

A Short Introduction to PRIMAR

6th ROPME Sea Area Hydrographic Commission

February 2015

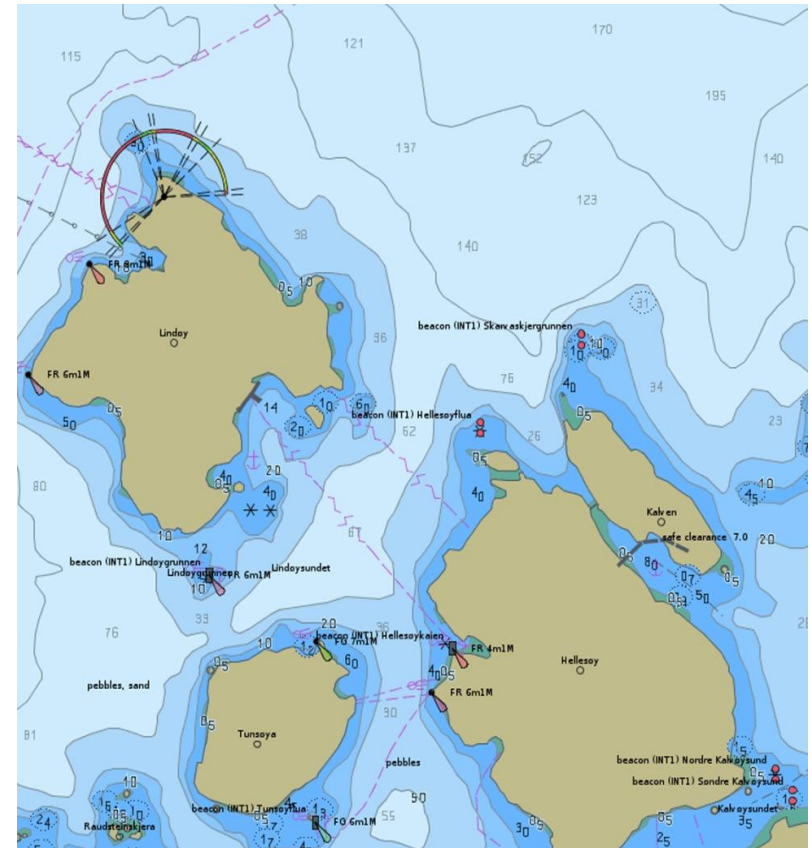
Minika Bjørge & Robert Sandvik

Operated by the Norwegian Hydrographic Service

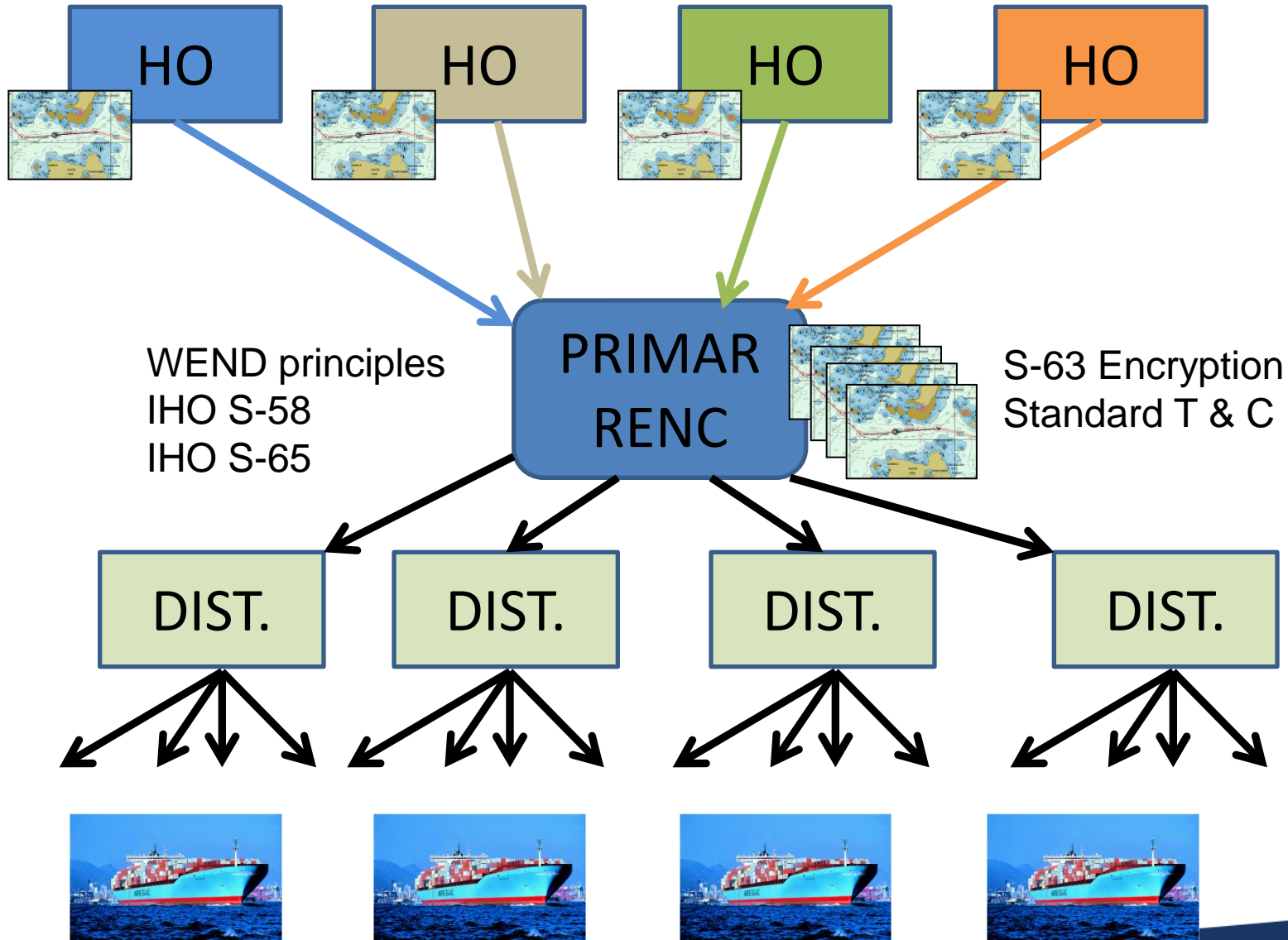
FREEDOM TO CHOOSE

PRIMAR – Organisation

- The world's first 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)**.
- Provides a consistent and reliable electronic navigational chart (ENC) service world-wide.
- Fully compliant with IHO guidelines, principles and standards.



Distribution with PRIMAR RENC



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.

Governing Body and Sub-Groups

PRIMAR Advisory Committee (PAC)

