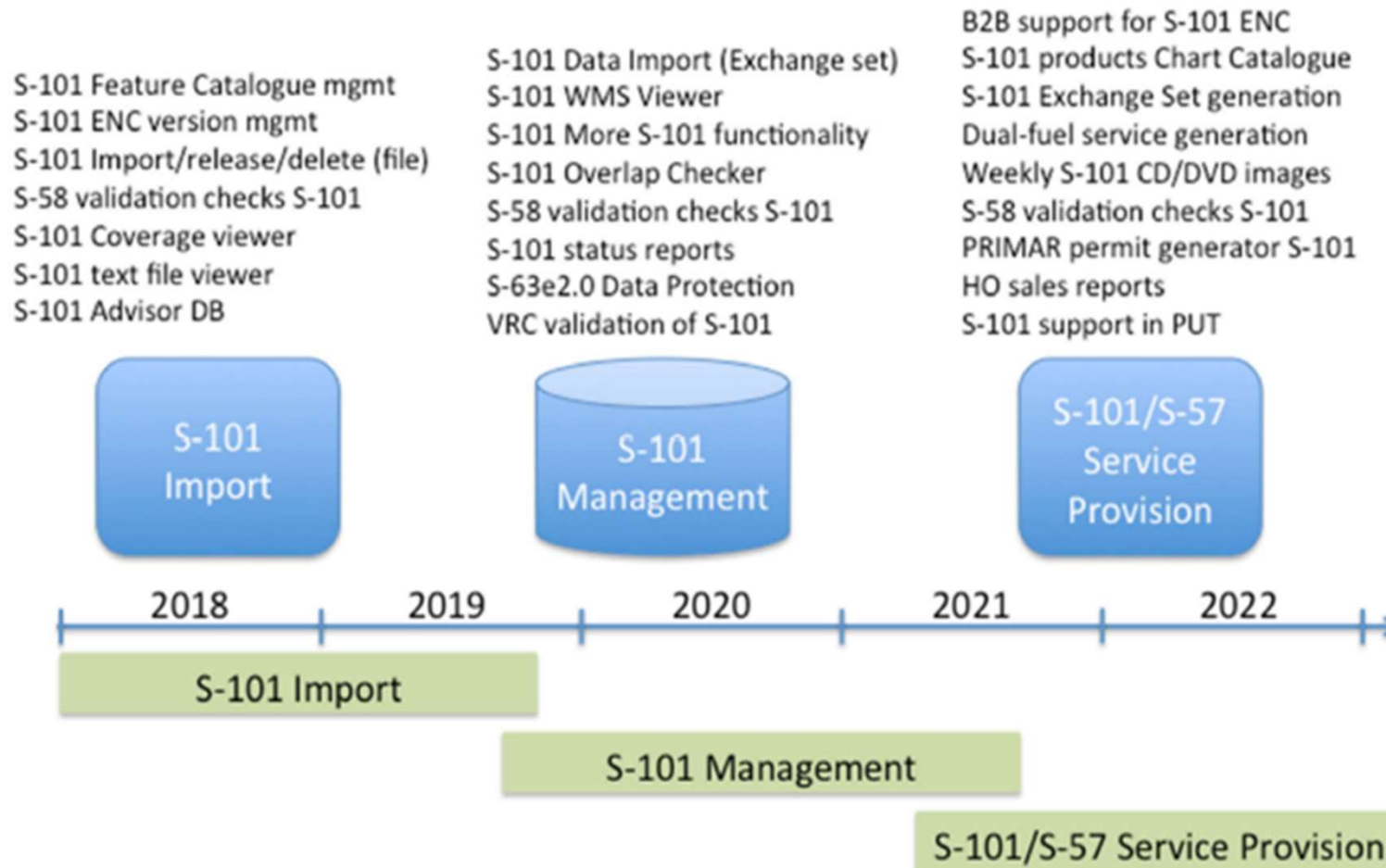
- Total revenue of ENC sales 21 % increase compared with 2018.
- Total cost of PRIMAR operation (commercial/national) \$2,5m.
- Financial surplus (excess of cost coverage after regular royalty payments) of approximately \$100k.

