

# **Changing ship traffic lanes in Norway**

## **Integration of data with Government – Industry collaboration for planning and execution.**

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# Content:

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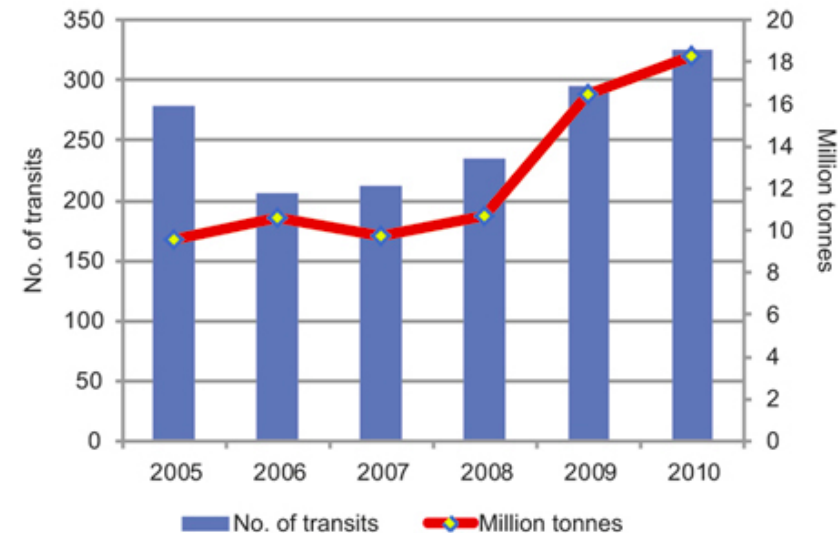
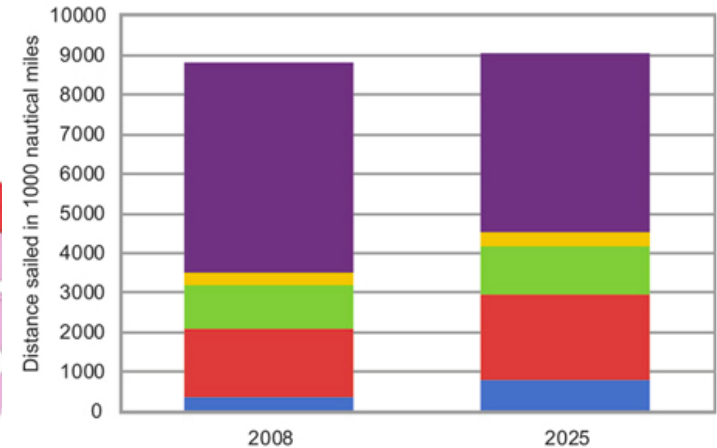
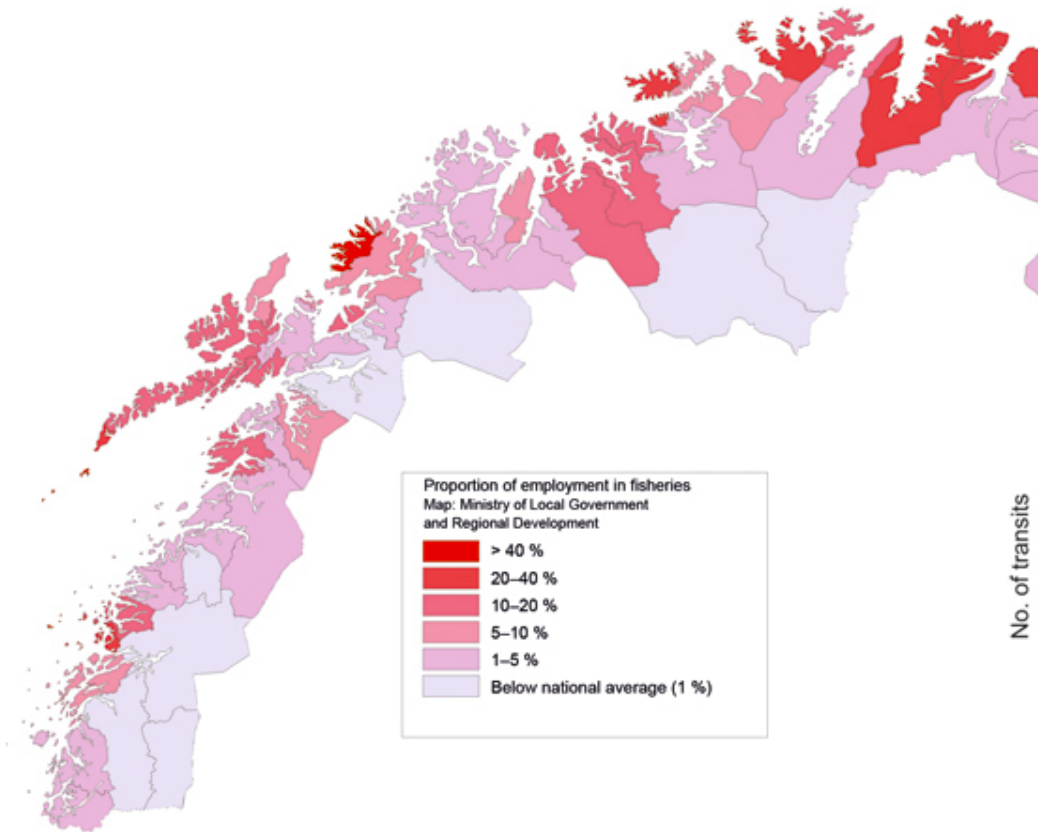
- Introduction and background
- BLAST and “Barentswatch” – web portals for MSP information
- Industrial and public collaboration for MSP information: ECDIS?
- Example of “old and new” route from the results and changing traffic lanes.
- Industrial recommended route database “onboard” and communication.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