**PRIMAR
Strategic
Working
Group
(PSWG)**

**PRIMAR
Financial
Working
Group
(PFWG)**

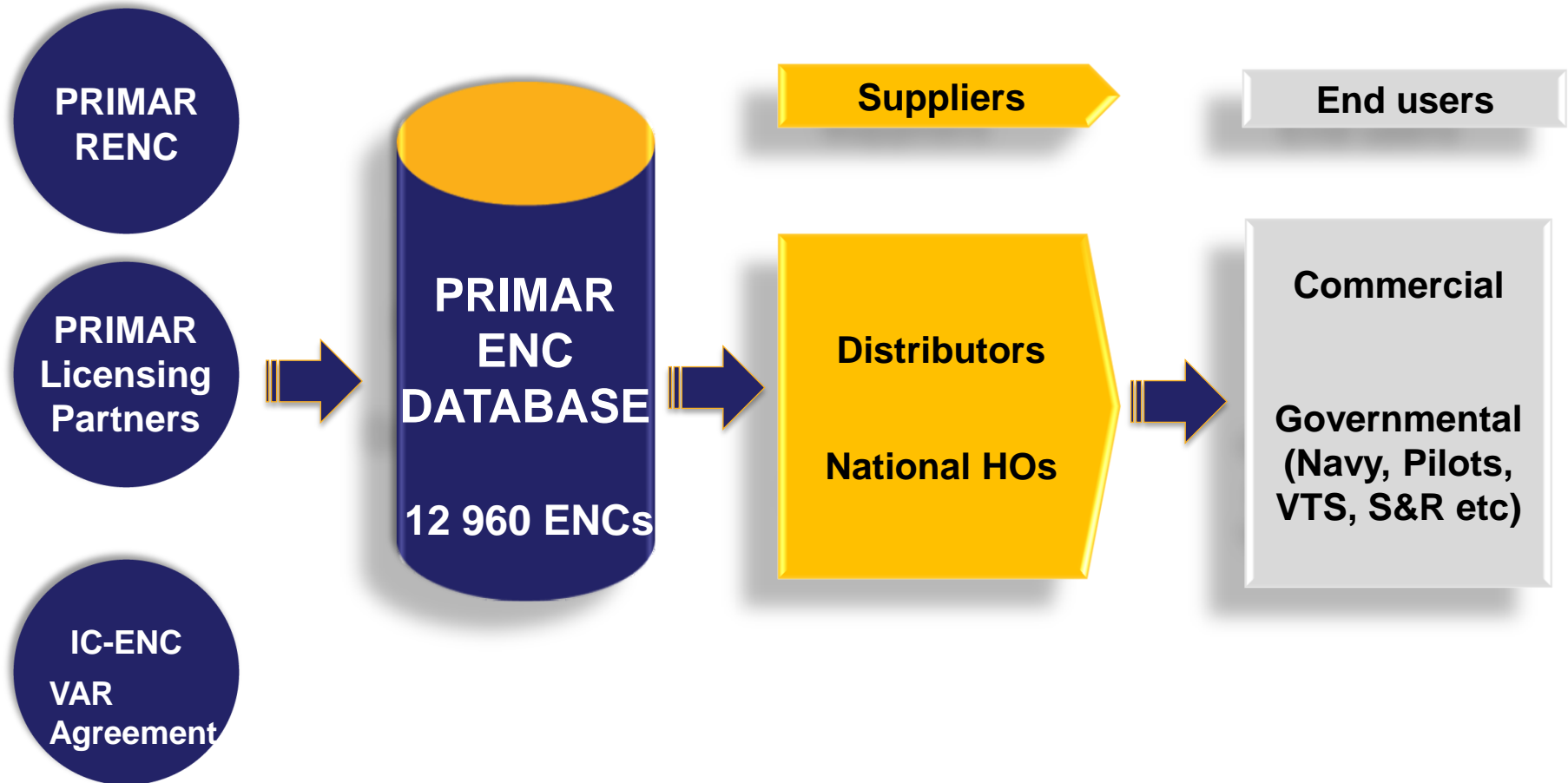
**PRIMAR
Marketing
Working
Group
(PMWG)**

**PRIMAR
Technical
Working
Group
(PTWG)**

PRIMAR Service Levels

- Level 1
Make **validated ENC**s available to commercial shipping and assume on behalf of CHOs RENC functions.
- Level 2
Provide **ENCs to other governmental**, navigation and safety related services (**Pilot, Navy, VTS, Search & Rescue, e-navigation related**).
- Level 3
Support other governmental geodata-based but **non-navigation services with ENC**s.
- Level 4
Support other governmental geodata-based but **non-navigation services with spatial data derived from the ENC**s (WMS, MSDI).
- Level 5
Deliver data and services to public and/or commercial players on behalf of a CHO.

The Value Chain

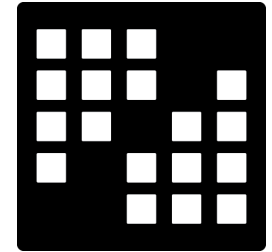




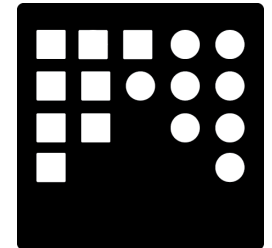
PRIMAR – Member Services



- Database Management: 24/7 access to own data.
 - Encrypted transfer of ENC's from CHO directly to pre-release database.
 - Full control over data upload, download and release operations
 - Online reports – ENC usage, revenue, customer info
- ENC Quality Assurance
 - Online tools available for checking the ENC quality
 - Training course on QC/QA; procedures, tools, PRIMAR functionality
 - Independent PRIMAR QC on all ENC data
- Quality Assurance Tools
 - Developed in-house
 - Automatic S-58 upload checker, ENC consistency checker, ENC overlap checker, ISO8211 to Text, Error database



