

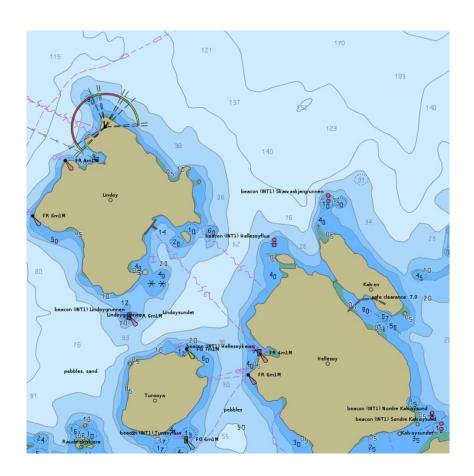
# PRIMAR RENC

**FREEDOM TO CHOOSE** 



#### What is PRIMAR?

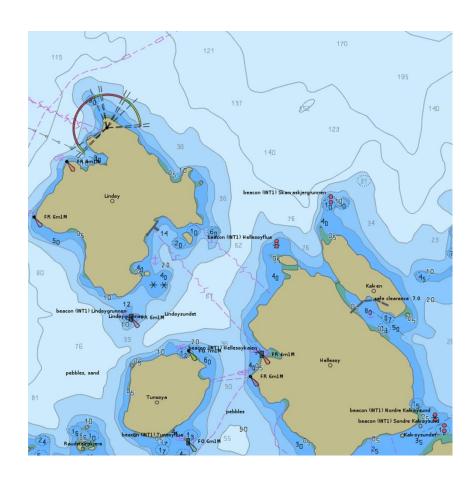
- A Regional ENC Coordinating Centre (RENC)
- Established in 1999
- Operated on a non-profit basis by the Norwegian Hydrographic Service in close cooperation with Electronic Chart Centre (ECC).
- Located in Stavanger, Norway





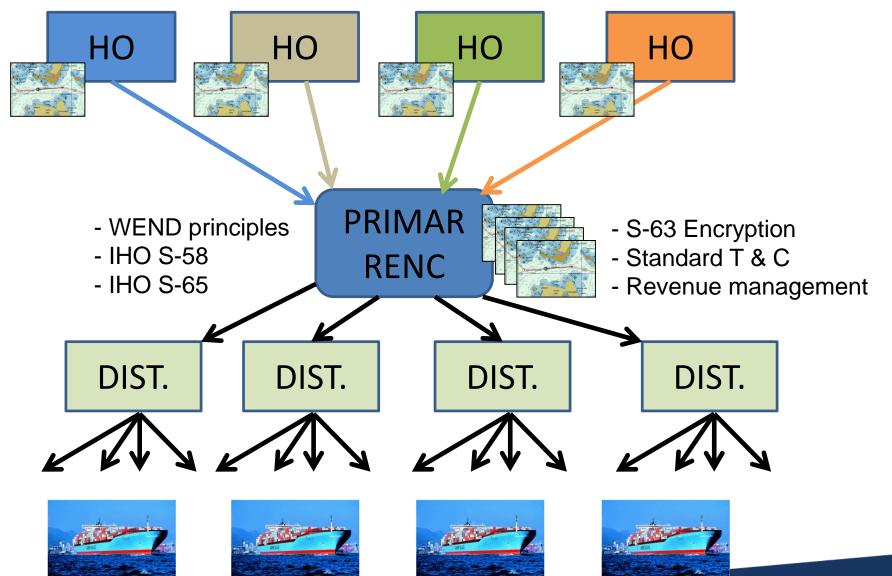
#### What does PRIMAR?

- Provides a consistent and reliable electronic navigational chart (ENC) service world-wide.
- Fully compliant with IHO guidelines, principles and standards.
- PRIMAR RENC:
  - 17 members
  - ENCs from more than 70 different nations available in the PRIMAR ENC service.



# **ENC** Distribution through PRIMAR





### **PRIMAR RENC value chain**



Albania Croatia Estonia Finland France Georgia

PRIMAR RENC

Latvia MEMBERS

Lithuania

Iran

Mozambique

Norway

**Poland** 

**Sweden** 

Russia Ukraine

Vietnam (VHO)

Vietnam (VMS-N)

Canada PRIMAR
China LICENSING
India PARTNERS
Indonesia EAHC (Others)
MSS

ALL

**IC-ENC** 

RENC DATA

Korea PRD ENC

Japan

Singapore NTOU (Taiwan) > 70 different official ENC providers

PRIMAR ENC Database

> 18 000 ENCs



11 Governmental Distributors

10 Navy Suppliers

Governmental users

Navy users

>36 000 registered end-users



# In-house Developed Validation tools

- Virtual PRIMAR Network (VPN) for data transfer and data management
  - S58 Upload Checks performed during the upload of data
- Validation Report Checker contains all the functionality for ENC Validation
  - Checking of validation logs from dKart Inspector and ENC Analyzer
  - Overlap Checker for overlapping candidates
  - Consistency checker for horizontal and vertical ENC consistency
  - S58 Upload Checks performed during the upload of data
  - ISO8211 to text converts EN/ER file to readable format
- S57 Advisor (Errors database) containing error/warnings discovered from validation tools