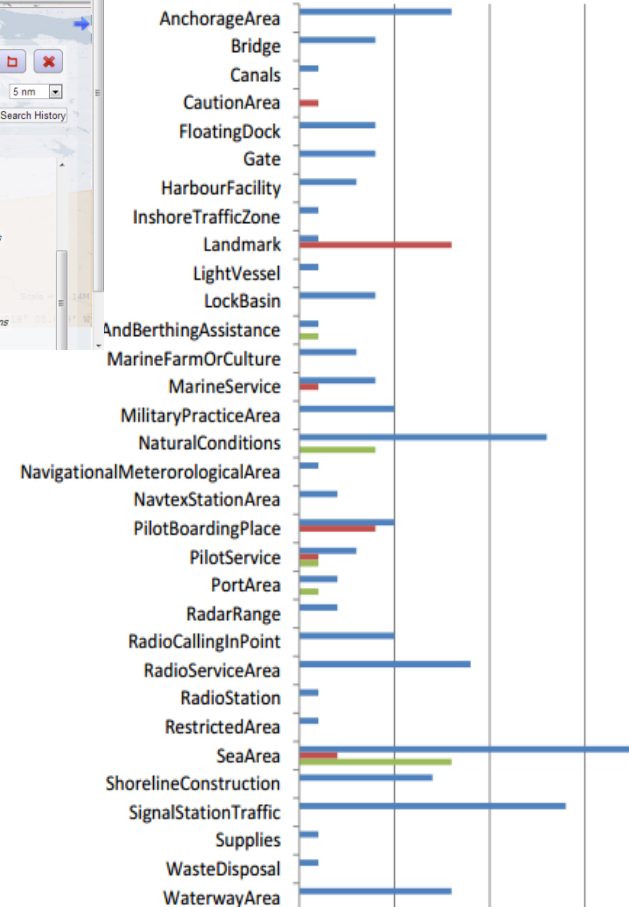
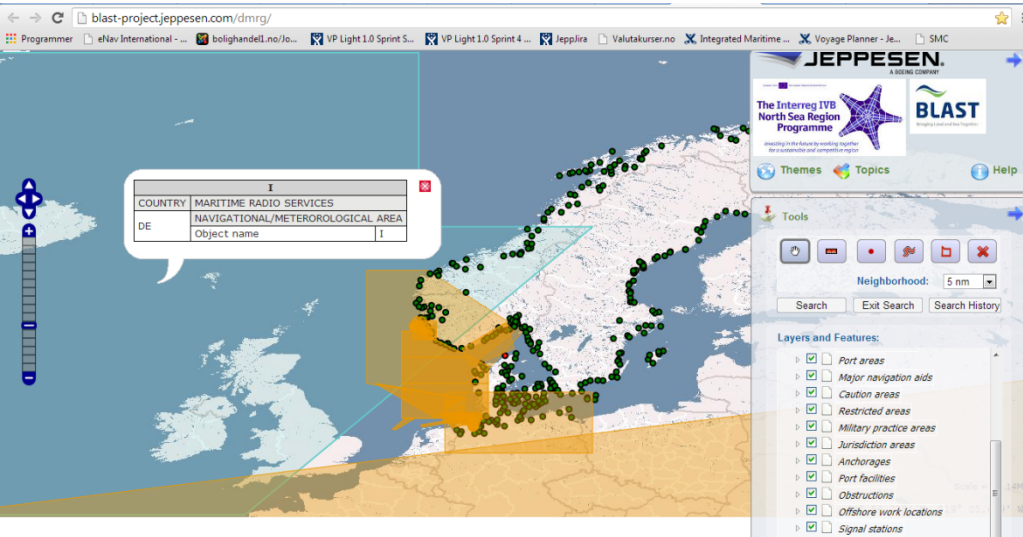
# Background data (from Norwegian Coastal Admin):

