



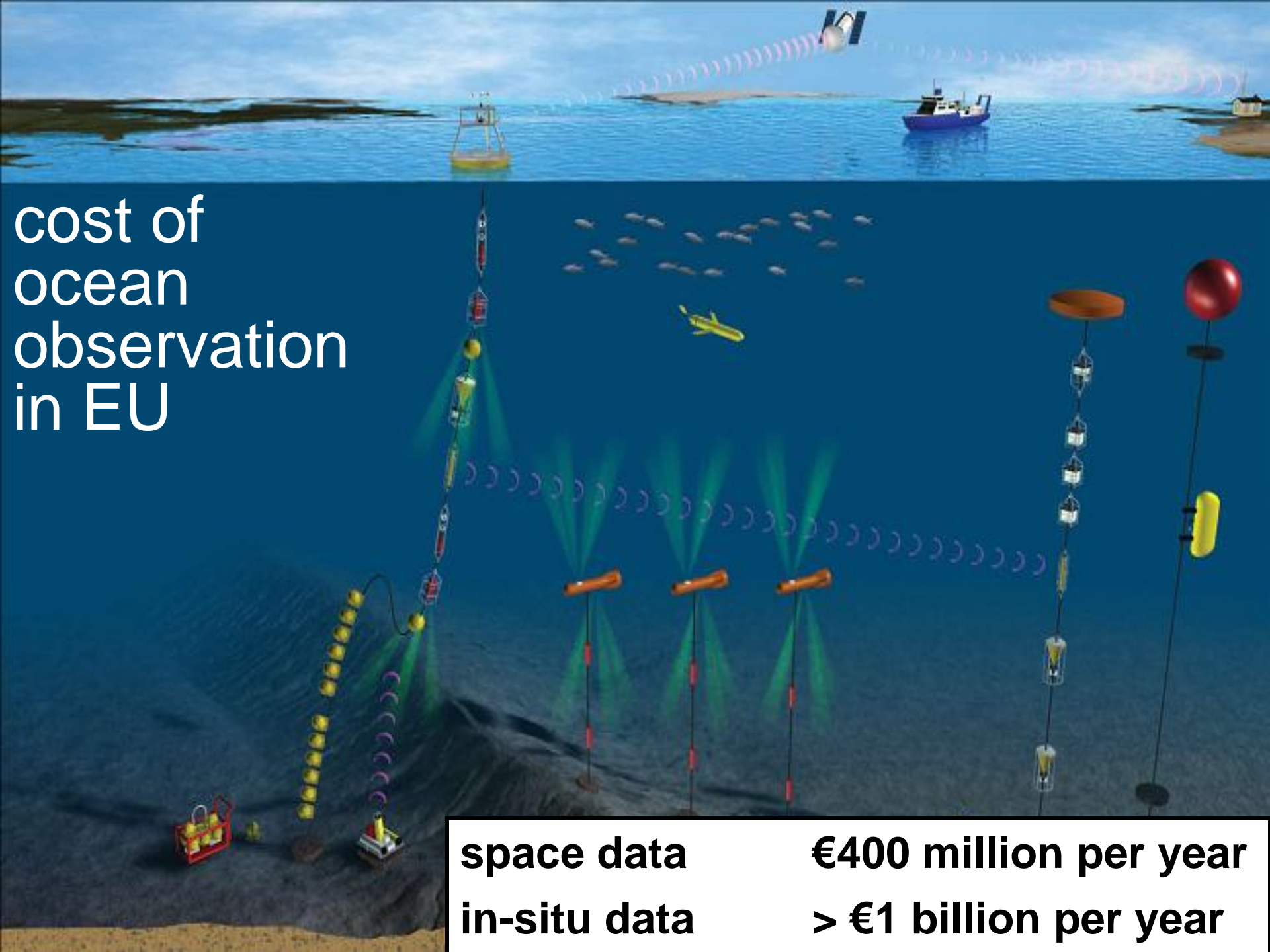
# marine knowledge 2020

## Next step



growth in the marine economy is accelerating





# cost of ocean observation in EU

**space data**  
**in-situ data**

**€400 million per year**  
**> €1 billion per year**





## Maria Damanaki, Commissioner for Maritime Affairs and Fisheries

(..) the data collected through these observations can only generate knowledge and innovation if Europe's engineers and scientists are able to find, access, assemble and apply them efficiently and rapidly. At present this is often not the case.

