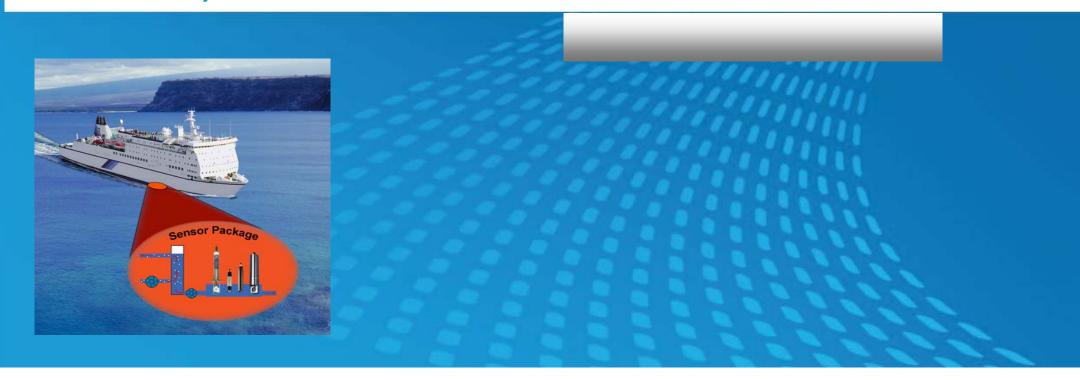
State-of-the-art and incorporation into an European observational network

Franciscus Colijn, em.



Overview EU structures and developments



DG Research and Innovation: Marine Research Infrastructure (MRI) expert group: Proposal for a European integrated Ocean Observing System (IOOS)

DG MARE: EMODNET- European Marine Observation and Data Network, MODEG as expert group; current activities are development of data portals for e.g. biology, geology, physics coastal waters, chemistry, human activities, bathymetry, (fisheries by JRCs), coastal data by Eurostat (tourism)

Contribution of DG MARE: Marine Knowledge 2020- Marine data and observation for smart and sustainable growth

European Observational Network: EOOS (1)

What for?

- -Socio-economic needs such as marine spatial planning, ICZM, marine energy and food sectors, transport, exploitation resources, weather/climate forecasting,
- -Good Environmental Status (GES), as required by the MSFD (marine Strategy Framework Directive), coastal environment, water quality,
- -Ocean/climate interactions, adaptation to climate change
- -Marine safety, security (extreme events, disasters)

European Observational Network: EOOS, (2)



EOOS will have three levels:

- 1. The acquisition of data (satellites, in-situ devices with adequate sensors) plus transmission to data centres
- 2. The collection, storage and management of data through databases, national repositories
- 3. The use of data through integrating platforms, models, applications to turn them into products for end-users

European Observational Network: EOOS, (4)



Existing initiatives for Data Collection and Management: (examples)

- 1. National Oceanographic Data Centres
- 2. European Register of Marine Species (MARBEF)
- 3. European Ocean Biographic Information System (EUR-OBIS)
- 4. SeaDataNet provides a platform with harmonised standards at EU Level for metadata, data, vocabularies, quality; Interoperability with Ocean Data Portal of IODE/IOC network;
- 5. EMODNET provides a platform based on SeaDataNet standards and tools to assemble a large collection of data and make them available for applications/end-users (different portals under construction)

EMODNET & Incorporation FerryBox in Infrastructure



- 1. State-of-the-art of FerryBox: sensors available, extensions, new developments
- 2. Link to EU policy issues (MSFD)
- 3. Statement of Marine Board (Ostend Declaration): "observational capacities in Europe should be strengthened". Need for an operational oceanographic network, including FerryBoxes.
- 4. JERICO: integration and harmonization of FerryBox measurements in Europe; how to incorporate other global initiatives (US, Asia, Australia) (presentation by Patrick Farcy)

