Changing ship traffic lanes in Norway
Integration of data with Government – Industry collaboration for planning and execution.

Geir L. Olsen

Product Manager, Navigational Planning and Operations
Jeppesen Marine

Content:

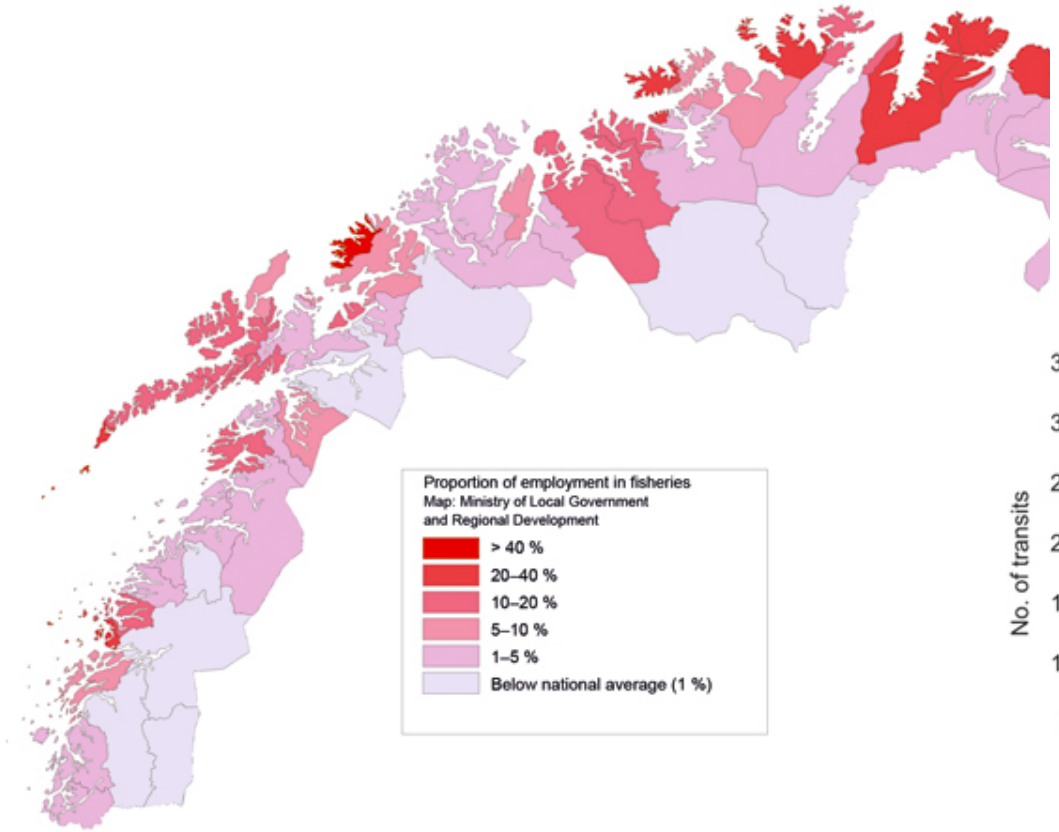
- Introduction and background
- BLAST and “Barentswatch” – web portals for MSP information
- Industrial and public collaboration for MSP information: ECDIS?
- Example of “old and new” route from the results and changing traffic lanes.
- Industrial recommended route database “onboard” and communication.
- How Jeppesen can help in MSP

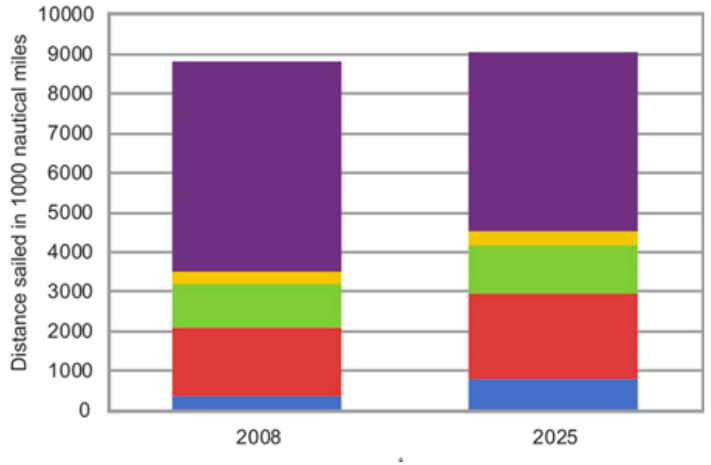
Background data (from Norwegian Coastal Admin):