# expected benefits of EMODnet in long-term according to impact assessment

- **€300 million annually**

- reducing of operating cost of which
  - €100 million for science
  - €56 million for public authorities
  - €150 million for private companies

with inevitable growth in marine economy, these benefits will increase

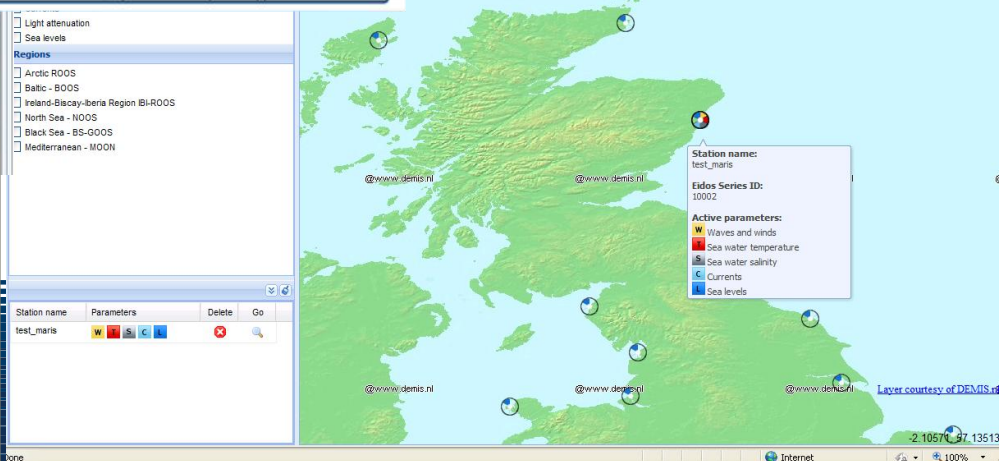
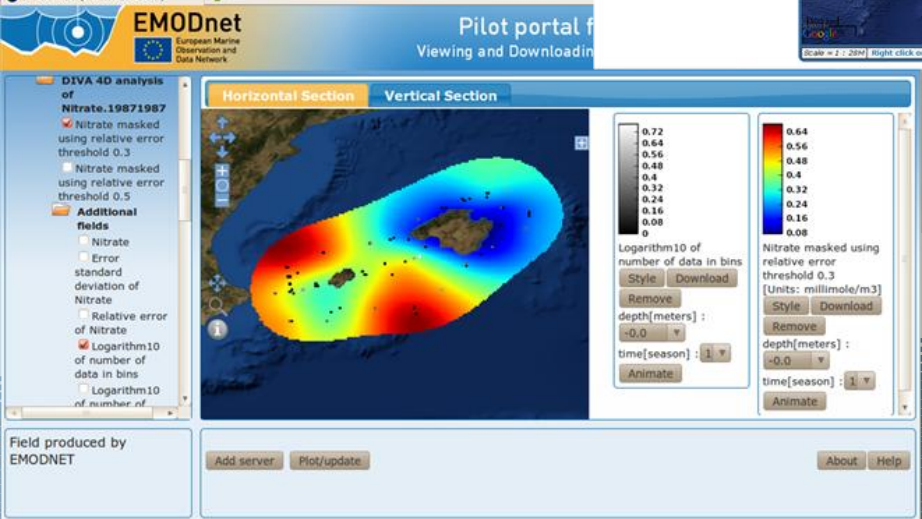
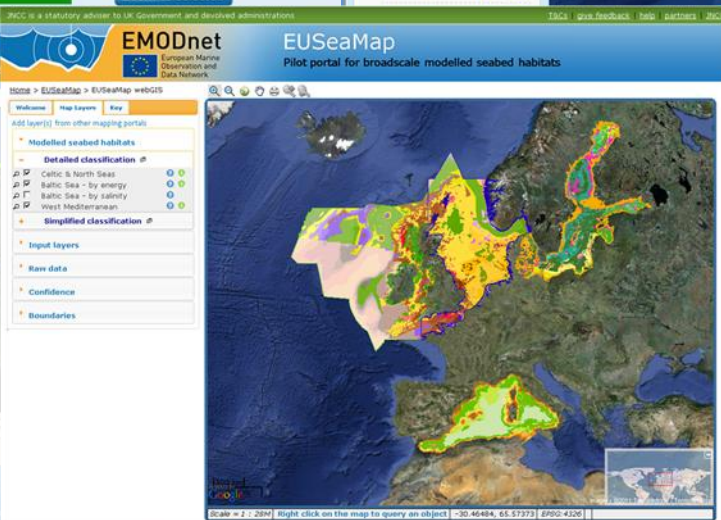
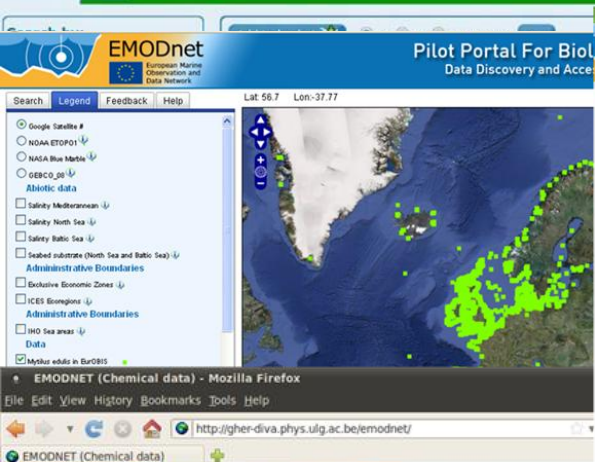
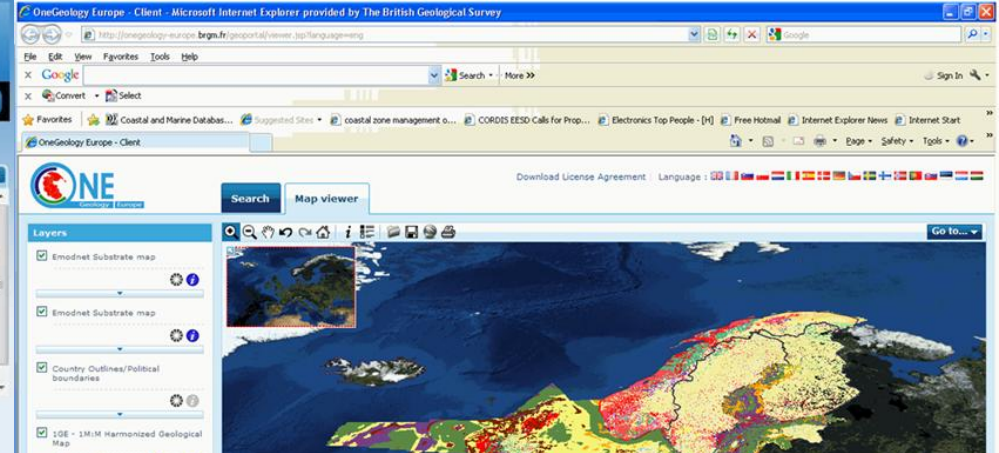
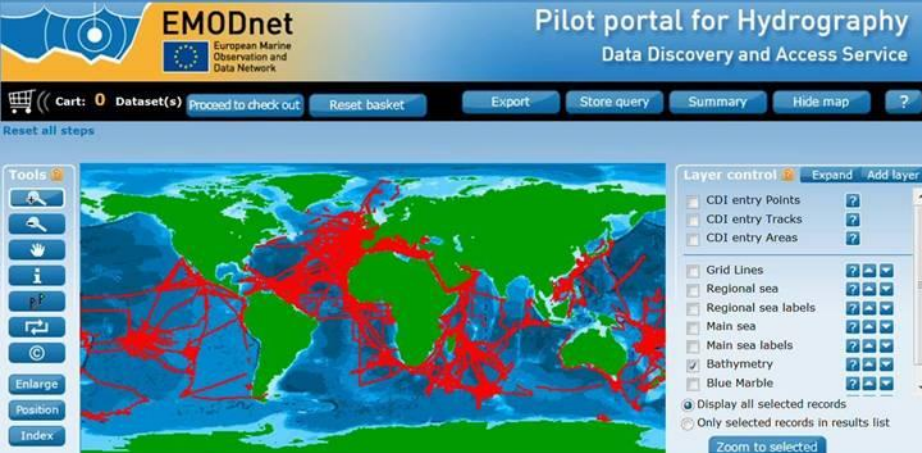
- **€60-€200 million annually**