EMODNET & Incorporation FerryBox in Operational

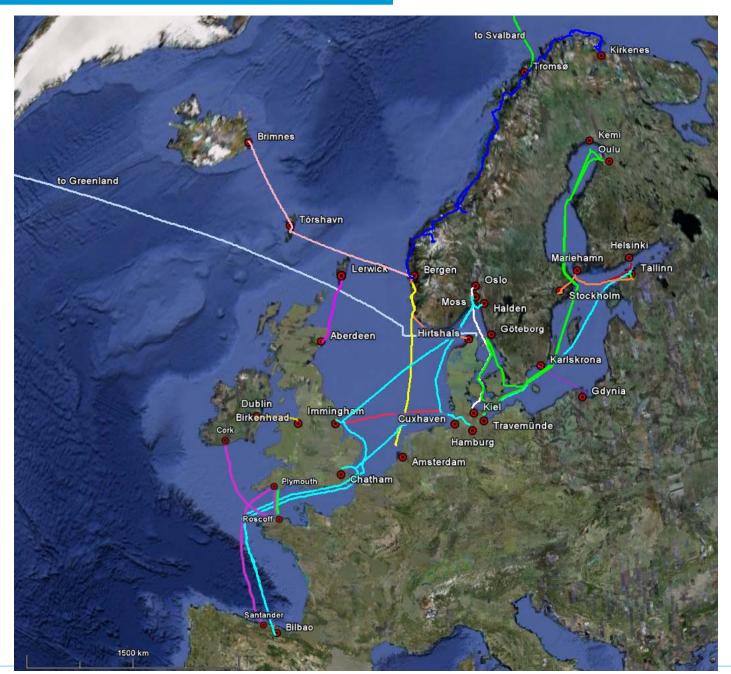


monitoring

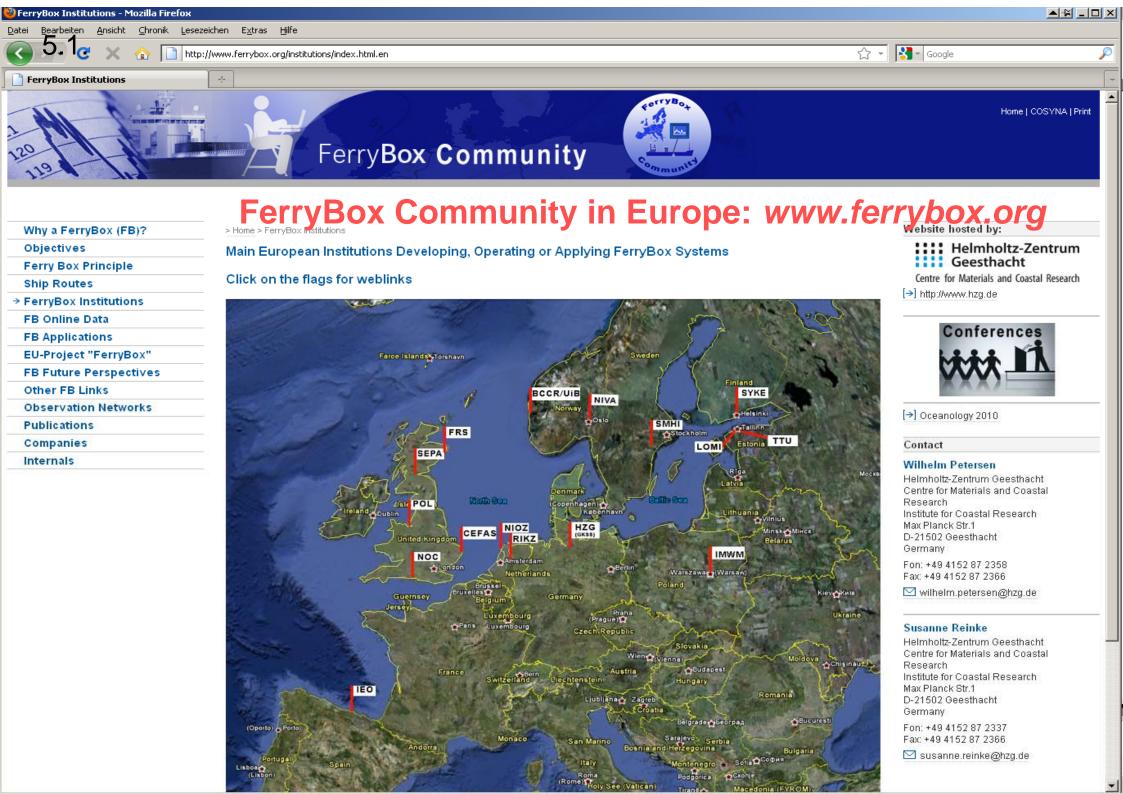
- 1. Incorporation of FerryBox as an integrated instrument into national monitoing programmes: e.g. Norway, Scotland, UK, Finland
- 2. Show reliability and usefulness of FerryBox on a European Level
- 3. "observational capacities in Europe should be strengthened". Need for an operational oceanographic network, including FerryBoxes.
- 4. Further scientific (research oriented) developments of FB systems
- 5. Project of EMODNET for an integrated monitoring case in the North Sea (Projected)

Ferrybox Routes in Europe (status of 2011)





FerryBox 8



Ferry Lines

Helmholtz-Zentrum
Geesthacht

als and Coastal Research