- 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

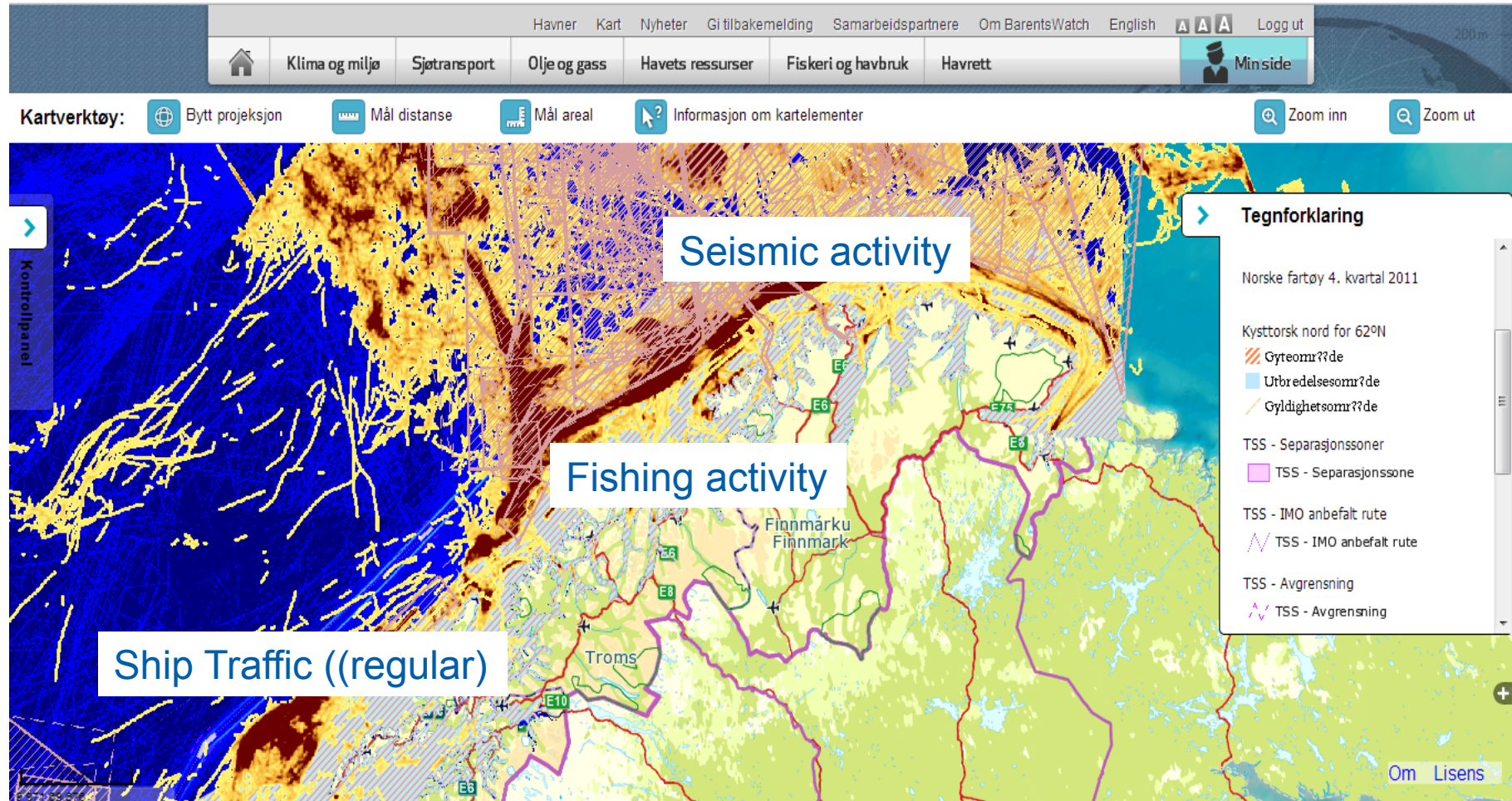


# Results from BLAST: integration and harmonization of Nautical data, identifying frequency of Nautical Objects in Official charts.