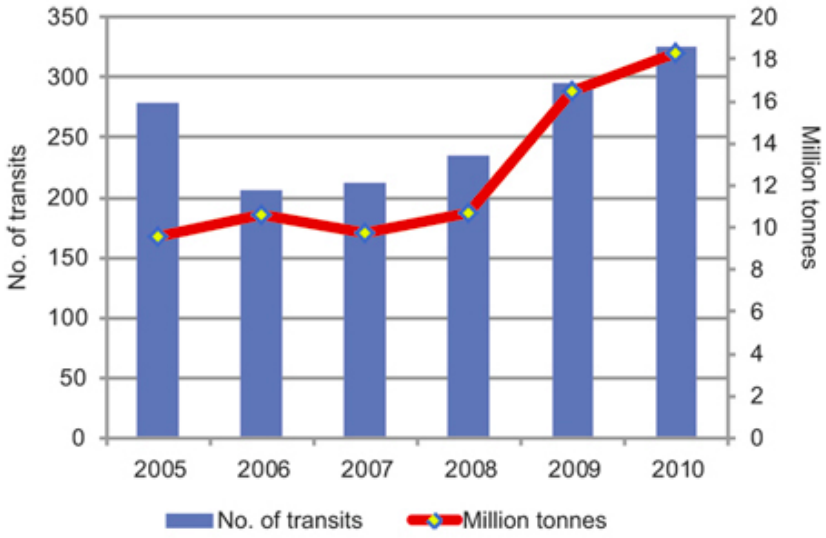
KYSTVERKET

•DNV/NMC analysis based on traffic data 2008, 3% increase until 2025
• Higher activity in High north/arctic area and increased Russian traffic shows increase of Tanker traffic.
• Barents Sea/Lofoten considered high value fisheries, marine life breeding ground and environmental critical, especially for Cod.
• Whole Coast of Norway high aquaculture activity.
• Stortingsmelding (Information to Parliament) 2010/2011 chapt.4: "**Integrated Management Plan for the Marine Environment of the Barents Sea–Lofoten Area**"
•With the approval of the International Maritime Organization (IMO), traffic separation schemes were established on 1 July 2007 between Vardø and Røst in the Norwegian exclusive economic zone. Under these schemes, tankers of all sizes and other cargo ships of gross tonnage 5 000 and over are required to sail about 30 nautical miles from land. There are two traffic lanes for shipping in opposite directions.
•The Vardø VTS Centre was established in 2007. It monitors all tankers and other high-risk traffic along the entire Norwegian coast, and whether vessels are complying with the rules of the routing system. If the VTS Centre observes irregularities, it calls up the vessel, guides it onto the right route, and if necessary summons assistance.

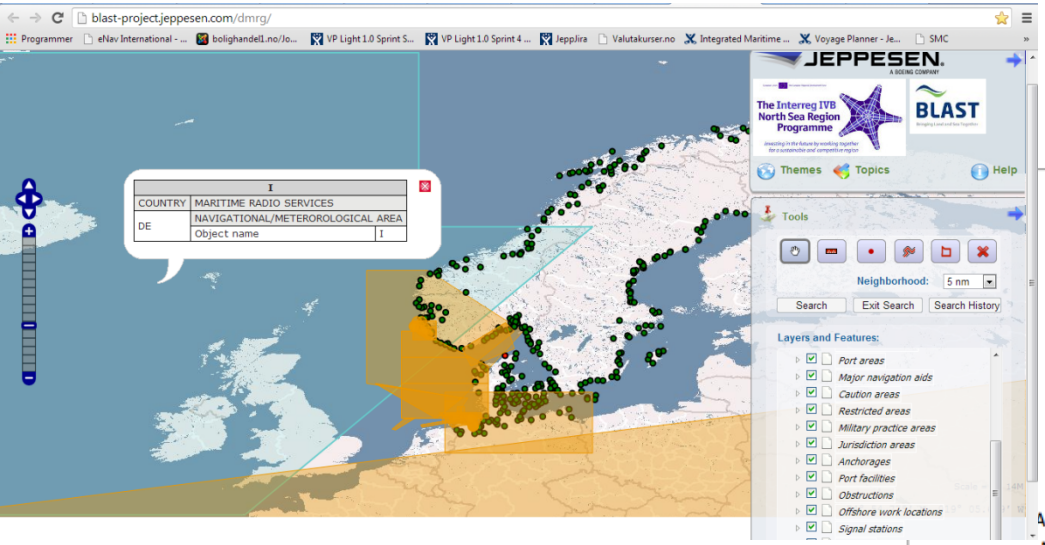
Northern Norway: fishing as majority employment and ship traffic factor