- increasing competition and opportunities
  - contributes to innovation and growth

**BELGIUM**, Flanders Marine Institute/Vlaams Instituut voor de Zee(VLIZ), Royal Belgian Institute of Natural Sciences, University of Liege - GeoHydrodynamics and Environment Research (ULG)ja Belgium; **BULGARIA**, Institute of Oceanology Bulgarian Academy of Science (IO-BAS), **CYPRUS**, University of Cyprus-Oceanography Centre (OC) , **DENMARK**, Danish Environmental and Planning Agency (BLST), Danish Hydraulic Institute (DHI), Geological Survey of Denmark and Greenland, National Environmental Research Institute (NERI-MAR), **ESTONIA**, Geological Survey of Estonia, **FINLAND**, Geological Survey of Finland,, **FRANCE**, Bureau de recherches géologiques et minières , Collecte Localisation Satellites (CLS), Institut Français de Recherche pour l'Exploitation de la Mer (Ifremer), Service Hydrographique et Oceanographique de la Marine (SHOM)., **GEORGIA**, Iv. Javakhishvili Tbilisi State University (TSU-DNA), **GERMANY**, Alfred Wegener Institute for Polar and Marine Research (AWI), Bundesamt für Seeschifffahrt und Hydrographie (BSH-DOD),, Federal Institute for Geosciences and Natural Resources, University of Bremen (UniHB), **GREECE**, Hellenic Centre for Marine Research (HCMR), **INTERNATIONAL**, International Council for the Exploration of the Sea (ICES), The Global Biodiversity Information Facility (GBIF), UNEP/GRID-Arendal, **IRELAND**, Geological Survey of Ireland, Marine Institute (MI), **ITALY**, ETT srl, Istituto Nazionale di Oceanografia e di Geofísica Sperimentale (OGS), Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA), **LATVIA**, Latvian Environment, Geology and Meteorology Agency, **LITHUANIA**, Lithuania institute of Geology and Geography, **NETHERLANDS**, ATLAS, Deltares, Mariene Informatie Service 'MARIS' BV, NIOZ Royal Netherlands Institute for Sea Research (NIOZ), Royal Netherlands Academy of Arts and Sciences/Koninklijke Nederlandse Akademie van Wetenschappen (KN A W); Netherlands Institute of Ecology; Centre for Estuarine and Marine Ecology (NIOO-CEME), **NORWAY**, Geological Survey of Norway, Norwegian Marine Data Centre - Institute of Marine Research (IMR),, **POLAND**, Polish Geological Institute, **ROMANIA**, National Institute for Marine Research and Development "Grigore Antipa" (NIMRD), **RUSSIAN FEDERATION**, All Russian Research Institute of Hydro-meteorological Information - WDC B (RIHMI-WDC), P.P. Shirshov Institute of Oceanology Russian Academy of Science (SIO-RAS), **SPAIN**, Instituto Español de Oceanografía (IEO), **SWEDEN**, Geological Survey of Sweden, Sveriges Meteorologiska Och Hydrologiska Institut (SMHI), Swedish Environmental Protection Agency, **UKRAINE**, Institute of Biology of the Southern Seas, National Academy of Sciences of Ukraine (IBSS NASU, Marine Hydro-physical Institute (MHI), **UNITED KINGDOM**, Joint Nature Conservation Committee Support Co, NERC British Océanographie Data Centre, Liverpool (BODC), NERC, British Geological Survey, Edinburgh (BGS), NERC, National Oceanography Centre Southampton (NOC), **UNITED STATES**, Rutgers University; Institute for Marine and Coastal Sciences (IMCS),

