

# HELCOM Data activities

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# Content

- Work of HELCOM on
  - Producing / gathering and presenting data and information
  - emphasis on MSP relevant data
  - linkages to other regional as well as European data collection frameworks.



# HELCOM Databases

- **COMBINE – oceanographic data** - will be revised to support BSAP & MSFD better
  - Data publicly available via ICES website:  
<http://ocean.ices.dk/helcom/Helcom.aspx?Mode=1>
- **PLC – Pollution load compilation** – waterborne and airborne pollution loads – project to modernize and build interface to PLC database
  - Data extractions available at HELCOM Map and Data Service:  
<http://maps.helcom.fi/website/mapservice/index.html>
- **MORS – Monitoring of Radioactive Substances** in the environment and discharges from NPPs
  - Database available at [www.helcom.fi](http://www.helcom.fi), extractions available at HELCOM Map and Data Service

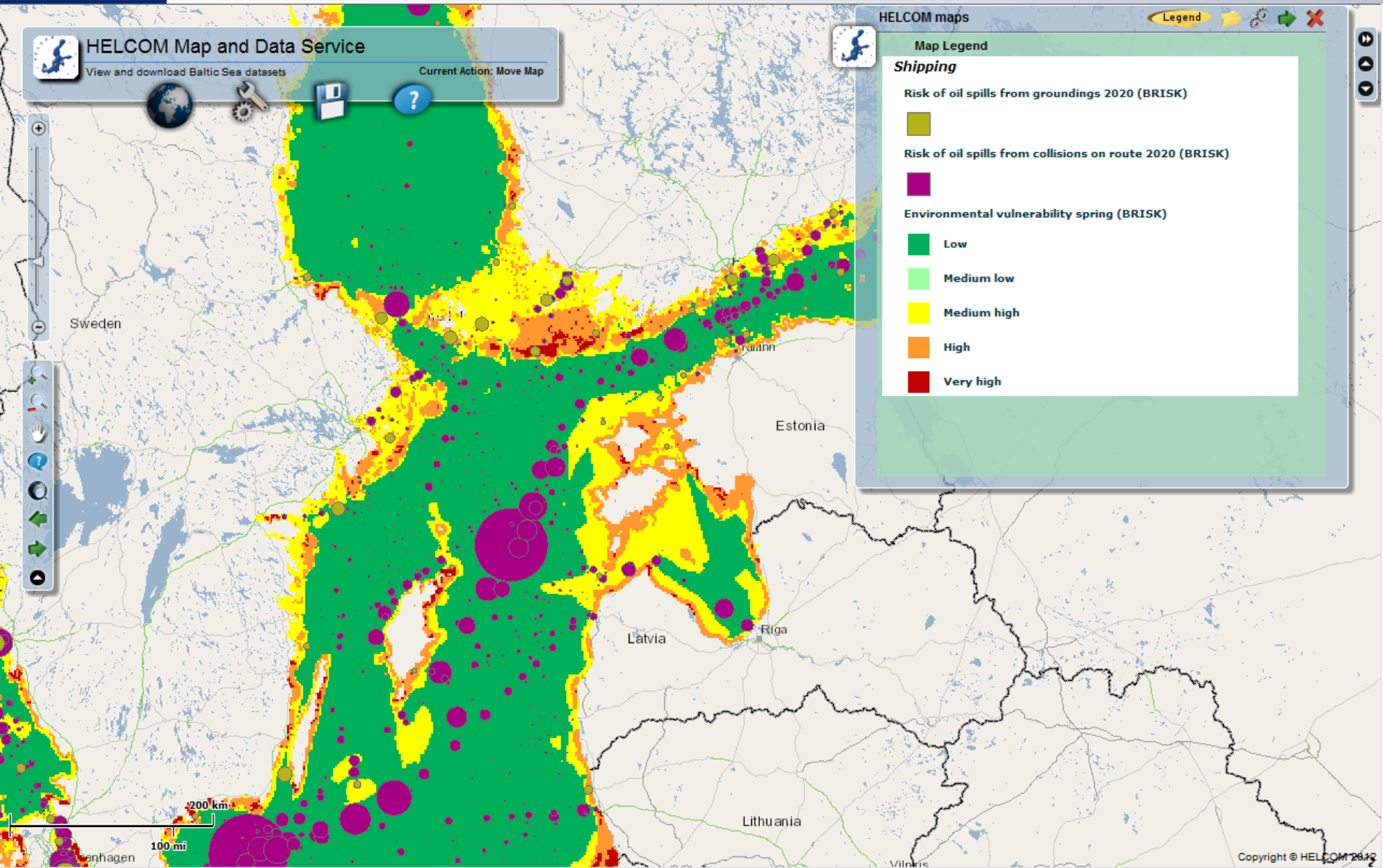


# HELCOM Databases & datasets

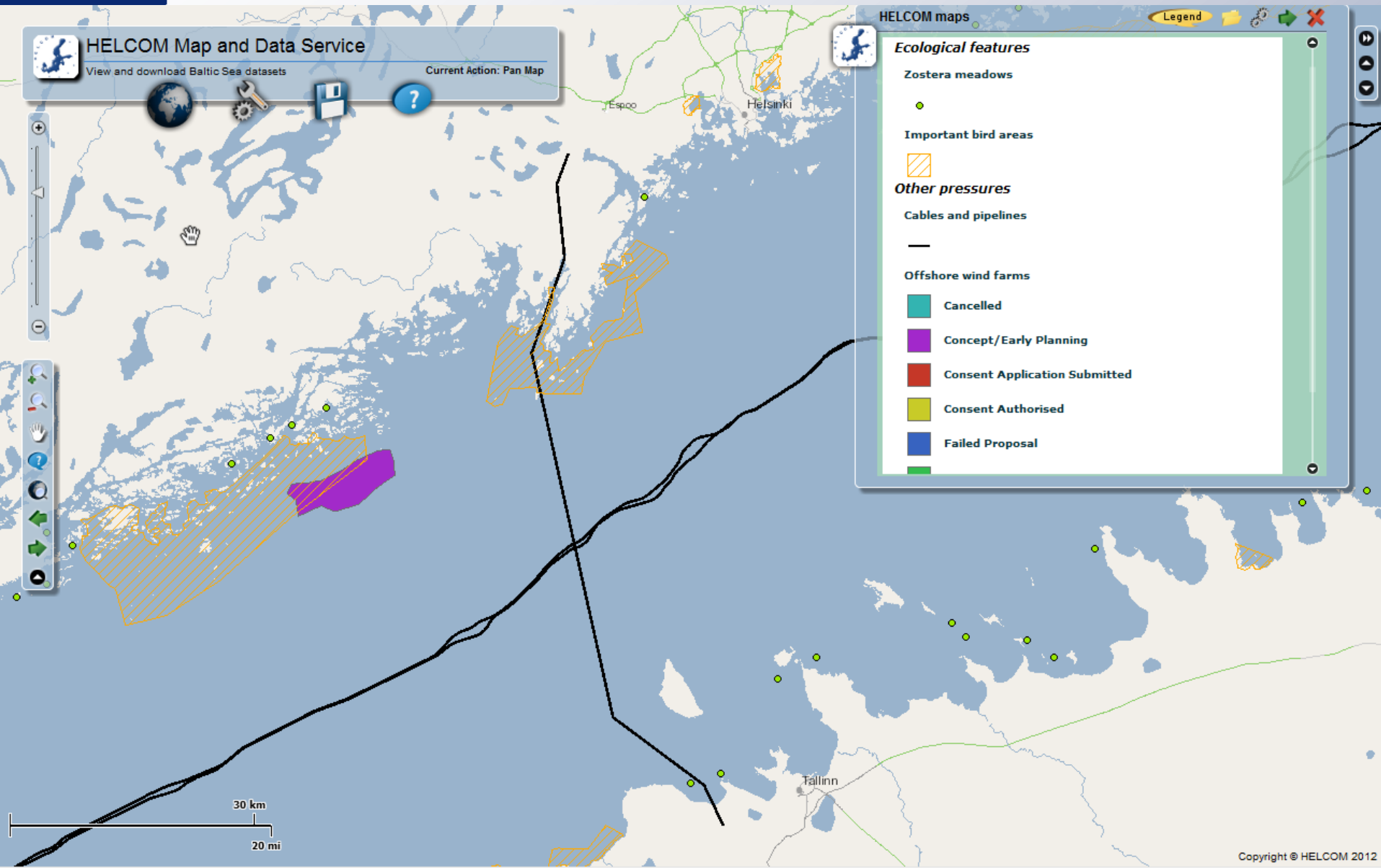
- Shipping accidents
- Illegal oil discharges
- HELCOM/ASCOBANS Harbour porpoise
- Other datasets (over 300 layers):
  - Ecological features: Physical features, species distribution,...
  - Protected areas: Baltic Sea Protected Areas, N2K,...
  - Pollution: Radionuclides, Hazardous substances, indicators...
  - Shipping: AIS traffic statistics, emissions, risk assessments,...
  - Pressures: Wind farms, dredging, oil platforms, cables,...
  - Eutrophication: Overall indicator and distinct indicators
  - Background: Land use, Population, DEM, Administrative boundaries...