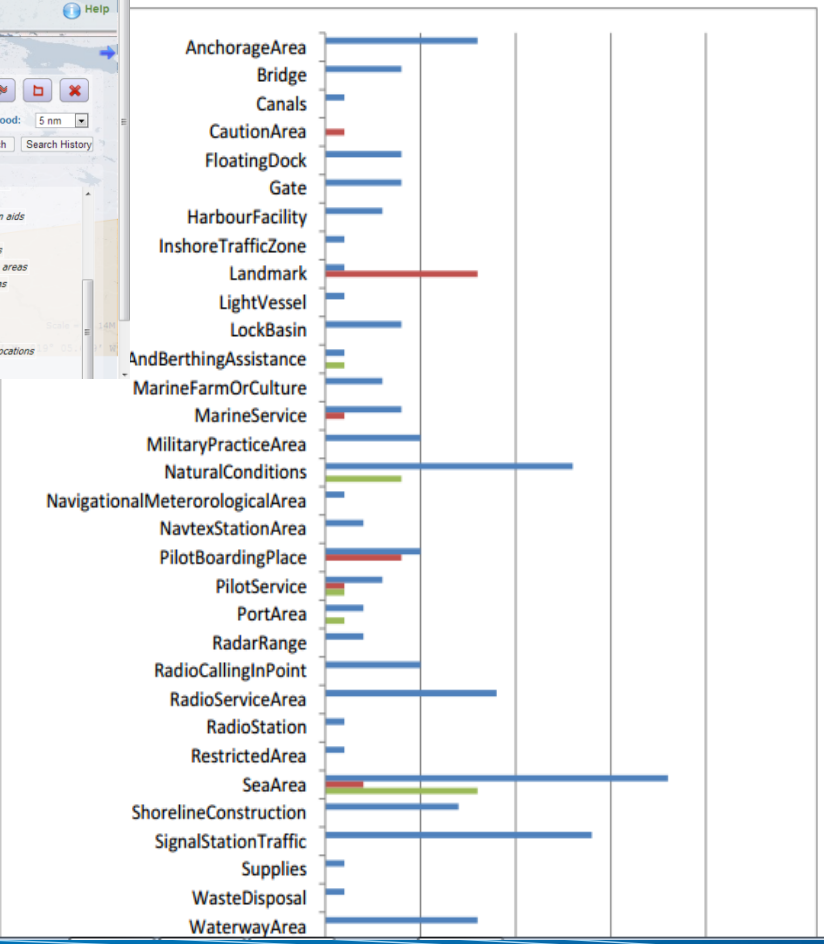




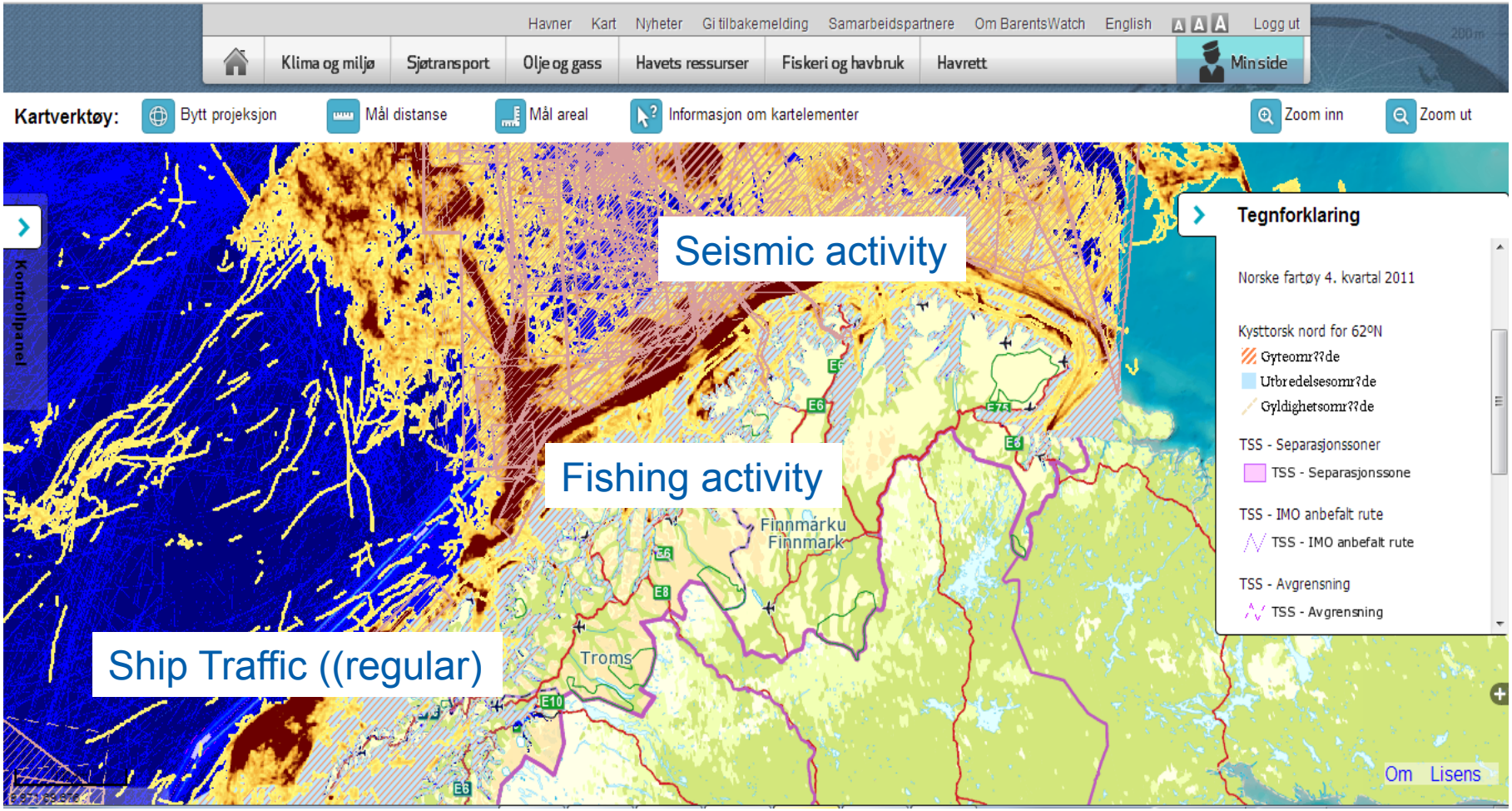


Results from BLAST: integration and harmonization of Nautical data, identifying frequency of Nautical Objects in Official charts.