# 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)



Jeppesen Integrated Maritime Suite

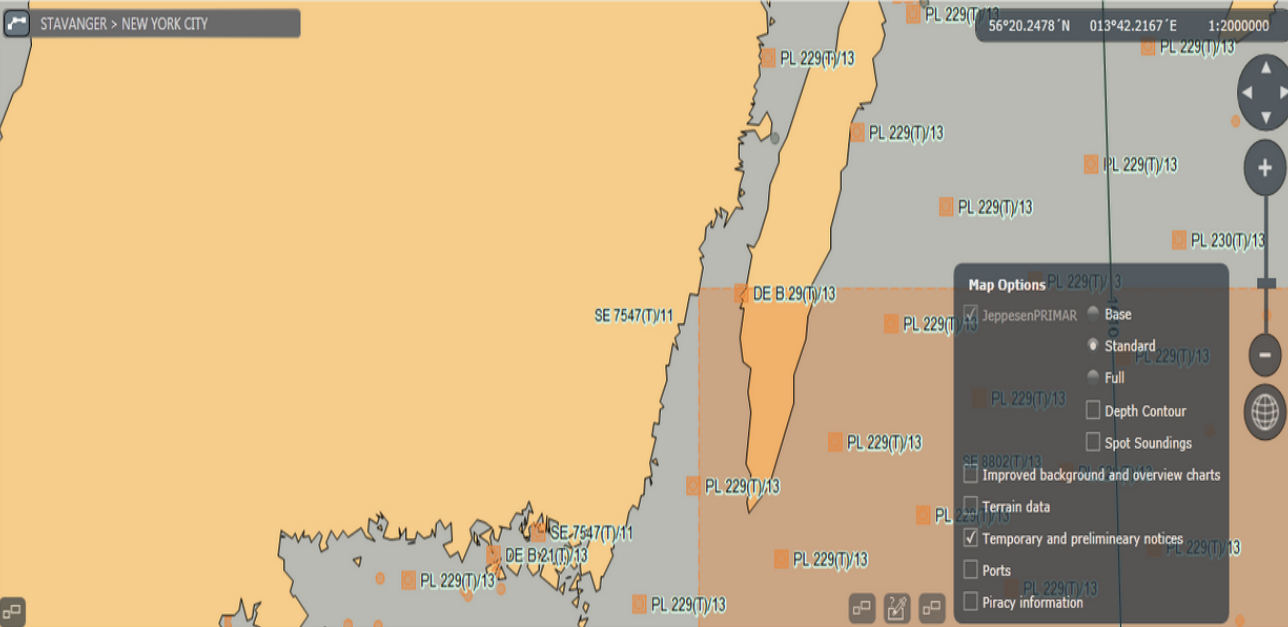
JeppesenPRIMAR 548

Databases
Settings
Users
Logout
Help

### Object Info

- Navigational Information Object
- Navigational Information Object
- Navigational Information Object
- Navigational Information Object <SE 7547(T)/11>
- Navigational Information Object
- Seamless coverage
- Coastline
- Land area

Attributes
Pictorial representation



#### Map Options

- ☒ JeppesenPRIMAR
- ☐ Base
- ☐ Standard
- ☐ Full
- ☐ Depth Contour
- ☐ Spot Soundings
- ☐ Improved background and overview charts
- ☐ Terrain data
- ☒ Temporary and preliminary notices
- ☐ Ports
- ☐ Piracy information