Database
Management

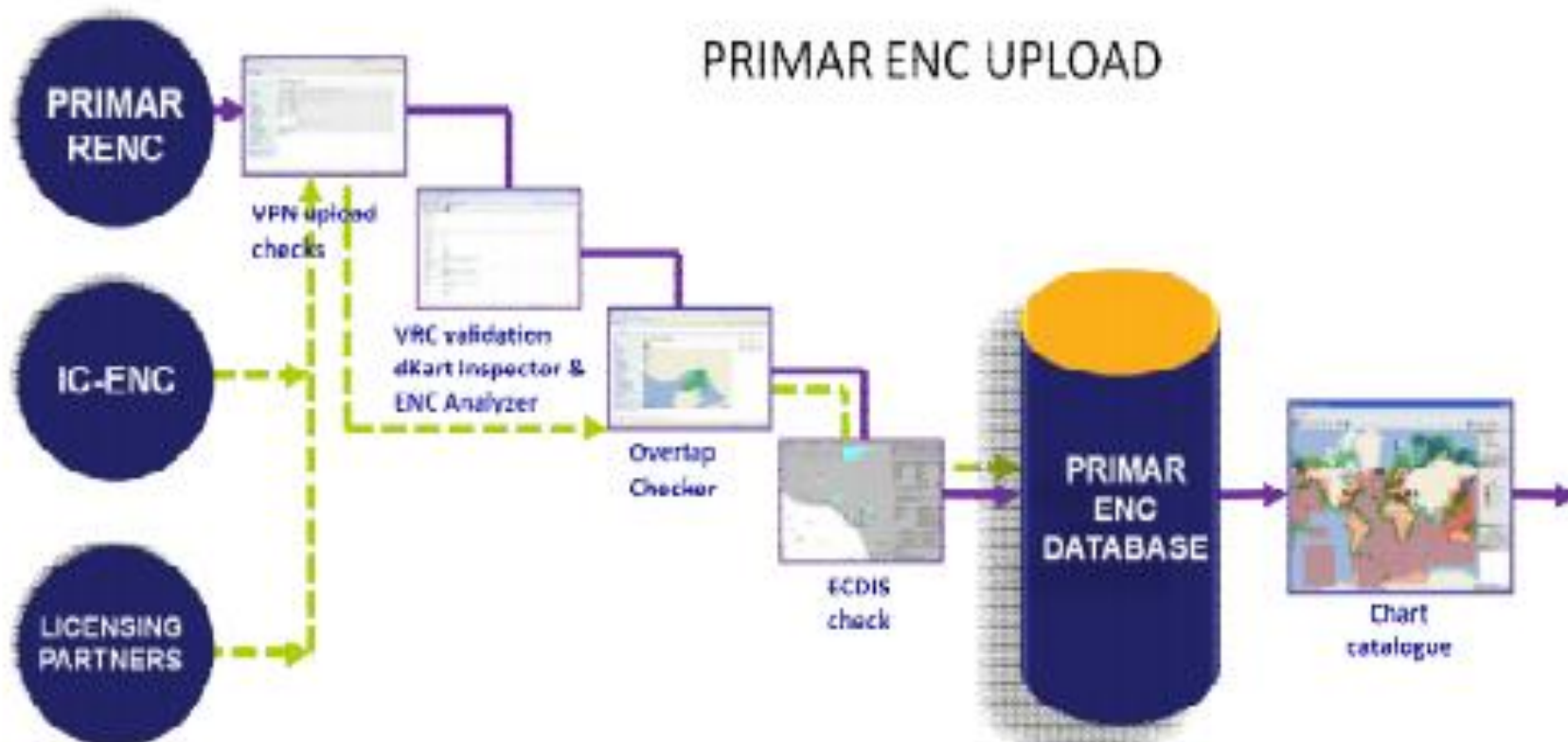


Quality Assurance
Services



Quality Assurance
Tools

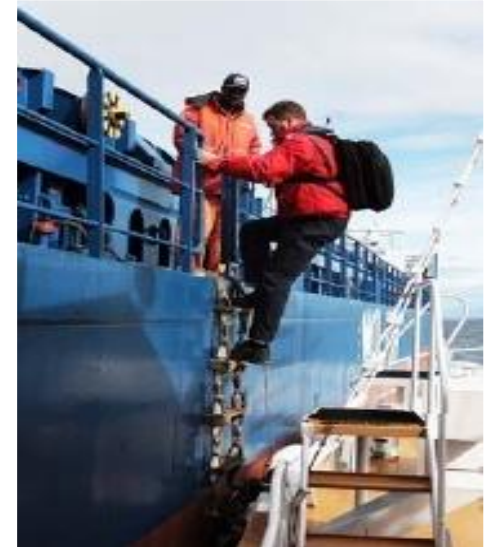
PRIMAR Validation Procedures



PRIMAR – Member Services



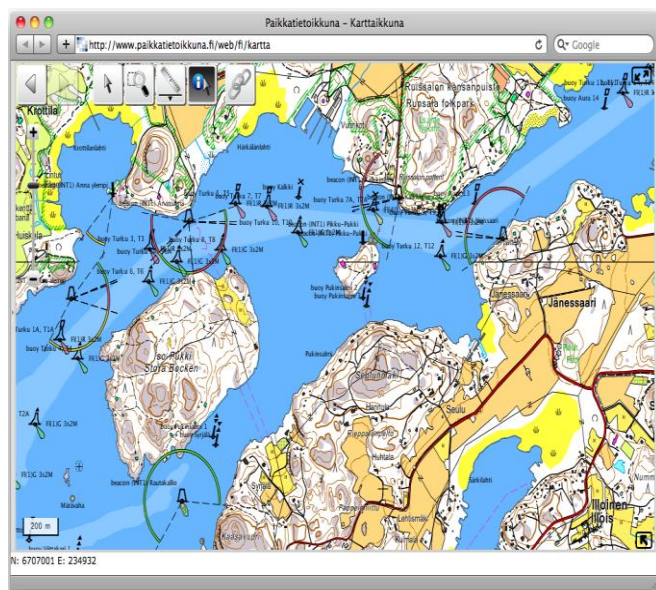
- **National service for ENC's for navigation**
 - Pilots, Vessel Traffic Control, Search & Rescue
- **National service for non-navigation** using products derived from ENC's
 - Coastal zone management & Contingency planning
- **Navy Supplier service** for delivery of ENC's to the nation's own navy / coast guard
- **PRIMAR Inspector Service** for Port State
- Control Officers – vessel inspections



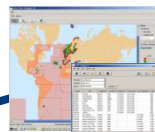


PRIMAR[®]