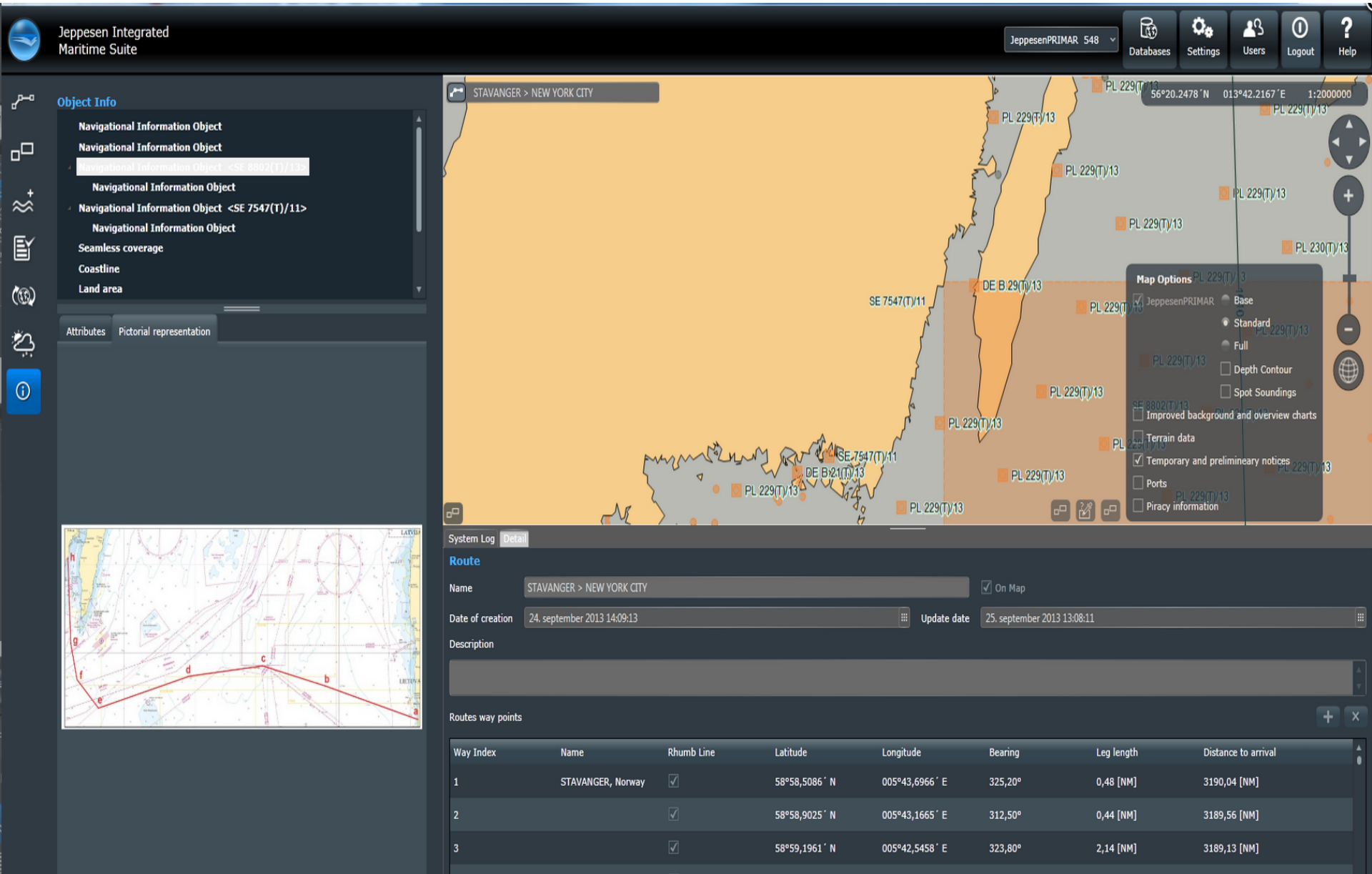




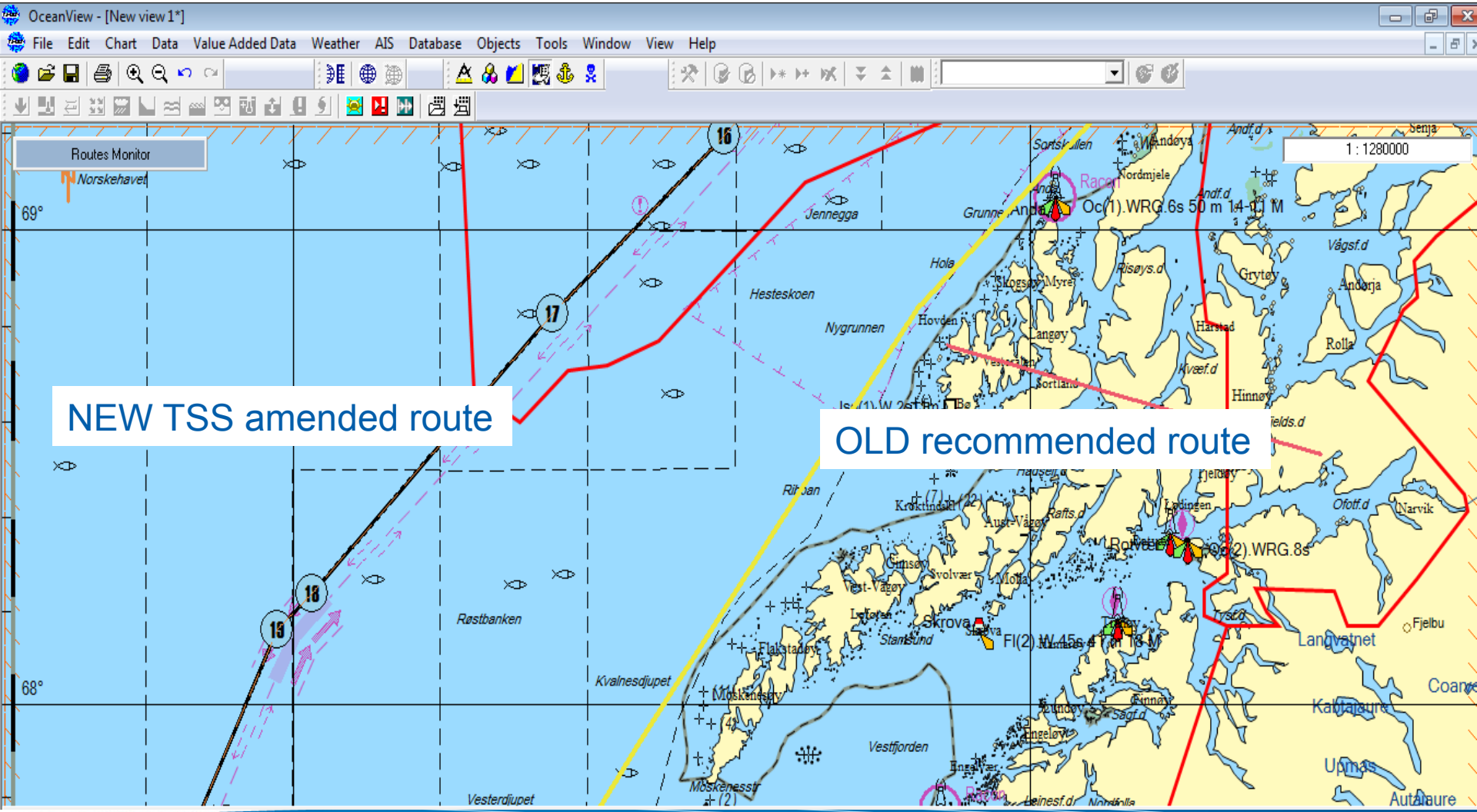
Barentswatch: portal for MSP, however not a valuable tool for onboard mariners: both TO MUCH information, and internet limitations onboard.