System Log
Detail

### Route

Name: STAVANGER > NEW YORK CITY
☒ On Map

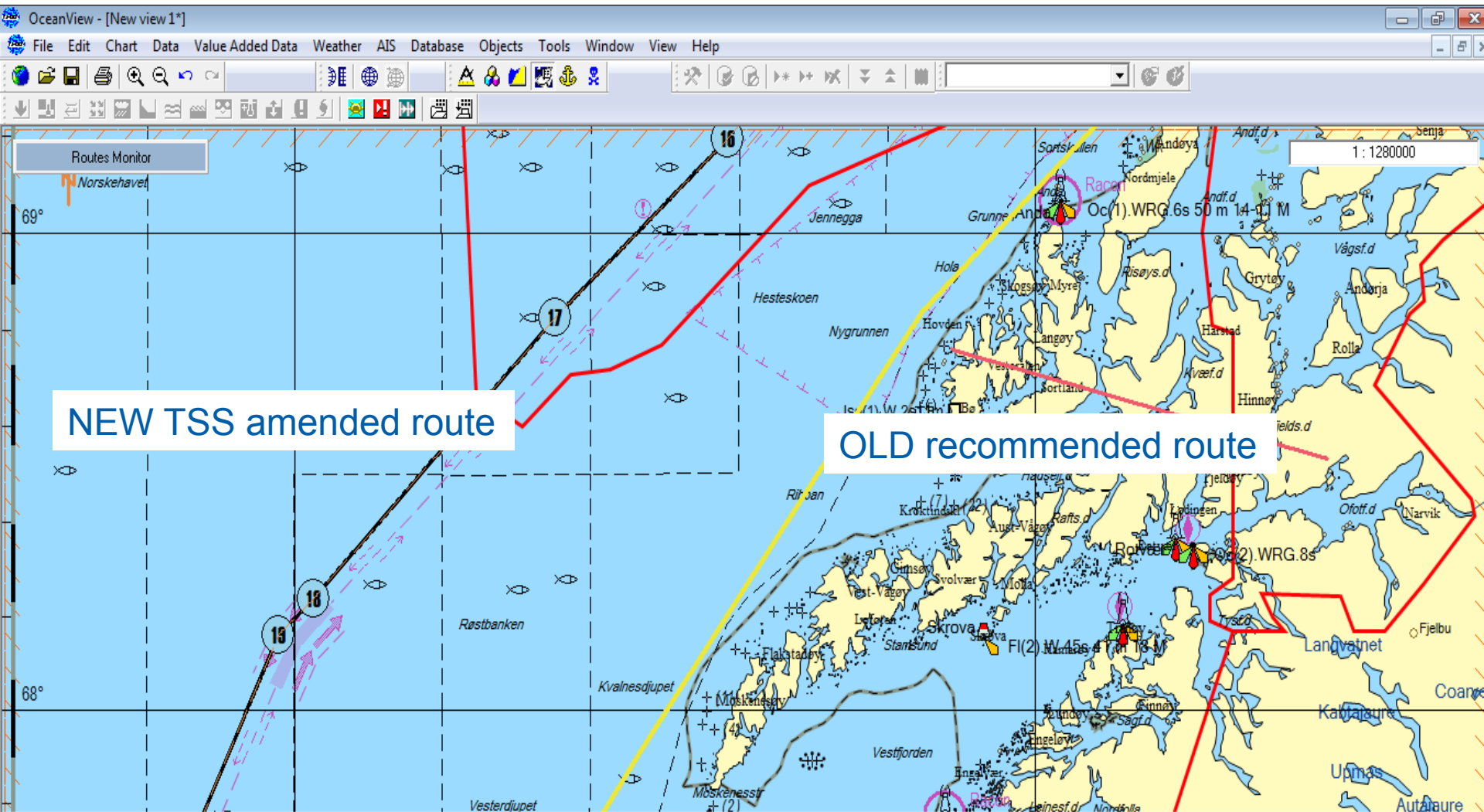
Date of creation: 24. september 2013 14:09:13
Update date: 25. september 2013 13:08:11

Description:

#### Routes way points

Way Index	Name	Rhumb Line	Latitude	Longitude	Bearing	Leg length	Distance to arrival
1	STAVANGER, Norway	<input checked="" type="checkbox"/>	58°58,5086' N	005°43,6966' E	325,20°	0,48 [NM]	3190,04 [NM]
2		<input checked="" type="checkbox"/>	58°58,9025' N	005°43,1665' E	312,50°	0,44 [NM]	3189,56 [NM]
3		<input checked="" type="checkbox"/>	58°59,1961' N	005°42,5458' E	323,80°	2,14 [NM]	3189,13 [NM]

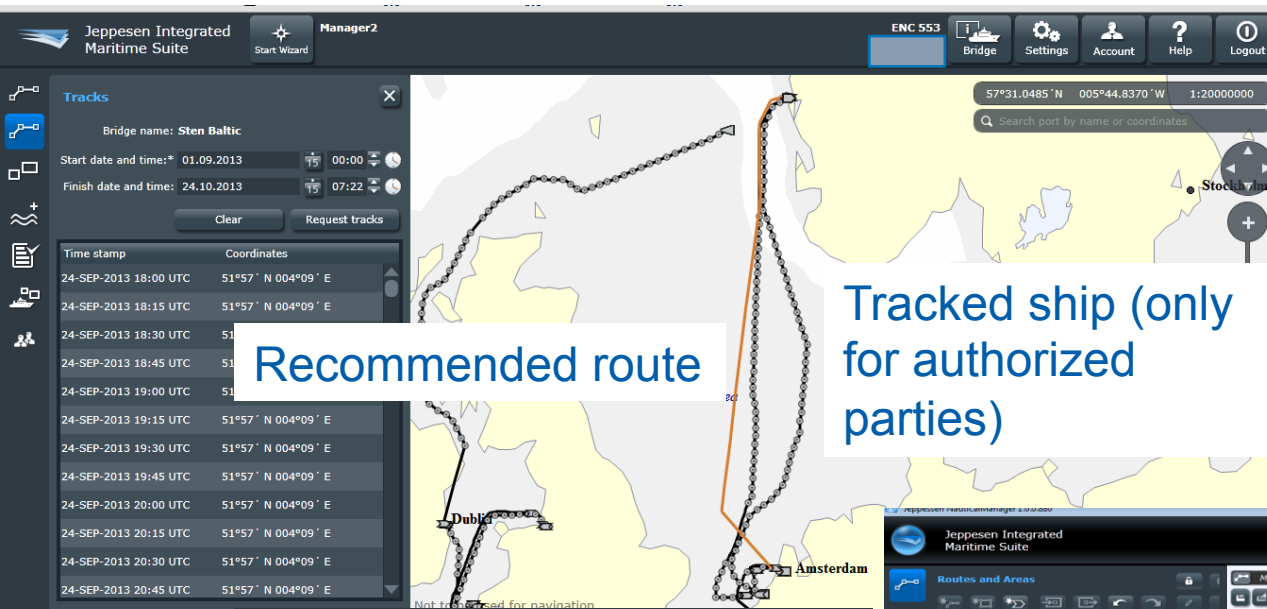
# Norwegian Coastal Administration: requested IMO to amend new Traffic Separation Zones and Ship Reporting System (Barents SRS: joint effort with Russia). In effect from 2007 and 2013.





