



ACCSEAS: e-Navigation Test-Bed in the North Sea Region



Trinity House

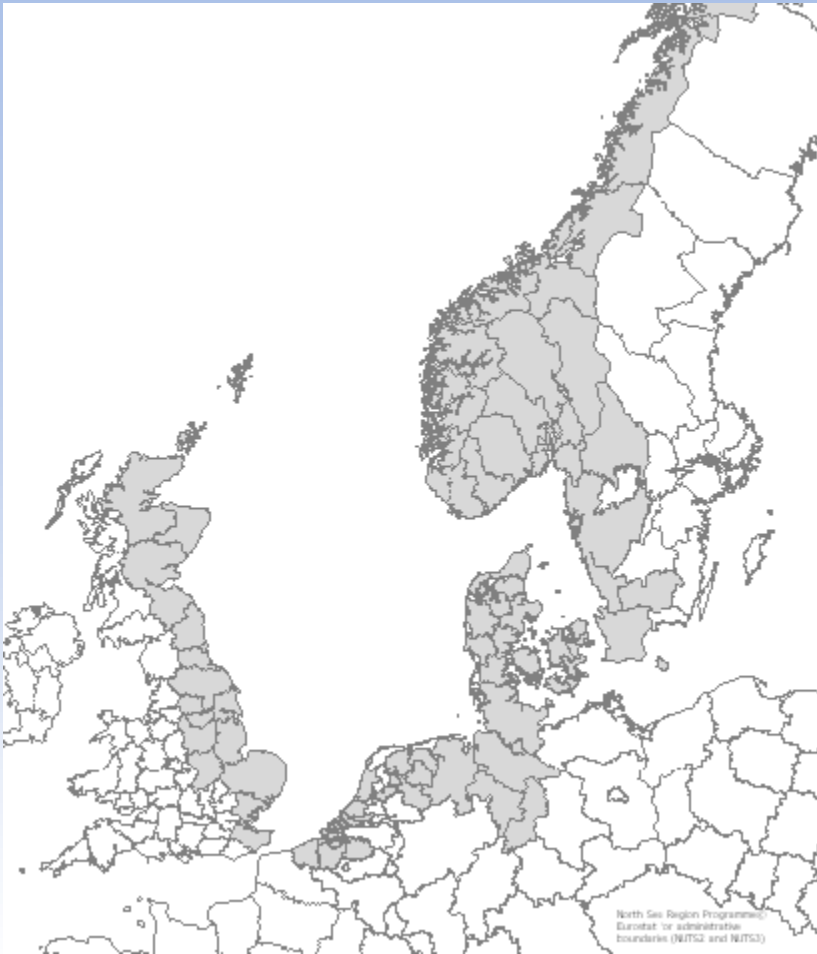
RESEARCH &
RADIONAVIGATION
GENERAL LIGHTHOUSE AUTHORITIES
United Kingdom and Ireland

e-Navigation Underway

30 January 2013



Shipping Challenges of the North Sea Region



- Increased density of shipping
- Reduced space/manoeuvrability
- Growth of offshore installations
- Traffic pinch-points at approaches to:
- Risks of collision and grounding
- Safe and efficient access to the North Sea Region



What is the ACCSEAS project?

- ACCessibility for Shipping, Efficiency Advantages and Sustainability
- Part of the INTERREG IVb North Sea Region (NSR) Programme
- Key theme of the INTERREG programme: Improve accessibility of places in the North Sea Region
 - reducing congestion
 - developing sustainable transport
 - promoting transmodal solutions



ACCSEAS Aims and Objectives

Aims:

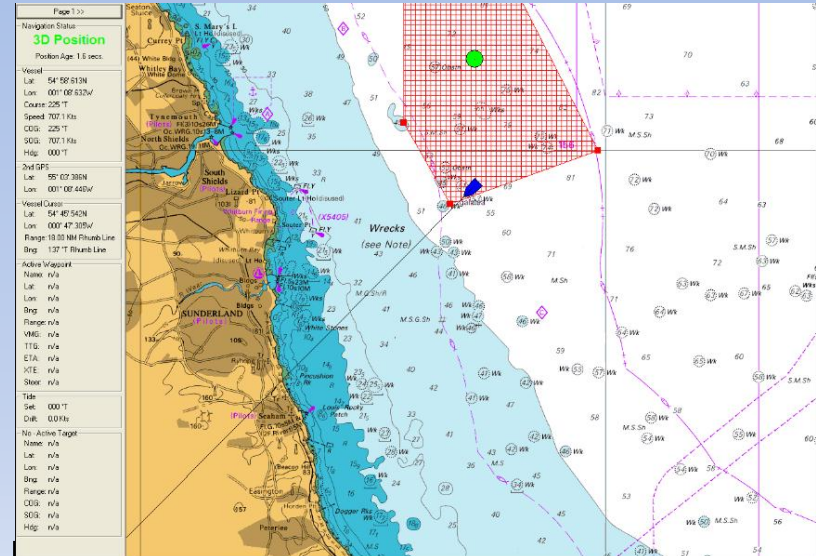
- *To implement and demonstrate e-Navigation test-bed in the NSR*
- *To contribute to resilience of the Region's critical*
- *Enhance maritime access to the Region.*