Communicating changes to Mariners: T&P, NTM's: require good onboard tools (not necessary ECDIS)

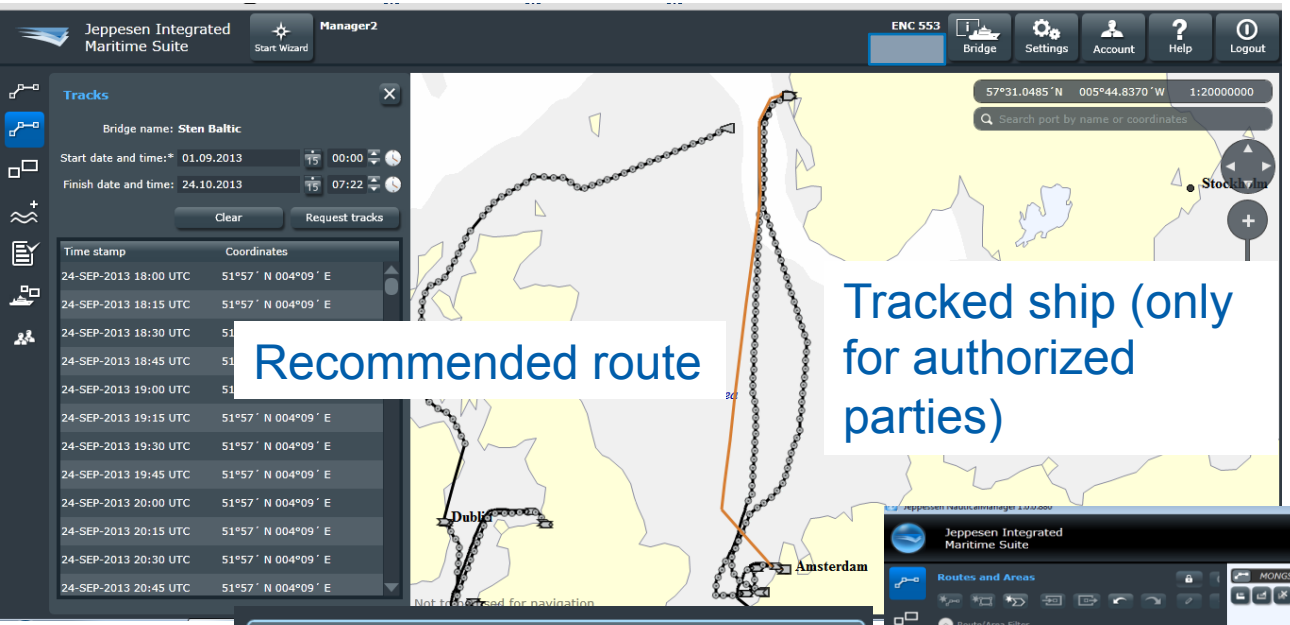


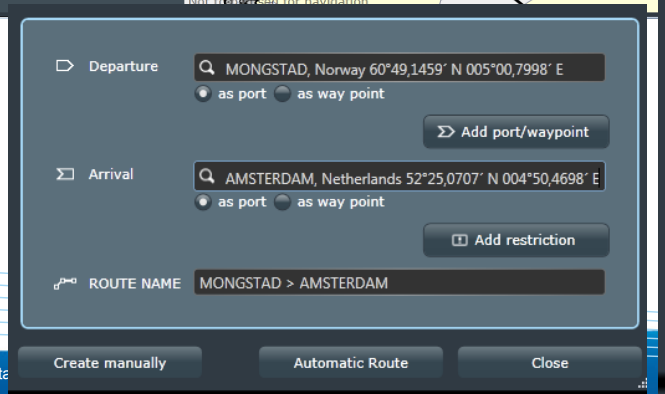
Norwegian Coastal Administration: requested IMO to amend new Traffic Separation Zones and Ship Reporting System (Barents SRS: joint effort with Russia). In effect from 2007 and 2013.