ENCs as PRIMAR Web Chart Service



Cooperating
HO



CHO



Commercial
distributor

CD

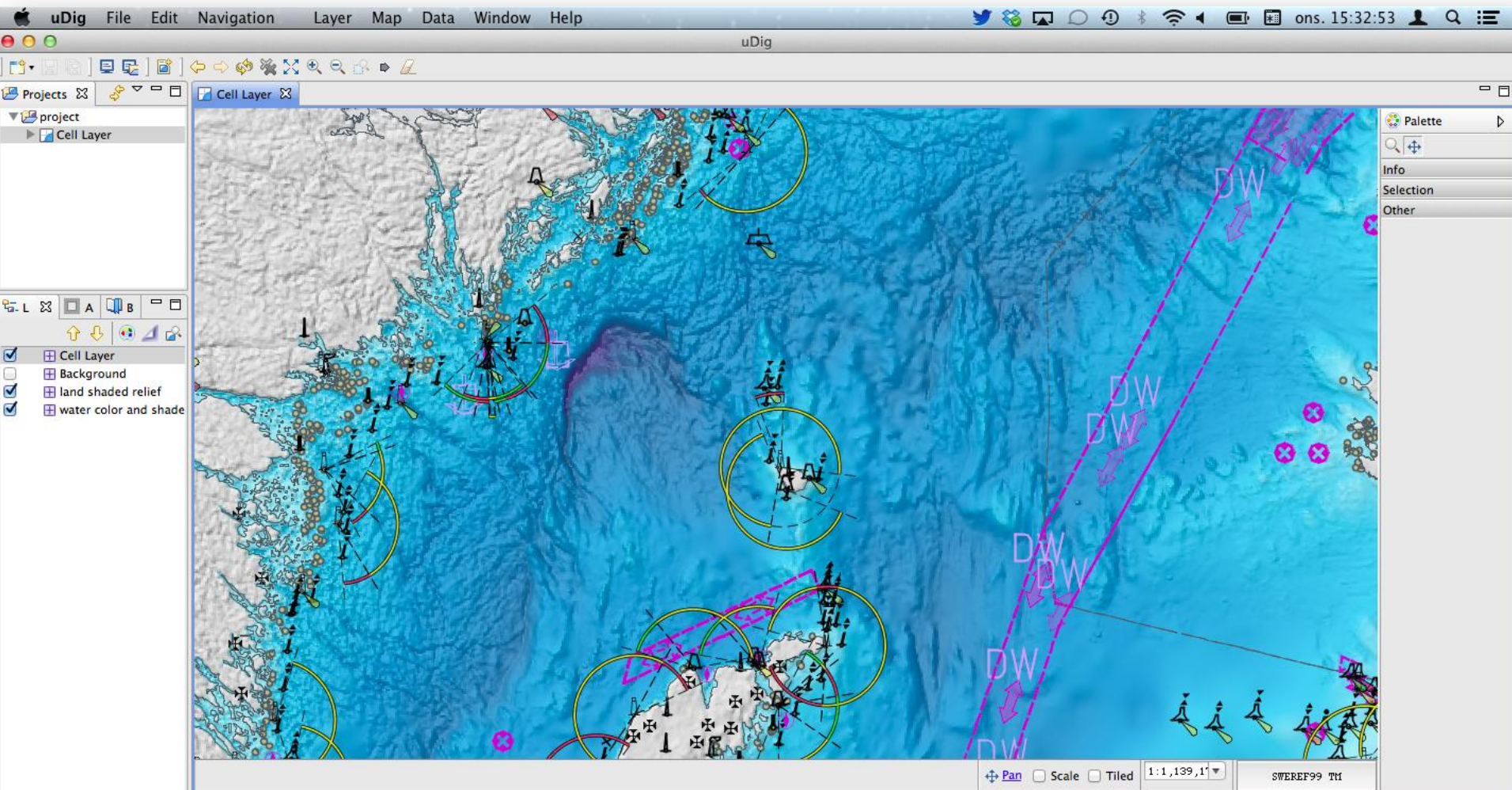
Governmental WMS users

- National portals
- GIS users
- Maritime projects
- Coast Guard / Police / Navy
- Municipalities
- Coastal management
- Crises response

Commercial WMS users

- Ship owners