Objectives:

- *Establish prototype solutions based on IMO's e-Navigation concept to 'bring maritime navigation into the digital age':*

Test-Bed: Resilient PNT

- Mitigation of GNSS vulnerability
- Independent and complementary backup system to GNSS
- Prototype an Integrated Navigation System (INS)
 - radar positioning
 - R-Mode
 - multiple GNSS
 - integration of eLoran

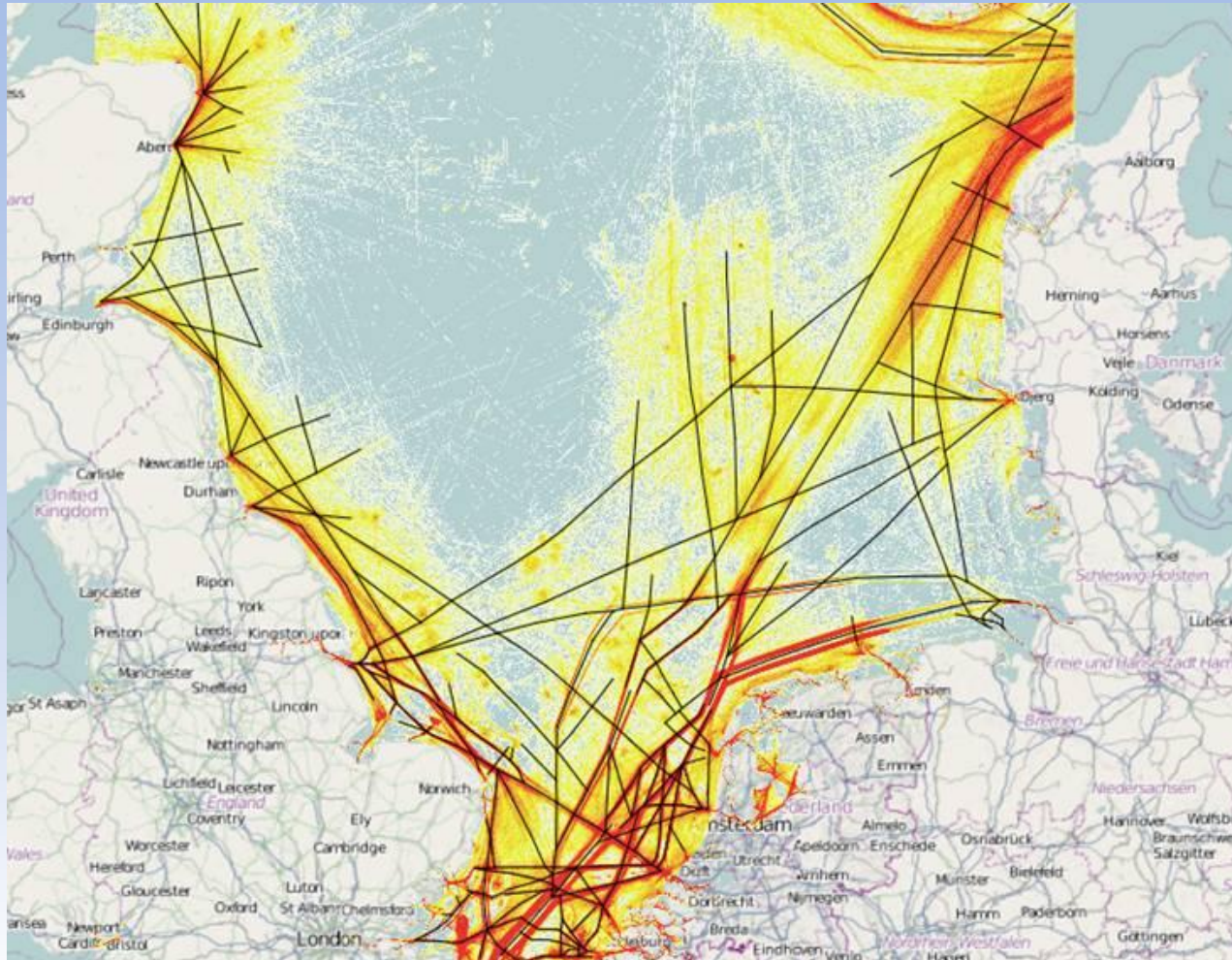


Test-Bed: e-Navigation Services

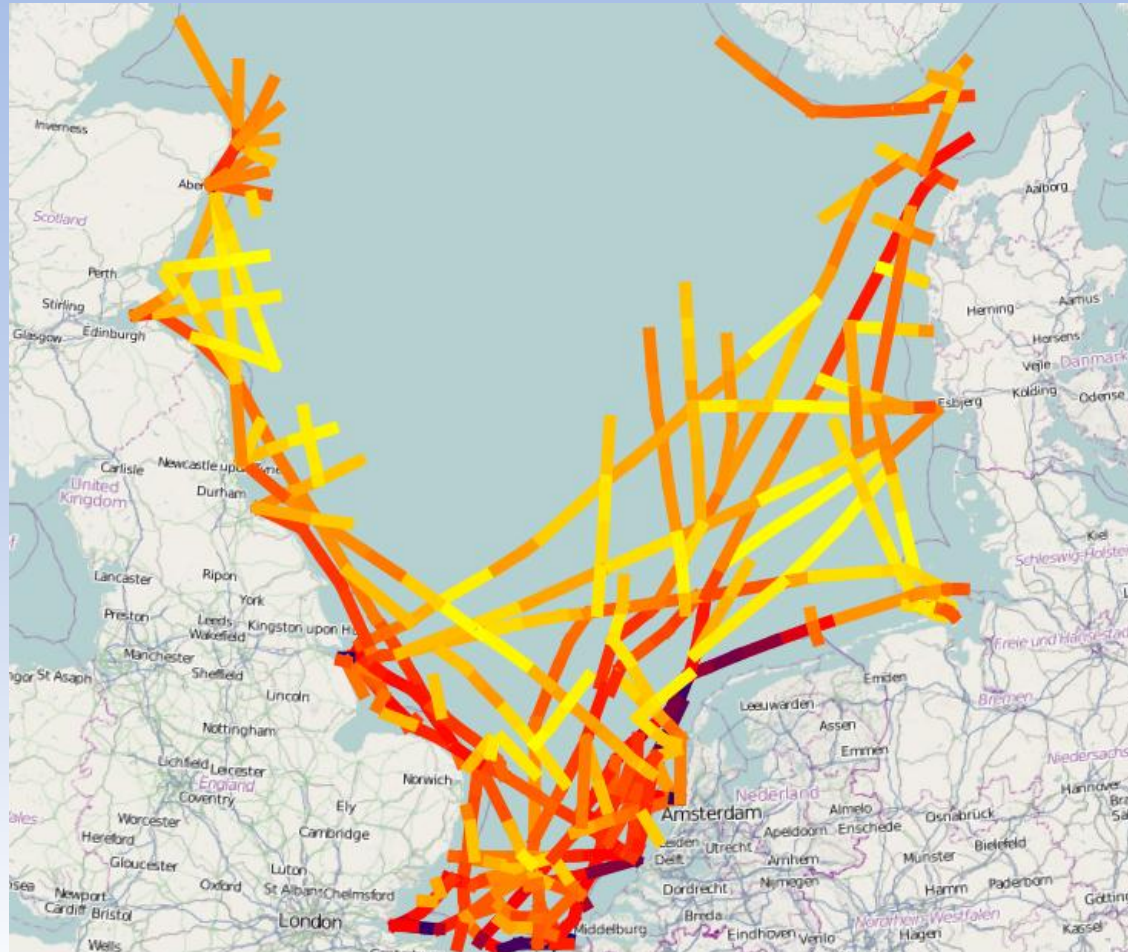
- ‘Berth-to-berth’ applications, Maritime Service Portfolio safety, efficiency and environmental protection
- vessel route planning / update, exchange and display:
 - ship-to-ship: route and intended manoeuvre
 - ship-to-shore: VTS interface and elements of ‘Sea Traffic Management’
 - port operations
- exchange of data and information ship-to-ship and ship-to-shore:
 - seamless exchange of static vessel and dynamic voyage data
 - IHO S-100 format
 - Inter-VTS Exchange Format (IVEF)
- extended functions of virtual/AIS Aids-to-Navigation



ACCSEAS Results coming in



ACCSEAS Results coming in



ACCSEAS Conference

- March 5-7 2013
- Flensburg, Germany
- Theme: *ACCSEAS: pioneering safe regional access with e-Navigation*
 - Day 1: *Defining regional e-Navigation for safe efficient access in the North Sea*
 - Day 2: *Innovative approach to North Sea accessibility and efficiency challenges*
 - Day 3: *e-Navigation – a sustainable way forward for our region*



Conclusion

- Potential for positive impact on maritime accessibility and safety in the NSR and beyond
- Buy-in from ports, service providers, ship-owners and international e-Navigation community
- Results starting to come in, with a lot more to come!
- Conference: Flensburg, March 5-7



Thank you

Questions?