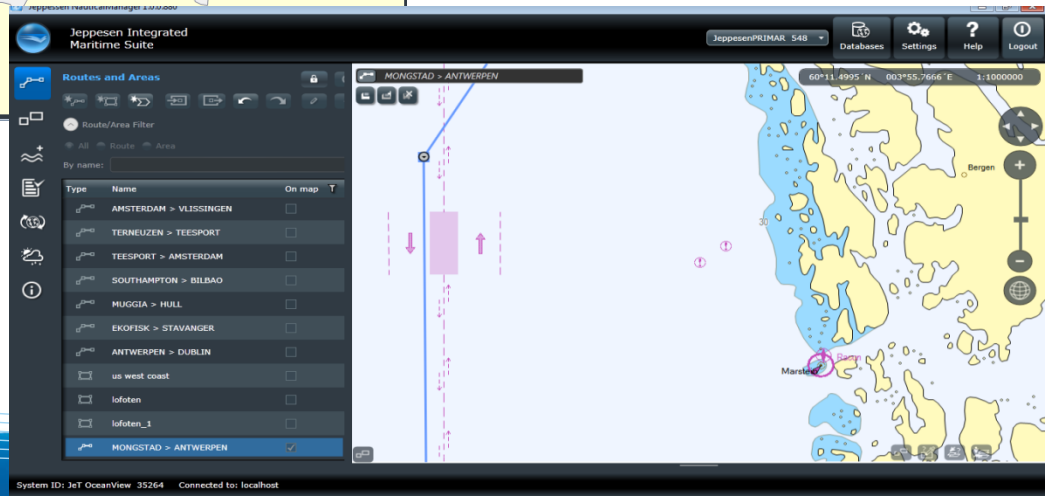


5+ LRIT/tracking partners and Ship-owners on track sharing; 15 min tracks over satellite –

"Automated industrial recommended route database": updated daily: can be used for MSP communication?