- Ships
- GIS users
- Maritime industry
- Off shore activity
- Fishery

PRIMAR WMS with bathymetric overlay



S-102* Project with Norwegian Pilots

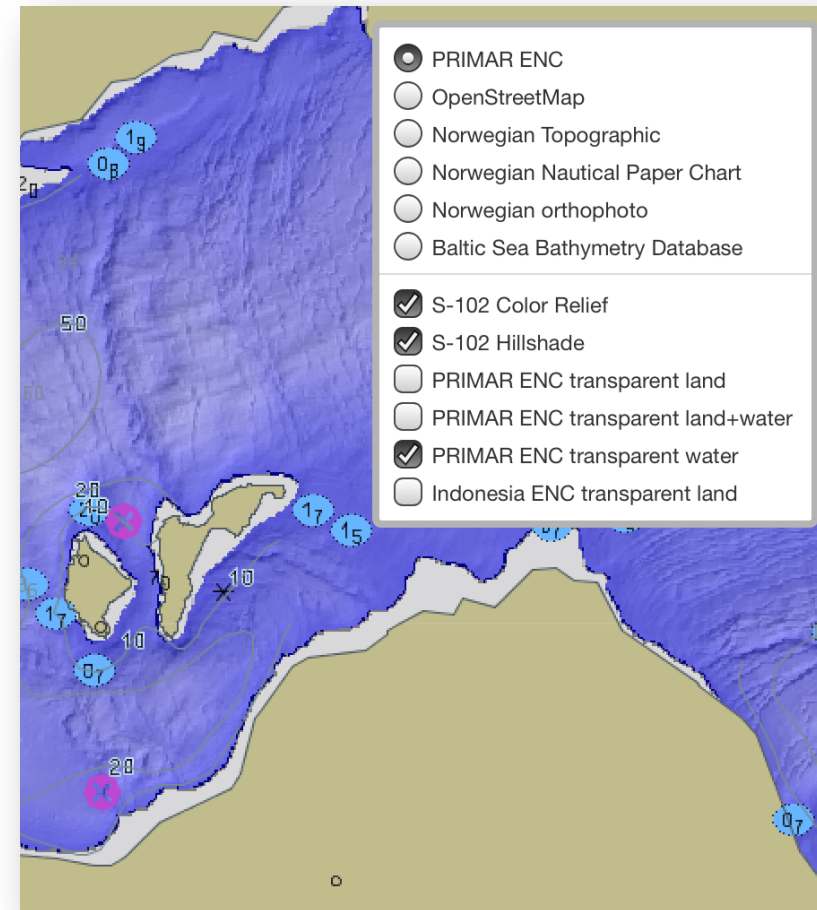
Project: Pilot's test S-102

- ✓ Organised by PRIMAR
- ✓ Started October 2014
- ✓ S-102 distribution portal developed by PRIMAR