2019 Technology Development



- S-101 data upload, validation and distribution.
- S-102 data upload, validation and distribution.
- S-100 Data as a Service.
 - Project in cooperation with Caris and CHS
- S-100 part 15 Data Protection (new S-63).
- S-57 distribution service
- PRIMAR Periodic Update Query
- RTZ (S-421) distribution

PRIMAR S-101 Project Status

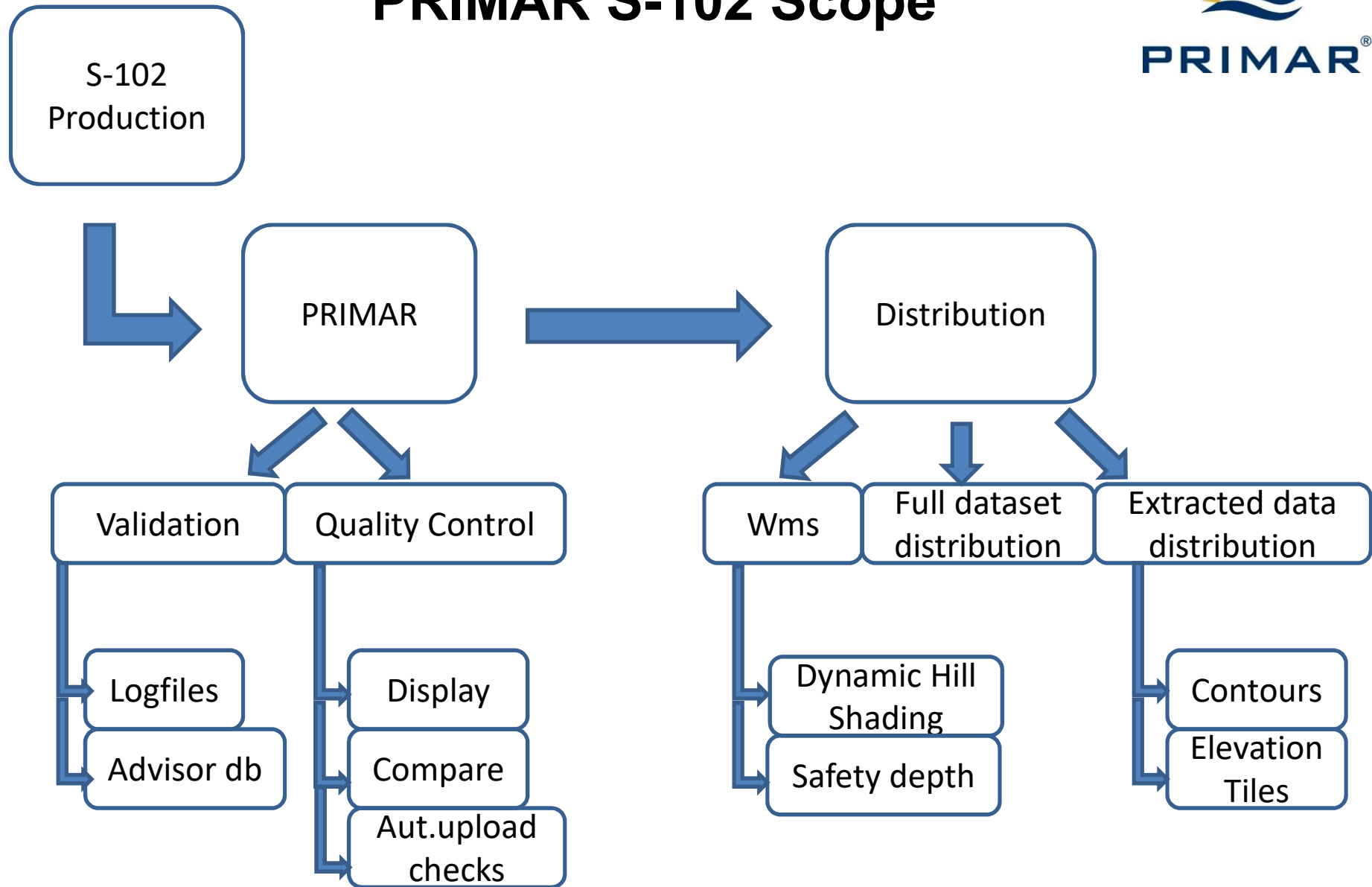


PRIMAR S-101 Project Status



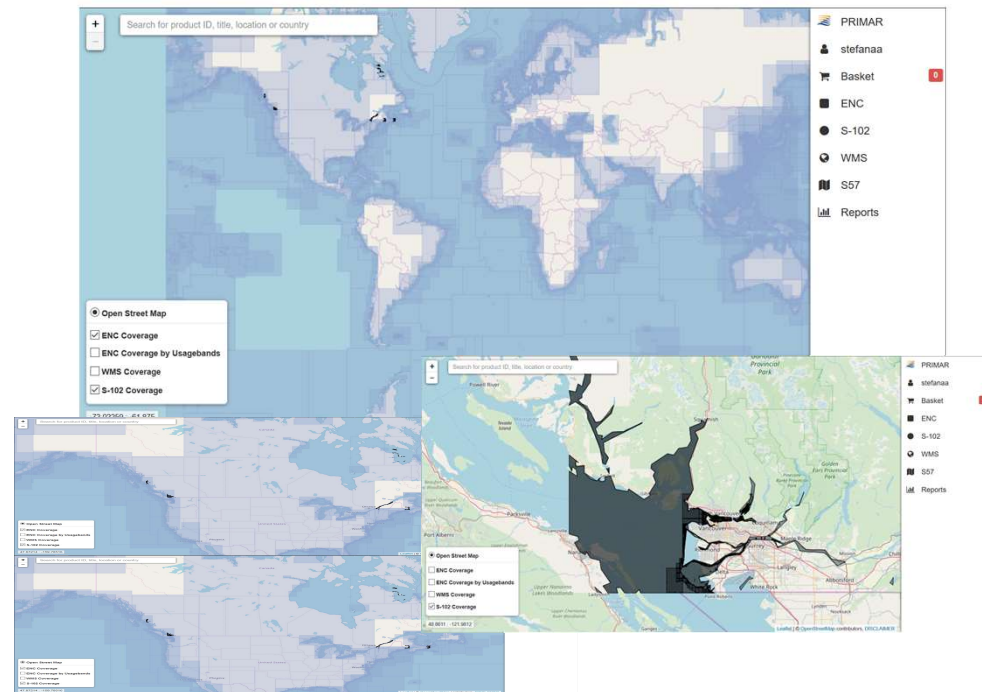
- Focus in 2019 has been on:
 - Supporting S-100 part 15 data protection
 - Build user interfaces for S-101 VPN
 - Started to develop S-101 graphical viewer (S-101 Portrayal Catalogue)
 - Started on PRIMAR Chart Catalogue support for S-101
- Focus in 2020 will be on:
 - S-101 support in PRIMAR Chart Catalogue
 - VRC (Validation Report Checker) functionality
 - Viewer for S-101 quality issues
 - Automated creation of S-101 image files
 - Service information to selected OEMs/Distributors