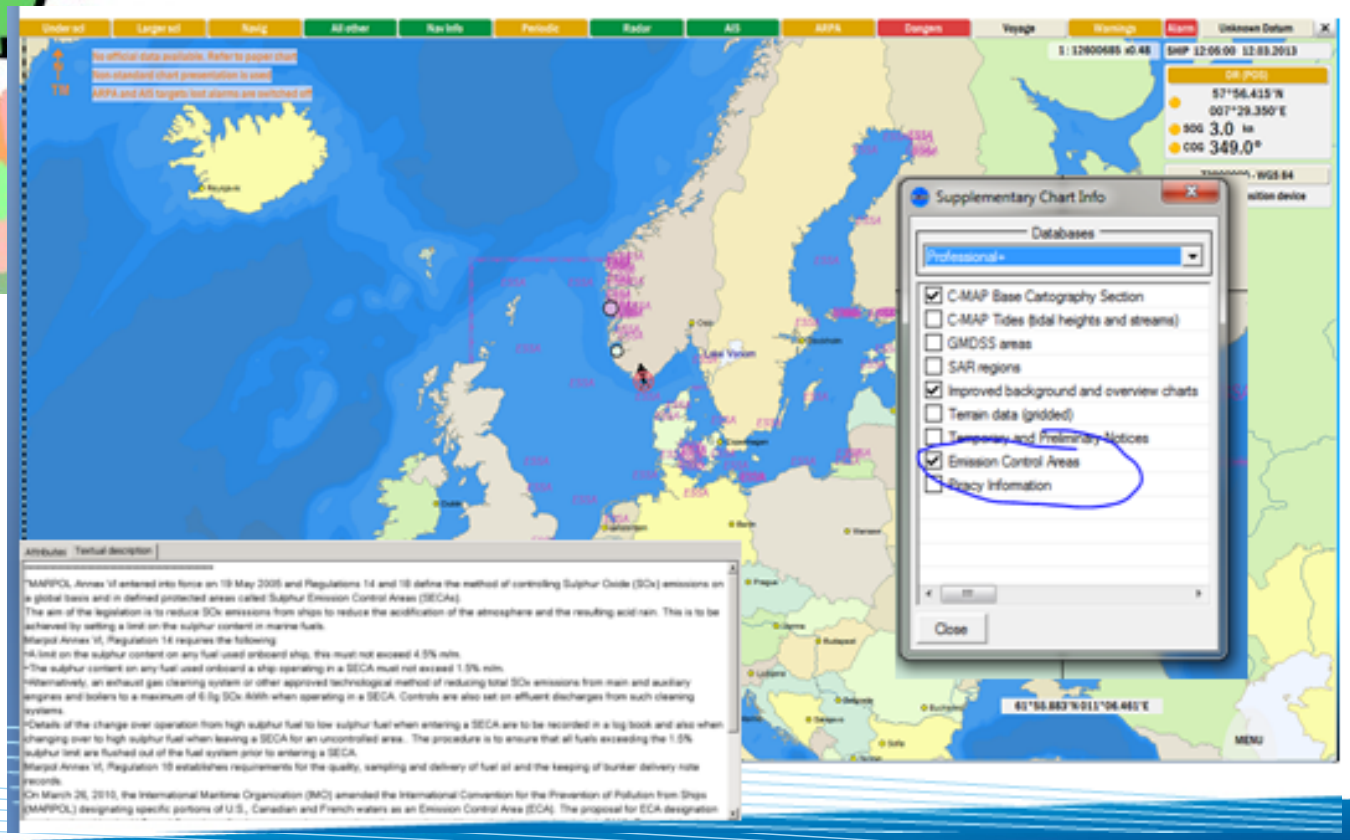






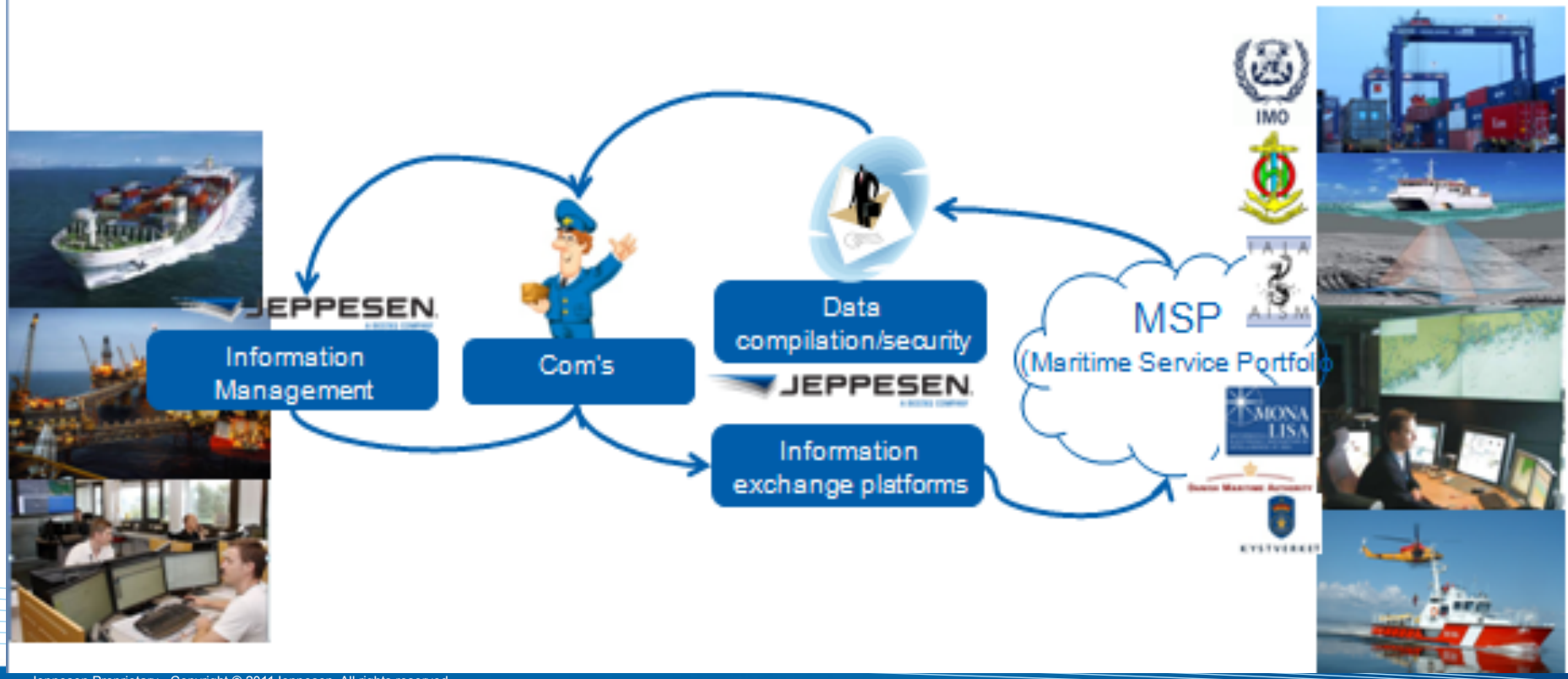
Singapore MEH: IMO/NCA - S100 Seatrial coordinator – will be extended to a Norwegian Marine Elect. Highway

Sulphure Emission Control Area: effective communication to Mariners independent of Hydrographic offices (“Value Added Layer”) using S57 (ESSA):



Jeppesen role in MSP:

- Hydrographic offices production tools (dKart)
- "eNavigation" expertise (www.enavigation.com)
- Marine data exchange expertise (ENC + value added information)
- Access and influencing IHO/IALA/CIRM (presidency), IMO with more.
- In Monalisa: establishing a central VoyageLibrary for Jeppesen customers and partners. Providing ECDIS SOFTWARE and official ENC with integrated information to partners.



Thank you!

Geir.olsen@jeppesen.com