# HELCOM Map and Data Service



# HELCOM Map and Data Service



# HELCOM Map and Data Service

- In addition to provide **display, query** and **download** functionality to HELCOM datasets it serves as entry interface to all HELCOM spatial datasets:

- **OGC WMS:**

<http://maps.helcom.fi/ArcGIS/services/DataDelivery/MapServer/WMServer>

- **ArcGIS REST:**

<http://maps.helcom.fi/arcgis/rest/services>

- Current users of HELCOM WMS/REST:

- Emodnet Biological pilot portal (<http://bio.emodnet.eu/portal/>)
- EfficienSea project portal (<http://www.efficiensea.org/default.asp>)
- Swedish Water Information System (<http://www.viss.lst.se/>)
- Finnish Environment Institute's BORIS Situation awareness system for environmental emergency response (restricted access)
- University of Tartu – OILRISK web tool (restricted access)
- Finnish national INSPIRE portal (<http://www.paikkatietoikkuna.fi>)



# HELCOM Map and Data Service



EMODnet



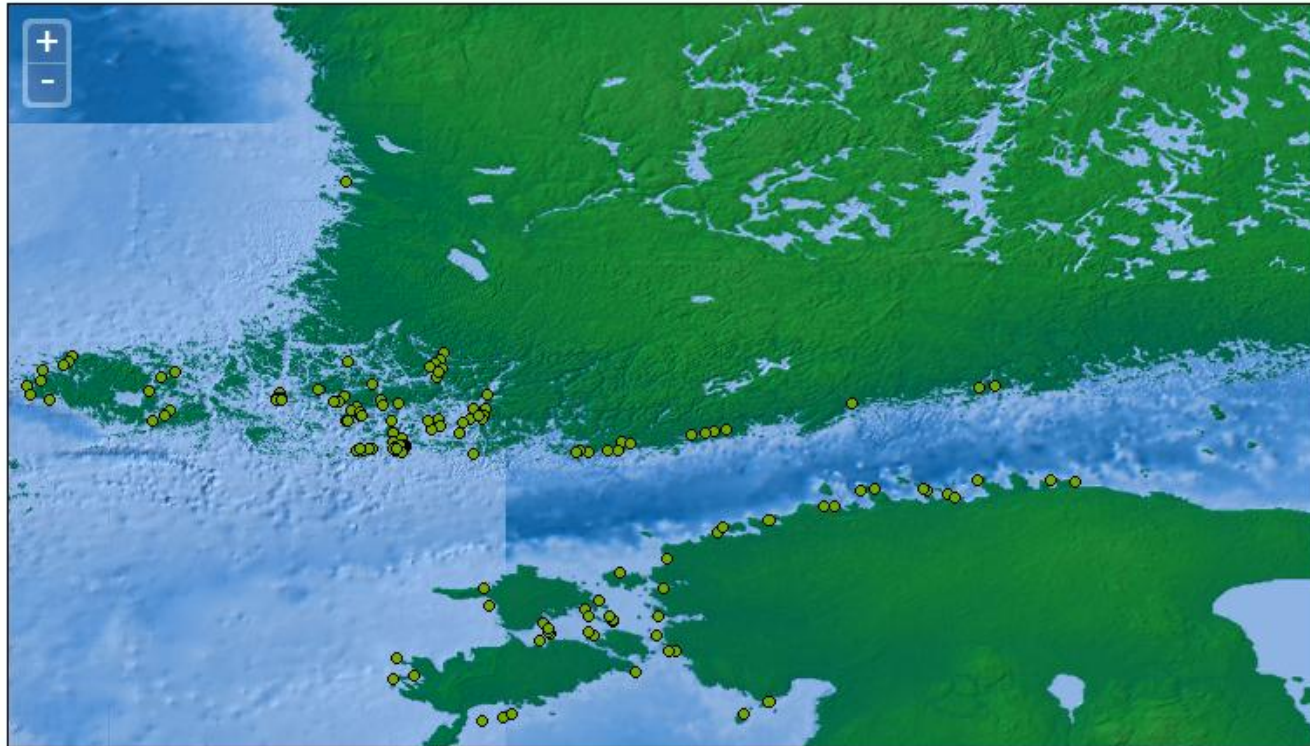
European Marine  
Observation and  
Data Network