PRIMAR S-102 Scope



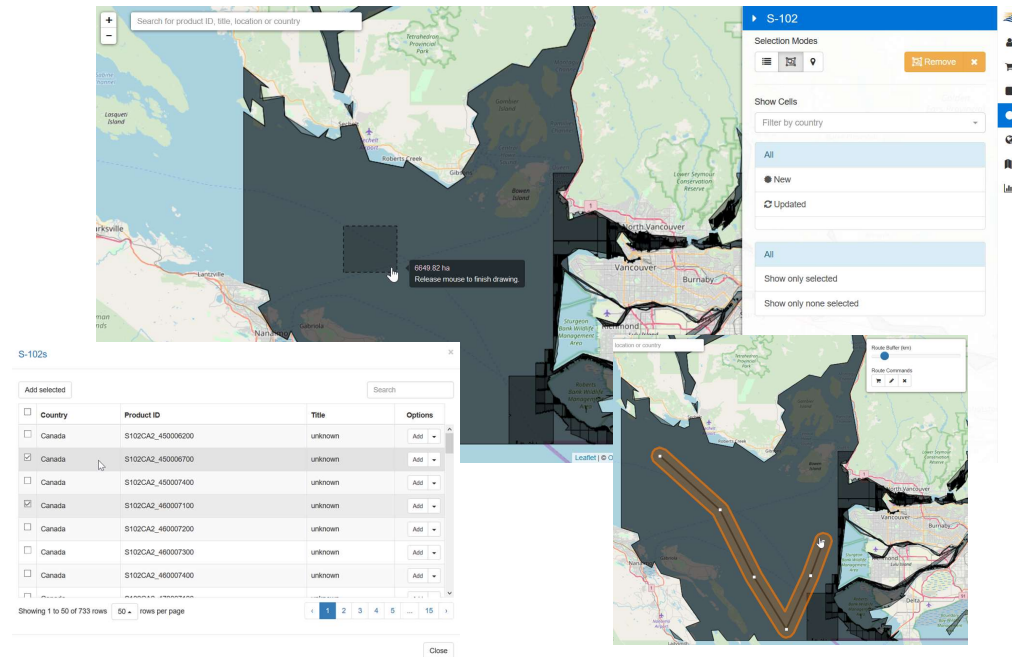
ORDERING BATHYMETRY DATA IN PRIMAR

- PRIMAR CHART Catalogue:
 - Visualization of the current S-102 and ENC coverage available
 - Product discovery, ordering and download
 - Management of product subscriptions
 - Management of end-user permits for PRIMAR distributors



ORDERING BATHYMETRY DATA IN PRIMAR - DISCOVERY

- Discovery of S-102 products by:
 - Area of interest:** all products that overlap the area of interest
 - Vessel route:** all products that overlap the vessel route, including a user-defined route buffer
 - List of available products:** manual selection from the list of all available S-102 products



ORDERING BATHYMETRY DATA IN PRIMAR - SUBSCRIPTION & DOWNLOAD

- Management of product subscriptions:
 - **Ordering/subscribing** to new S-102 products
 - **Summary of current product subscriptions**, including subscription period and auto-renewal option
- Download products:
 - Full set of subscribed S-102 products
 - Recently updated products

The image displays two screenshots from the PRIMAR web application. The top screenshot shows the 'Current Basket' window, which lists products in the basket. It includes a search bar, a 'Remove selected' button, and a table with columns for Country, Product ID, Title, and Usageband. The bottom screenshot shows the 'Active Subscriptions' window, which lists active subscriptions with columns for Product, Title, Permit End Date, Subscription Type, Usageband, and Auto Renewal. Below these windows is the 'Dataset Download' section, which includes a ship icon and two 'Download' buttons for different dataset options.

Country	Product ID	Title	Usageband
Canada	S102CA2_490012400	unknown	

Product	Title	Permit End Date	Subscription Type	Usageband	Auto Renewal
S102CA2_490012400	unknown	2020.02.29	12 months		Off
US1WC01M	North Pacific Ocean West Coast of North America Mexican Border to Dixon Entrance	2020.02.29	11 months	Overview	Off
CA3512	Strait of Georgia, Central Portion/Porte Centrale	2020.02.29	11 months	Coastal	Off
CA3001	Vancouver Island / Ile de Vancouver, Juan de Fuca Strait to Queen Charlotte Sound	2020.02.29	11 months	General	Off
US1WC07M	San Diego to Aleutian Islands and Hawaiian Islands	2020.02.29	12 months	Overview	Off