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?



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ENC 553

Bridge Settings Account Help Logout

Tracks

Bridge name: Sten Baltic

Start date and time: 01.09.2013 00:00

Finish date and time: 24.10.2013 07:22

Clear Request tracks

Time stamp	Coordinates
24-SEP-2013 18:00 UTC	51°57' N 004°09' E
24-SEP-2013 18:15 UTC	51°57' N 004°09' E
24-SEP-2013 18:30 UTC	51°57' N 004°09' E
24-SEP-2013 18:45 UTC	51°57' N 004°09' E
24-SEP-2013 19:00 UTC	51°57' N 004°09' E
24-SEP-2013 19:15 UTC	51°57' N 004°09' E
24-SEP-2013 19:30 UTC	51°57' N 004°09' E
24-SEP-2013 19:45 UTC	51°57' N 004°09' E
24-SEP-2013 20:00 UTC	51°57' N 004°09' E
24-SEP-2013 20:15 UTC	51°57' N 004°09' E
24-SEP-2013 20:30 UTC	51°57' N 004°09' E
24-SEP-2013 20:45 UTC	51°57' N 004°09' E

Tracked ship (only for authorized parties)

Recommended route

57°31.0485' N 005°44.8370' W 1:20000000

Search port by name or coordinates

Stockholm

Dublin

Amsterdam

Not to be used for navigation

Departure

MONGSTAD, Norway 60°49,1459' N 005°00,7998' E

as port as way point

Add port/waypoint

Arrival

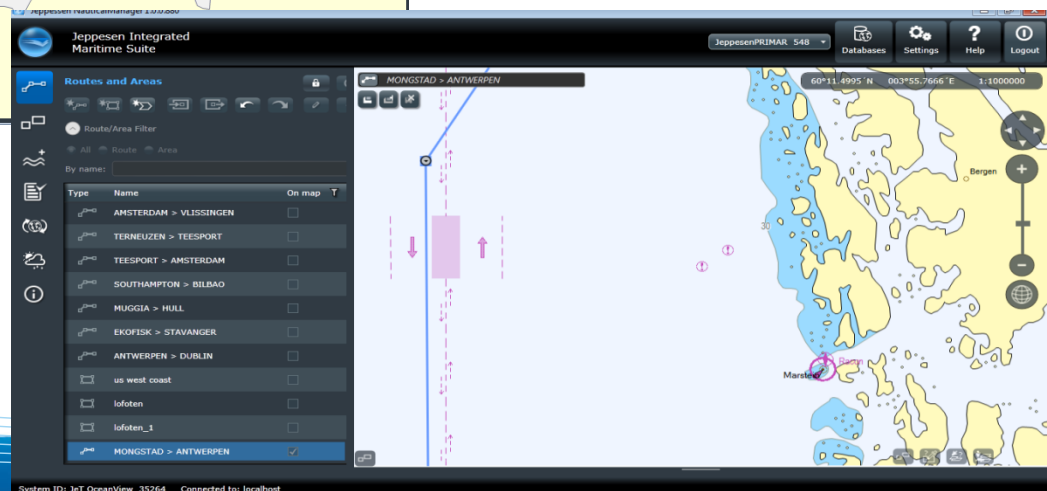
AMSTERDAM, Netherlands 52°25,0707' N 004°50,4698' E

as port as way point

Add restriction

ROUTE NAME MONGSTAD > AMSTERDAM

Create manually Automatic Route Close



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Databases Settings Help Logout

Routes and Areas

Route/Area Filter

By name: Route Area

Type	Name	On map
Route	AMSTERDAM > VLISSEINGEN	<input type="checkbox"/>
Route	TERNEUZEN > TEESPORT	<input type="checkbox"/>
Route	TEESPORT > AMSTERDAM	<input type="checkbox"/>
Route	SOUTHAMPTON > BILBAO	<input type="checkbox"/>
Route	MUGGIA > HULL	<input type="checkbox"/>
Route	EKOFISK > STAVANGER	<input type="checkbox"/>
Route	ANTWERPEN > DUBLIN	<input type="checkbox"/>
Area	us west coast	<input type="checkbox"/>
Area	lofoten	<input type="checkbox"/>
Area	lofoten_1	<input type="checkbox"/>
Route	MONGSTAD > ANTWERPEN	<input checked="" type="checkbox"/>