Participants:

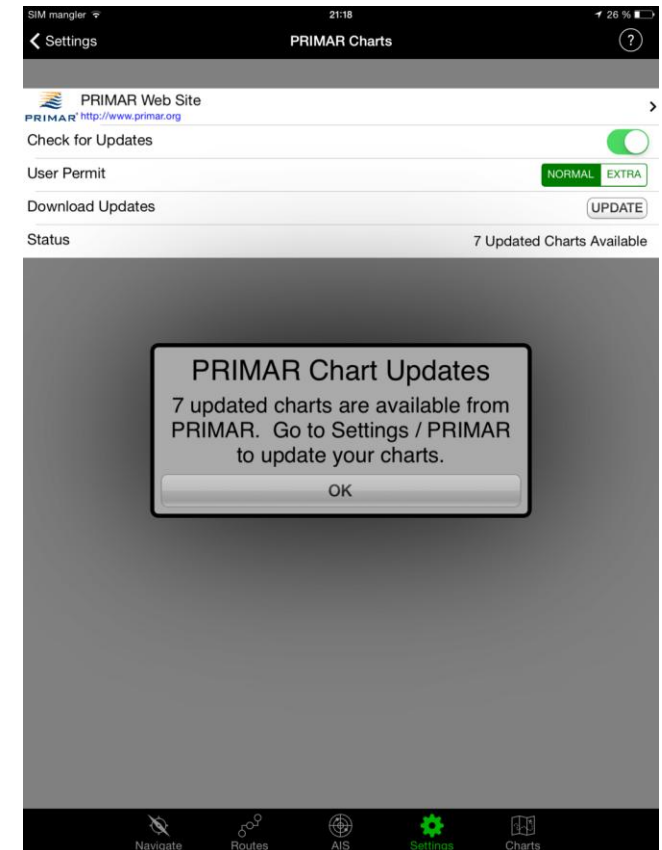
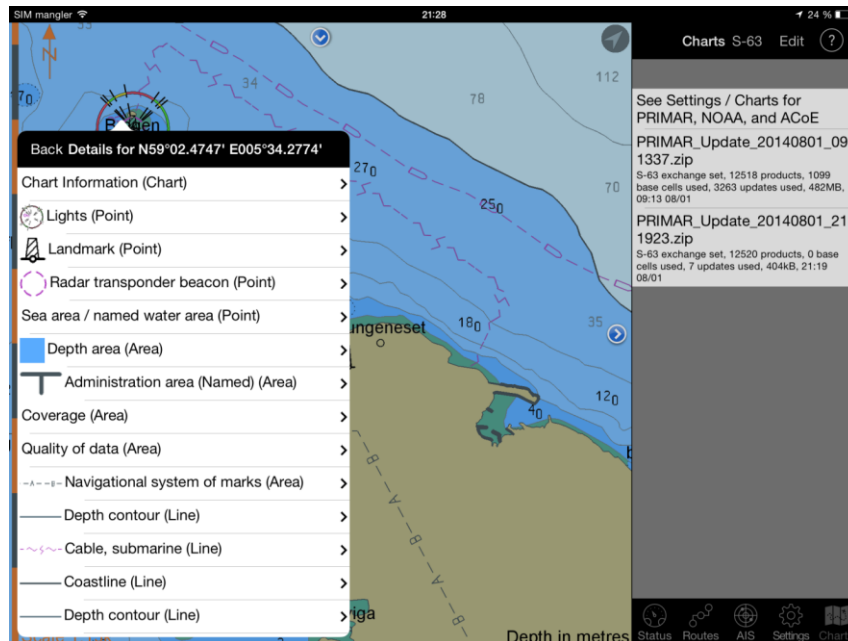
- ✓ PRIMAR
- ✓ Norwegian Hydrographic Service
- ✓ The Norwegian Coastal Administration
- ✓ System manufacturers (partly)
- ✓ Observers: Pilots in Sweden