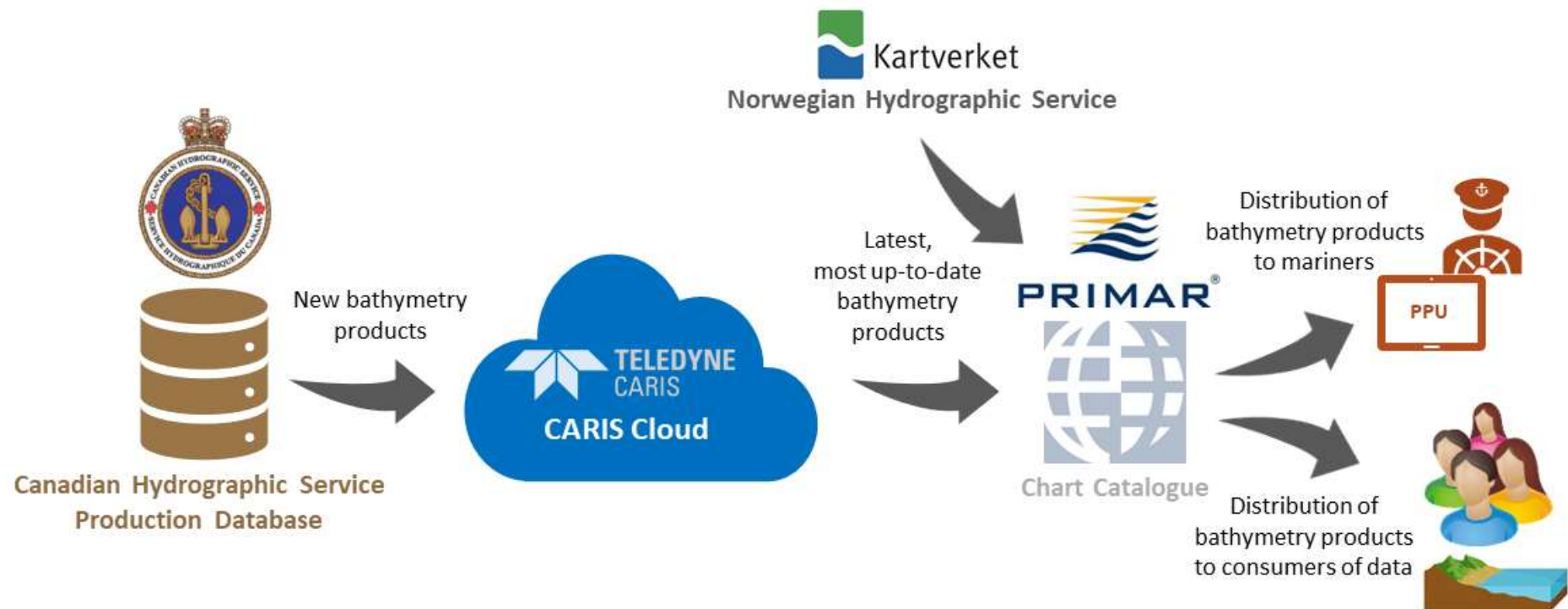
Dataset Download

Download Updates (Changes since Fri Feb 15 16:17:07 CET 2019 size 5.92 MB)

Download Full dataset (size 7.05 MB)