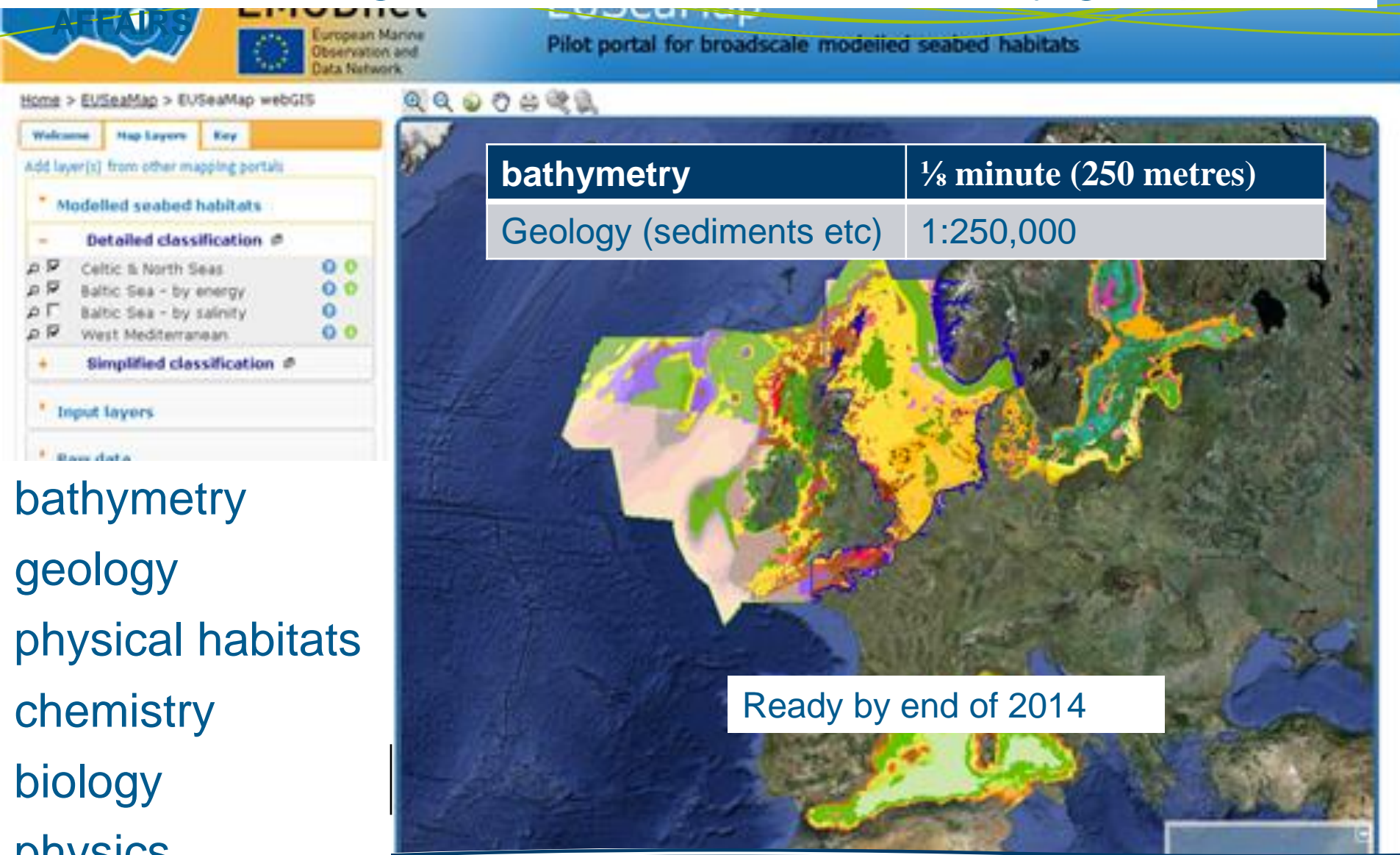
**53 Organisations working together**







# 2012 Work Programme – thematic assembly groups



bathymetry  
geology  
physical habitats  
chemistry  
biology  
physics  
human activity



# growth and innovation in ocean economy- gaps and priorities in sea basin observation and data



- **identify gaps**
- **assess priorities of industry, scientists, public authorities**
- **two projects**
  - €700,000 North Sea
  - €1,100,000 Mediterranean



# Green Paper, June 2012



- **priorities for new European maritime and fisheries fund?**
- **role of private sector?**
- **European sea-bed map by 2020**
- **Integrate GMES marine core service and Data Collection Regulation for fisheries**



# more information



- [http://ec.europa.eu/maritimeaffairs/index\\_en.html](http://ec.europa.eu/maritimeaffairs/index_en.html)
- <https://webgate.ec.europa.eu/maritimeforum/node/1305>