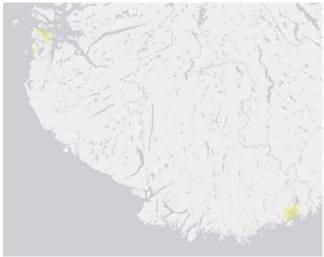




### **PRIMAR S-100 Service**

- The PRIMAR S-100 Service was launched July 2020
- 2500 S-102 / S-111 datasets from CHS and 87 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







# **PRIMAR Training Portal**



Home Courses Contact Us About us https://primar.learnworlds.com PRIMAR® ACHIEVE YOUR GOALS **PRIMAR Training Portal** 

Join us today and check some of the courses below

**FREEDOM TO CHOOSE** 



### **PRIMAR E- Learning Status**

Launch of PRIMAR Learnworlds training portal June 2021.

- Current modules
  - o 6 modules S-100/S-101 (2021)
    - S-100: Data Model, IHO Registry and Part 15 Data Protection.
    - S-101 General, Data Quality, Conversion Challenges.
  - 8 modules S-100/S-102/S-111 (2022)
    - S-100: Part 8 Imagery and Gridded Data, Part 10c HDF5 Data Model.
    - S-102 Product Specification, Data Encoding Format, Portrayal.
    - S-111 Product Specification, Data Encoding Format, Portrayal.
- High usage rate
- S-104 modules being developed.









# PRIMAR®

### S-57 / S-101 Dual Fuel Service

- S-100 program initiated in 2018
- Develop support for S-100 data model in PRIMAR services and functionality
- Establish dual-fuel S-57 & S-101 distribution
- Online HO services for QC and Data Management support S-100/S-101
- Provide S-101 testdata and dual-fuel service interface to manufacturers developing support for IHO S-100/S-101 standards
- Value
  - Feedback to IHO WG on S-100 standards
  - Testing of S-100/S-101 service elements towards PRIMAR member states and distributors
  - Trial dual-fuel S-57/S-101 distribution service
  - Harmonised S-100 transition plan





# S-100e5 Service Upgrade

- Upgrade of PRIMAR services
- Triple services
  - o S-63
  - o S-100e4
  - o S-100e5
- Provide support to everyone implementing S-100e5

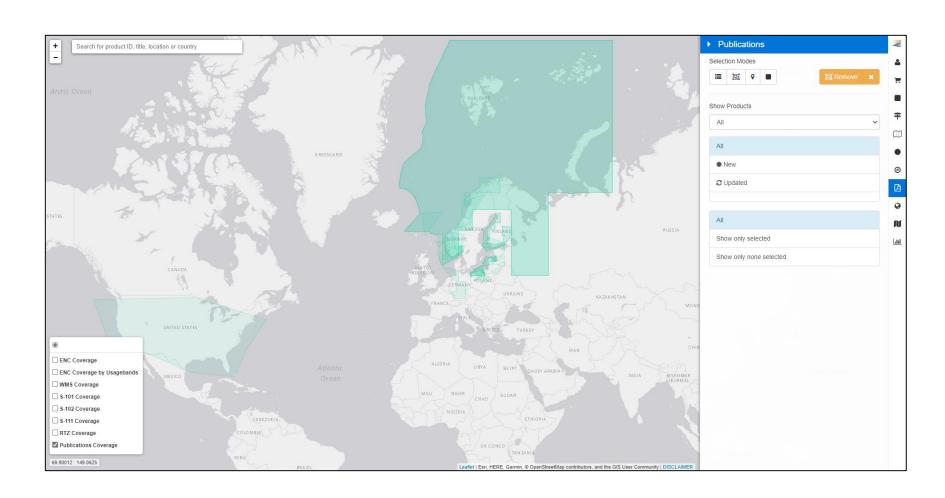
# **PRIMAR Conversion Task Force Project**



- Task force to evaluate options and tools and provide guidance to Member States and IHO Working Groups
- Test conversion and validation for:
  - S-57 to S-101
  - S-101 to S-57
- Establish data conversion and validation guidelines and establish forum for exchange of experiences
- Identify resource requirements and data conversion/dual-fuel production strategies
- Improved commercial software and functionality for data conversion and validation



# **PRIMAR Chart Catalogue-Publications**





## PRIMAR Navy / Governmental Supplier Services

- Supply ENCs to your Navy / Governmental users.
- Access to PRIMAR global ENC database.
- Easy operation from the PRIMAR Chart 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.





### PRIMAR 2023 focus

- Further development of the S-100 Service.
  - S-104
  - S-124
  - S-128
- Expansion of the PRIMAR Training Portal
- S-101 Conversion Task Force project
- SECOM E-Navigation project
- Upgrade of the Chart Catalogue
- Testing and update of the S-101/S-57 dual fuel service



# Thank you for your attention Questions?

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