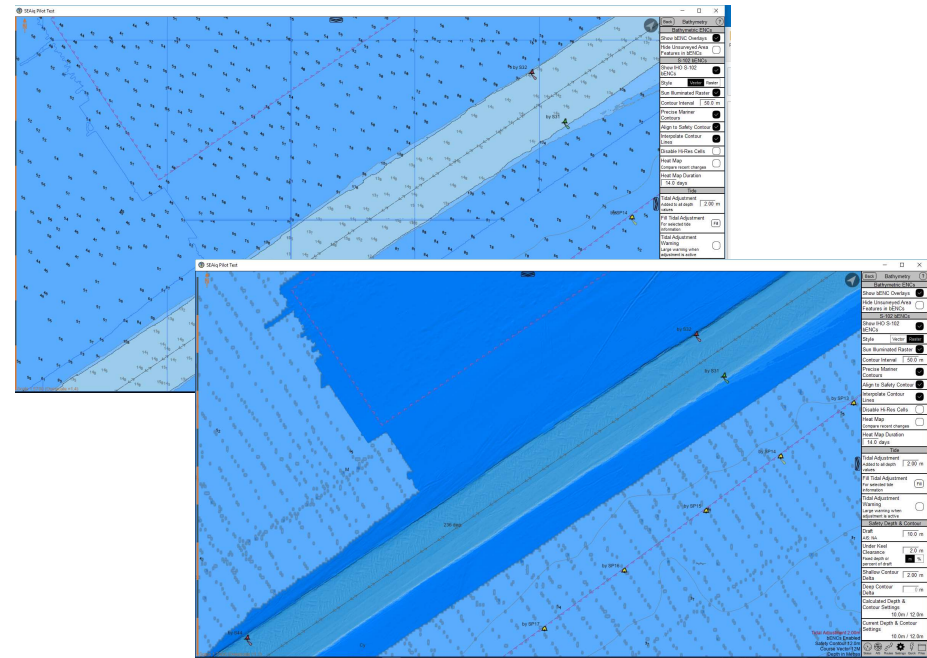
S-102 System Trials



S-102 System Trials

CHS S-102 datasets in SEAIq Pilot PPU (vector and raster views)

- Canadian and Norwegian users
- Industry participation
- Real-world navigation scenarios
 - Canada (East and West coast)
 - Norway
- Gather feedback from users and industry
 - Feedback about S-102 data
 - Feedback about Data Service
- Prepare the service for commercial roll-out
- Share results with hydrographic community



S-102 System Trials - Participants



SEAiq Pilot



PRIMAR RTZ (S-421) distribution

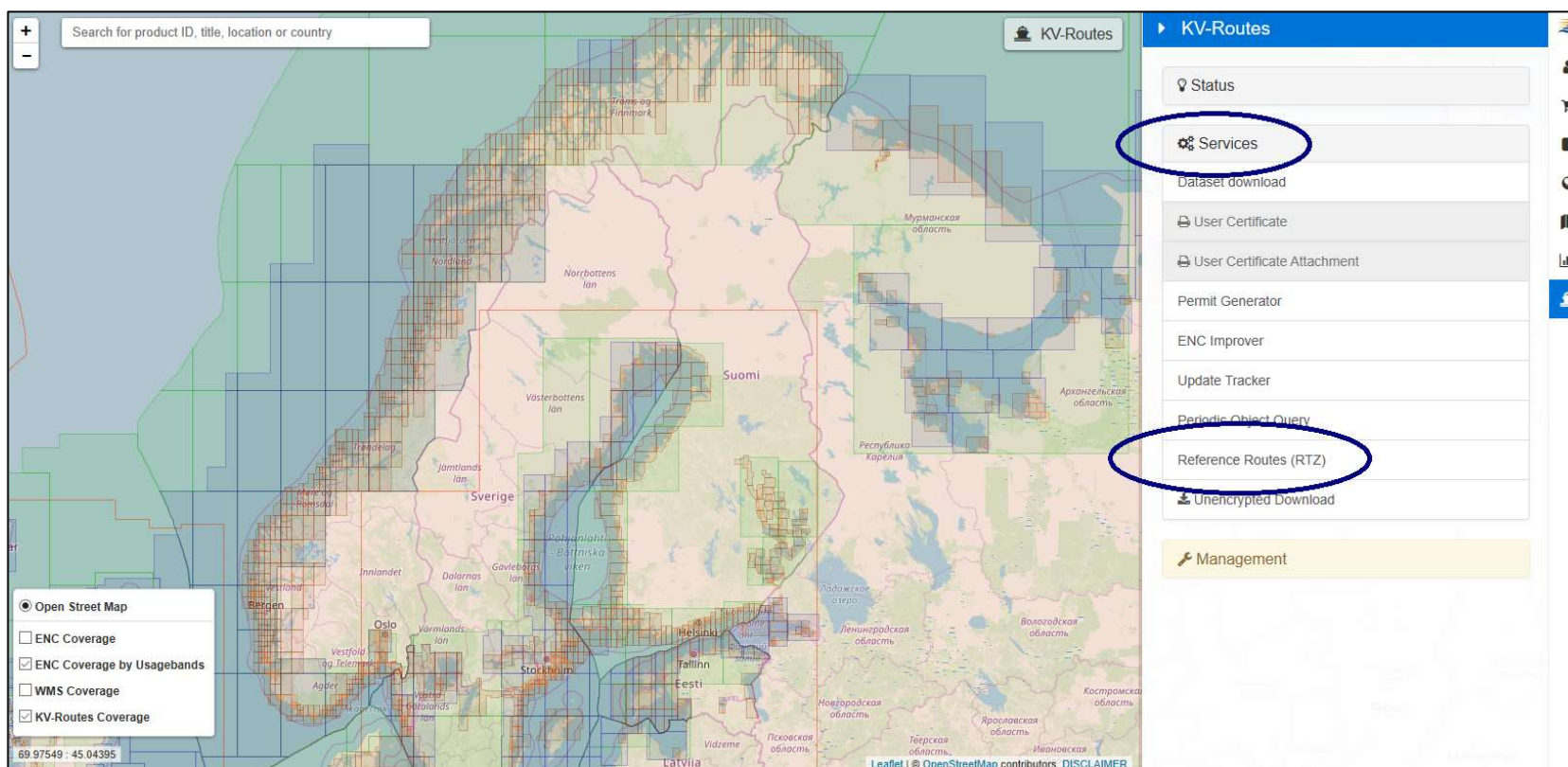
Goal:

- Support the API in PRIMAR Chart Catalogue
- Establish PRIMAR Distributor service for RTZ delivery

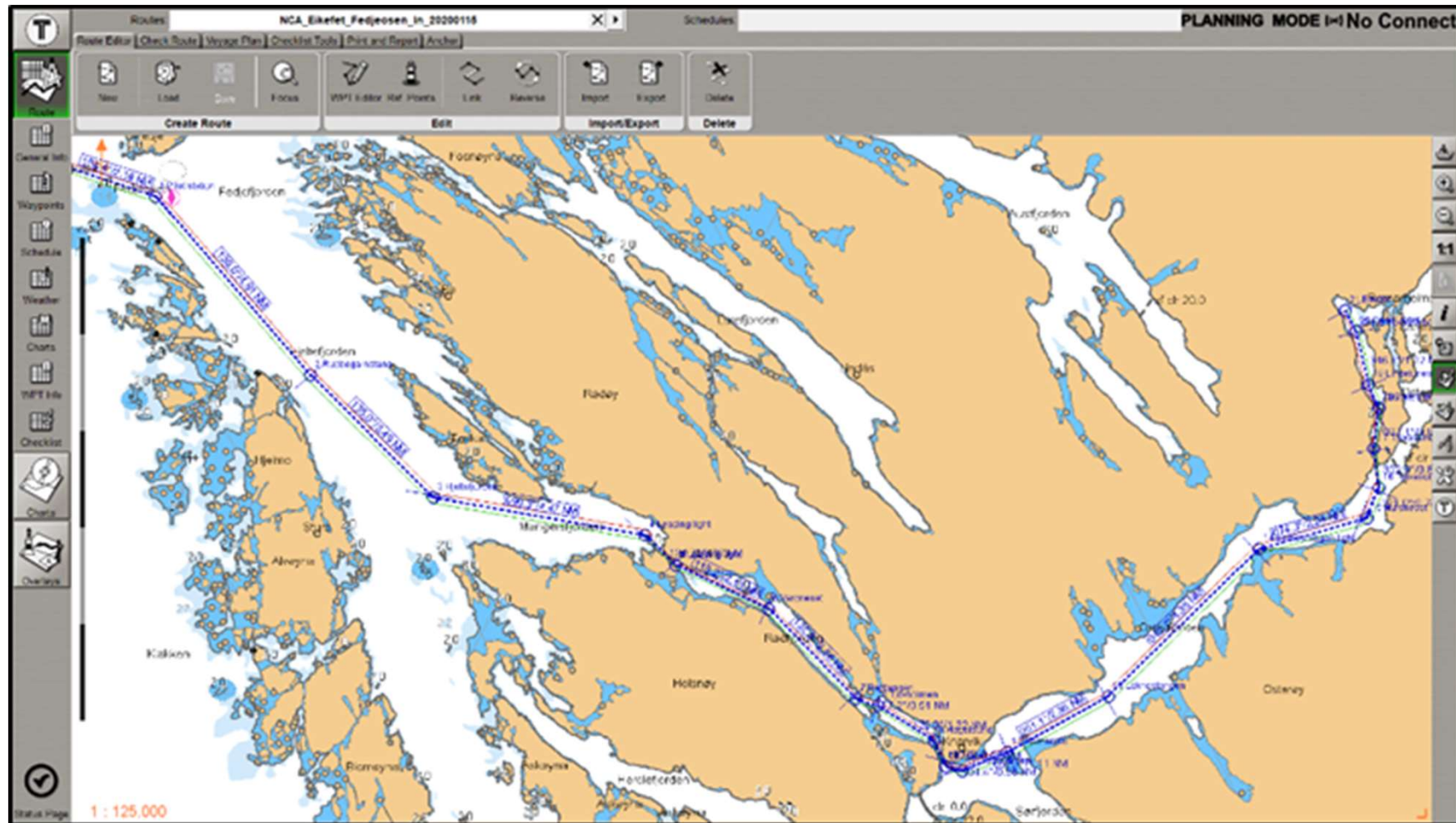
Service:

- Connect to RTZ producer's API
- Automatic download of routes and updates
- Service for PRIMAR distributors, suppliers and /OEMs

RTZ Service for PRIMAR ENC distributor

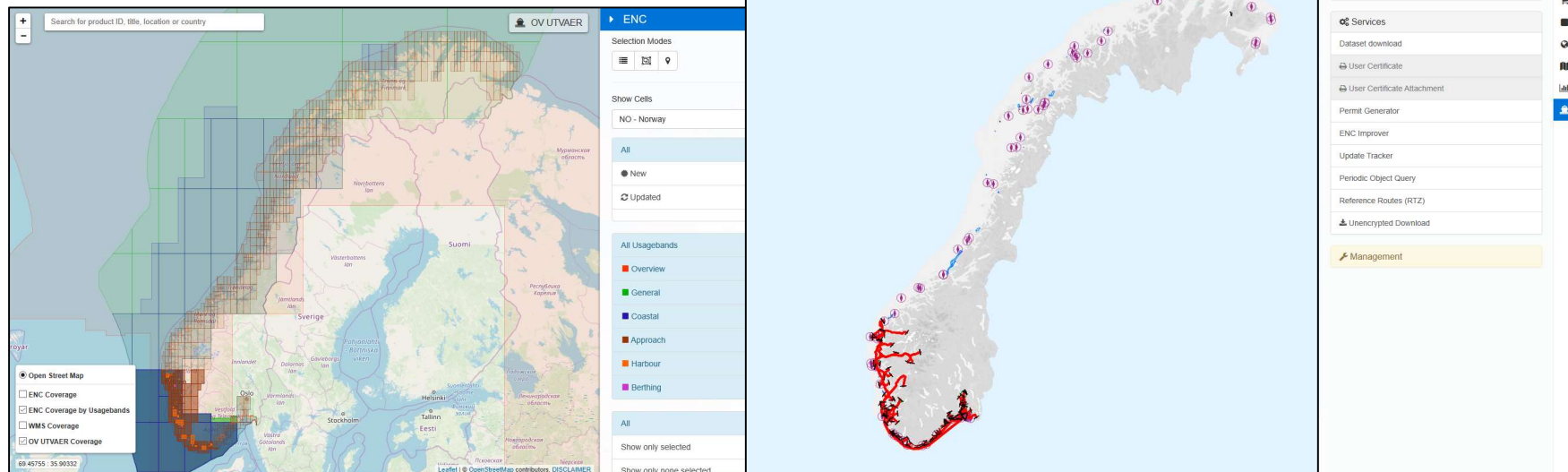


NCA RTZ-routes delivered from PRIMAR in Transas - ECDIS



Next steps in development

- PRIMAR RTZ Route service is currently operational
- Continue to develop the service based on user feedback
 - Area Coverage
 - Area Product Selection
 - Route selection
 - Business model



PRIMAR Targets for 2020

- Provide the world's most efficient ENC quality control and validation services.
- Increased ENC coverage – new members.
- Continue to support the S-100 technology development and product distribution.
- Visibility

Thank you for your attention
Questions?

www.primar.org