MONGSTAD > ANTWERPEN

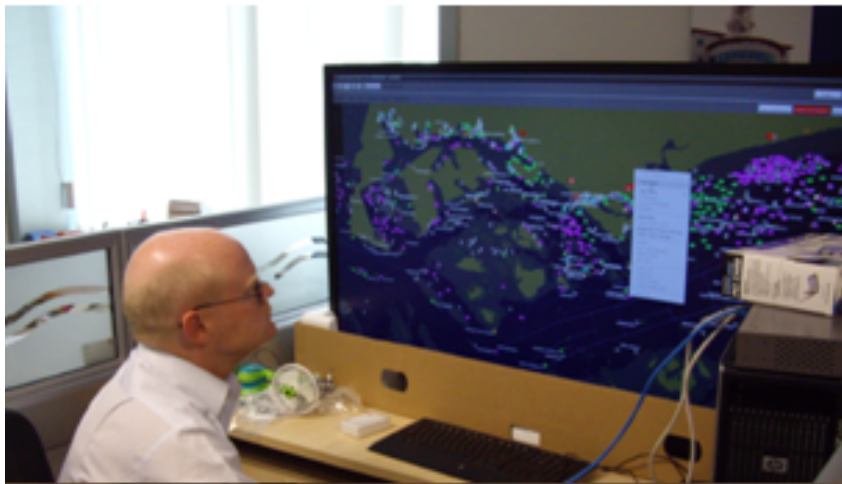
60°11.4905' N 00°55.2646' E 1:1000000

Bergen

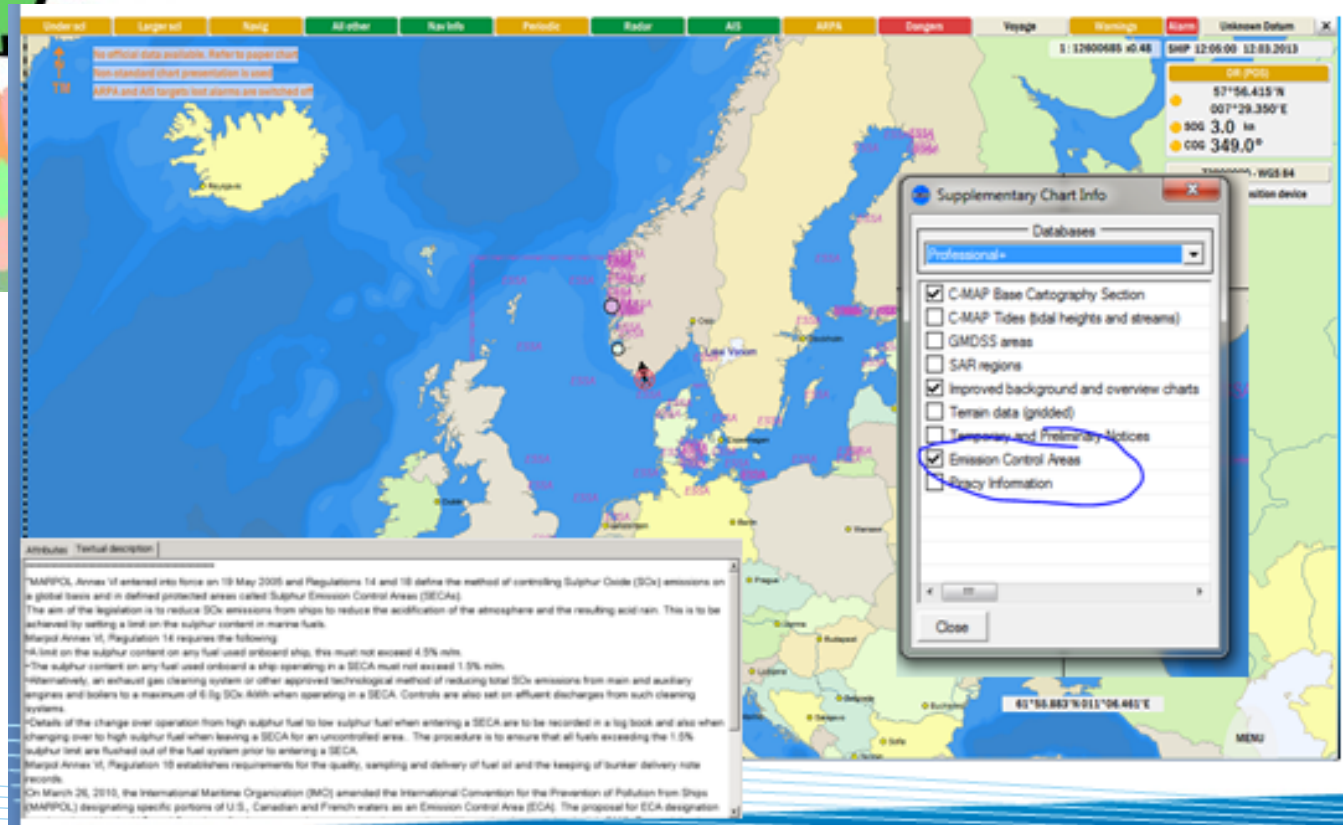
Marsklo

System ID: JeT OceanView 35264 Connected to: localhost

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



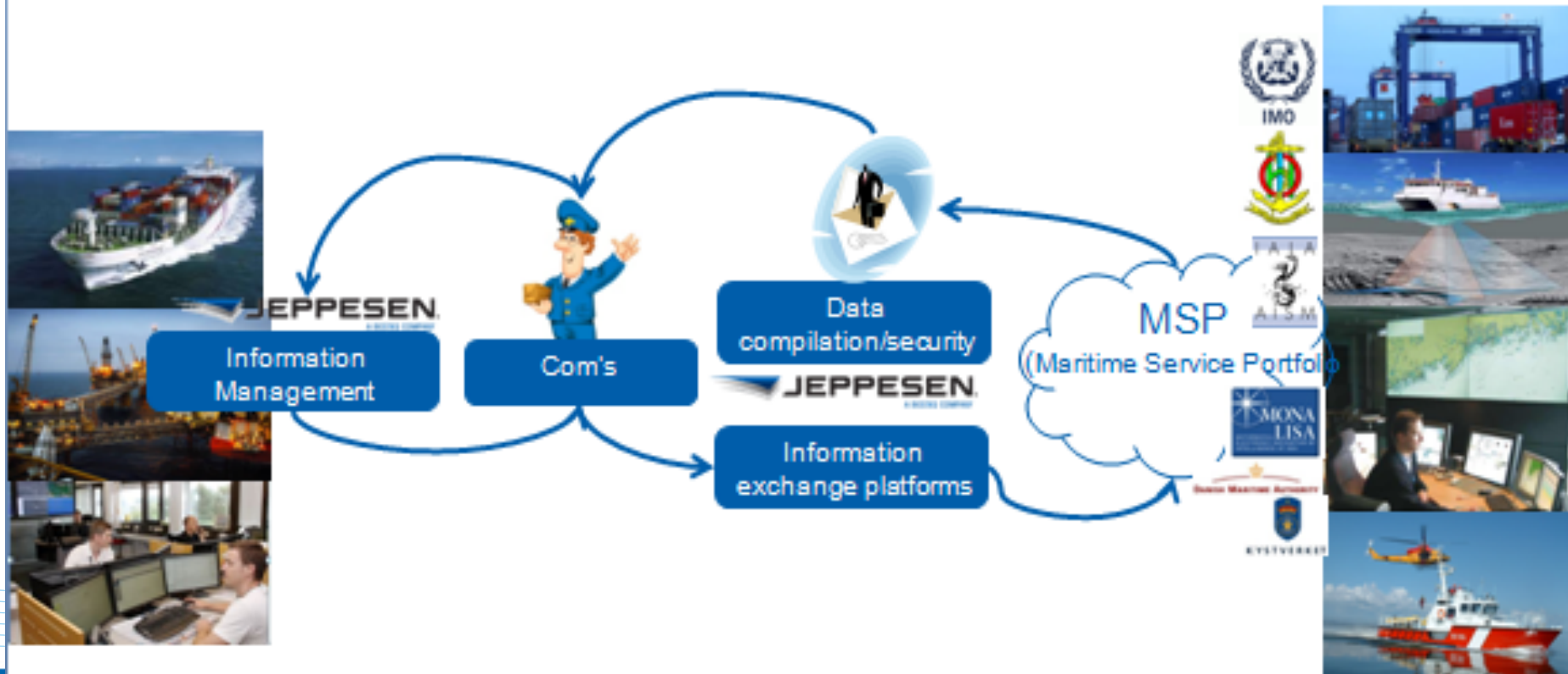
# Sulphure Emission Control Area: effective communication to Mariners independent of Hydrographic offices (“Value Added Layer”) using S57 (ESSA):





# Jeppesen role in MSP:

- Hydrographic offices production tools (dKart)
- “eNavigation” expertise ([www.enavigation.com](http://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!



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