ENSI

Enhanced Navigation Support Information

The Baltic Sea is challenging for navigators

- Narrow straits, shoaly and shallow waters, average depth only 55 m
- Busy waters with plenty of crossing traffic
- Ice conditions hamper winter navigation

Vessel traffic is monitored by VTS (Vessel Traffic Services)

- The aim is to improve vessel traffic safety and efficiency
- Based on proactive intervention before a situation becomes dangerous
- In Finland the VTS areas cover almost all merchant shipping lanes
- In the Gulf of Finland there is also a mandatory ship reporting system, GOFREP (Gulf of Finland Reporting)

VTS centres

- Have access to detailed route plans
- Warn about identified route deficiencies and monitor how the route plan is implemented
- Provide vessels with navigation support in the form of route-specific information

ENSI = sharing route plans with the VTS

ENSI in practice

ECDIS on board

Routeplan

VTS centre - the route is checked automatically

Information to vessels

ENSI helps to detect route deficiencies and deviations

- Timely detection of deficiencies in the route plan
- Immediate detection of deviations from the route
- Anticipates situations with high traffic density

The ENSI service facilitates the work of the ship’s crew

- ENSI provides an outside opinion on the vessel's route plan
- ENSI provides vessels with data supporting the route plan, e.g. information about conditions, warnings and winter navigation
- Vessels can transmit the information required for the GOFREP report together with the route plan
- The ENSI service and its contents will be further developed based on user feedback

The Finnish Transport Agency is responsible for the realisation and upkeep of the service

- ENSI stands in line with the IMO e-Navigation program
- ENSI stands in line with the EU eMaritime program
- ENSI stands in line with HELCOM Rec 34E/2
- ENSI is noted in MIMIC
- ENSI will adopt the IEC 61174 Route Exchange standard
- ENSI is and will be free to join, free to use

Current situation

- First ’commercial’ version coming out any day
- Estimated possibility for other VTS centres to join: late 2014 - early 2015
- Sharing route is the key element in future navigation support visions
- ENSI is the most advanced and tested solution for sharing route, globally

Next steps

- Expand test-bed to GoF, including shore facilities, and rest of Finnish waters
- Expand test-bed to Soundrep and Beltrep
- Expand test-bed to rest of BSR
- Stop calling it test-bed

EU-project

- Support needed to
  - Develop ENSI readiness to handle whole BSR
    - Technics
    - Politics
  - Distribution to VTS’s and vessel’s

- Not necessary own project
  - Acceptance has been excellent
  - Expenses of system modifications quite fair and
  - Often treated like development

CLEAN BALTIC SEA JOHN NURMINEN FOUNDATION

NESTE OIL

Liikenneviraston
Finnish Transport Agency

TraFi
Finnish Transport Safety Agency

ensi

For further information, please contact
Mikko Klang
Project manager
ENSI
Finnish Transport Agency
mikko.klang@jnfoundation.fi

Thank you!