**S-102 : IHO Bathymetric Surface Product Specification*



Enhancement of Pilot Services

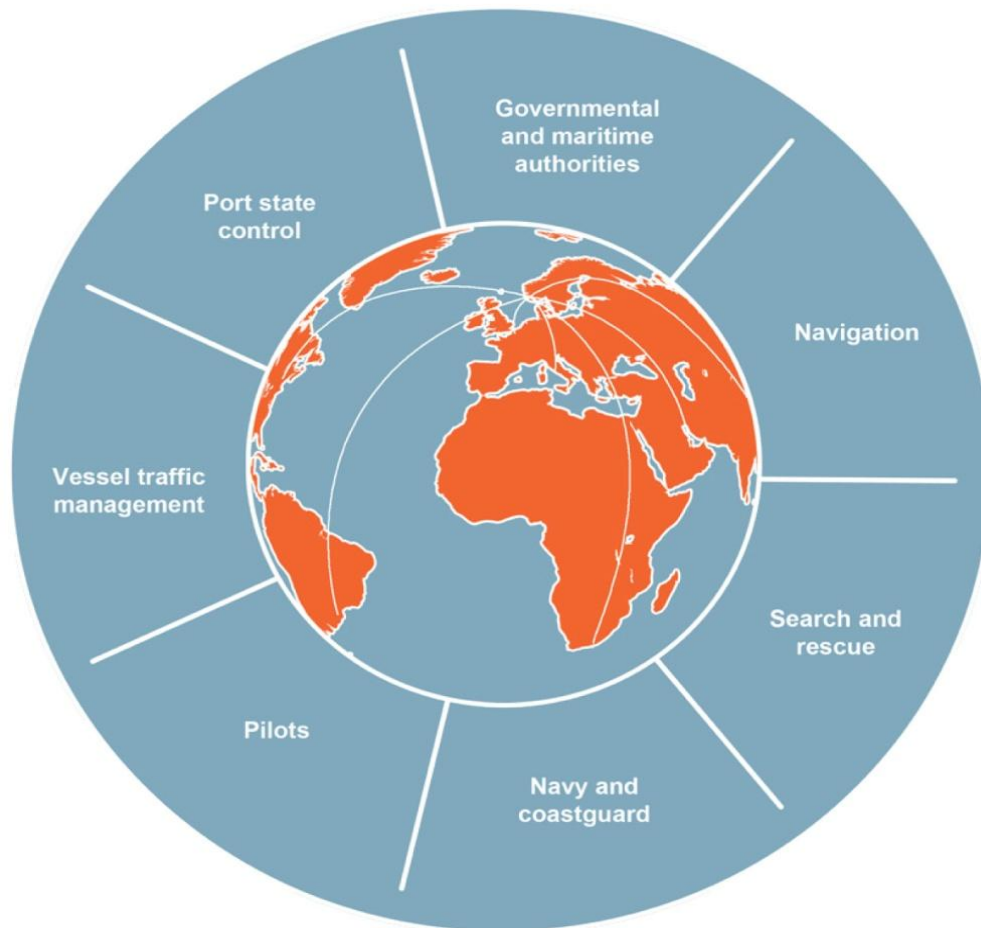
- Project with pilots in NO, SE
- Service improvements to support use of tablets
- Integration of ENC with S102





PRIMAR®

Service Levels & Maritime Safety Circle



- **All actors have access to the same charting information**
- By utilizing the **PRIMAR infrastructure**, a member nation can
 - contribute to increased maritime safety and
 - protect the maritime environment.

Benefits of PRIMAR Cooperation

- Technical infrastructure
- Offers functionality to CHOs in managing their own ENC delivery, validation and quality assurance work
- Immediate distribution of ENCs to PRIMAR'S global network of distributors.
- Real-time visibility of ENC uptake and usage
- Policies and strategies are made & governed by the CHOs (PAC)
- Differentiated services – Navy services, Governmental services, WMS, Inspector
- Training, Sharing and transformation of knowledge- S57, ENC QC/QA, S101, S102, feedback from end-user market

Benefits of PRIMAR Cooperation

- Revenue Management for CHOs
- Easy access for distributors (through Chart Catalogue) Highly automated, 24 x 7 availability
- Reliability – time tested distribution model
- Dynamic – able to respond flexibly to changes in the marketplace and technology in a relatively shorter time span

Thank you for your attention
Questions?

www.primar.org