Pilot Portal For Biology  
Data Discovery and Access Service

Search Legend Feedback Help

Lat: 58.44 Lon:22.53

- Google Satellite
- NOAA ETOPO1 [i](#)
- GEBCO\_08 [i](#) #
- Digital Elevation Model [i](#)
- Abiotic data**
- Salinity Mediterranean [i](#)
- Salinity North Sea [i](#)
- Salinity Baltic Sea [i](#)
- Seabed substrate (North Sea and Baltic Sea) [i](#)
- Administrative Boundaries**
- Exclusive Economic Zones [i](#)
- ICES Ecoregions [i](#)
- IHO Sea areas [i](#)
- Angiosperms**
- Ecological features - Zostera meadows [i](#)
- Seabed habitats**
- Seabed habitat Baltic Sea - by energy [i](#)
- Seabed habitat Baltic Sea - by salinity [i](#)
- Seabed habitats Celtic and North Sea [i](#)
- Seabed habitats Western Mediterranean [i](#)



Taxa(14) Parameters(0) Datasets(2) Layers(1)

Topic	Layer	Source	
Angiosperms	Ecological features - Zostera meadows	Helcom	<a href="#">i</a>



# HELCOM Map and Data Service

The screenshot displays the HELCOM Map and Data Service interface. At the top, there is a header with the service name and a 'Current Action: Identify' button. Below the header, a map of the Baltic Sea region is shown with various layers overlaid. A popup window is open over a facility, displaying the following data:

**Facilities**

- ParentCompanyName: PORVOON ENERGIA OY, TOLKKISTEN HÖYRYVOIMALAITOS
- IPPCSectorCode: Null
- LOV\_NACESectorID: 968
- ObjectID: 388
- LOV\_RiverBasinDistrictID: 81
- FacilityName: PORVOON ENERGIA OY, TOLKKISTEN HÖYRYVOIMALAITOS
- IPPCReportedActivityCode: Null
- LOV\_NUTSRLLevelID: 828
- ConfidentialIndicator: 0
- LOV\_NACEActivityID: 1673
- PostalCode: 06750
- NUTSLevel2RegionCode: F118
- LOV\_IASubActivityID: Null
- FacilityReportID: 388
- LOV\_CountryID: 73
- FacilityID: 6107
- ConfidentialCode: Null
- IAActivityCode: EPER\_1.1
- ReportingYear: 2001
- NACESectorCode: NACE\_1.1:OTHER
- NACESubActivityCode: Null
- LOV\_NUTSRLLevelID: 822
- NationalID: 11208
- RiverBasinDistrictCode: FIVHA2
- NACEActivityCode: NACE\_1.1:40.11
- IASubActivityCode: Null
- Address: TOLKKINEN
- LOV\_IASubActivityID: 00

On the right side, there is a 'HELCOM maps' panel with a 'Legend' and a 'Layers' list. The layers list includes:

- Ecological features
- Protected Areas
- Monitoring
- Pollution
- Shipping
- Other pressures
- Fisheries
- Eutrophication Status
- Background
- EEA Marine Water data
- EEA WFD surface water data
- EEA WFD river basin districts
- EEA E-PRTR Facilities

Below the layers list, there are two checkboxes:  Facilities and  Facility Details.

At the bottom right, there is a blue box with the following text:

- In addition to provide access to data for other portals, HELCOM Map and Data Service can display data from other sources: visualization of some EEA datasets have been made available

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# Data collection frameworks

- INSPIRE development:
  - Standards for sharing (what and how)
- EMODnet development:
  - European Marine Observation and Data Network
  - Call for tender 05/2012: " Knowledge base for growth and innovation in ocean economy: assembly and dissemination of marine data for seabed mapping"
  - 7 thematic EMODnet portals operational by 2014  
(Bathymetry, Geology, Physical habitats, Chemistry, Biology, Physics, **Human activities**)
    - Will cover all European Seas
- MSFD reporting:
  - EEA: Reportnet
  - WISE-MARINE ↔ EMODnet



# Marine knowledge 2020

- GREEN PAPER Marine Knowledge 2020: from seabed mapping to ocean forecasting
- Public consultation (DL 15.12.2012):

[http://ec.europa.eu/maritimeaffairs/policy/marine\\_knowledge\\_2020/documents/com\\_2012\\_473\\_en.pdf](http://ec.europa.eu/maritimeaffairs/policy/marine_knowledge_2020/documents/com_2012_473_en.pdf)

- Q4: "What should be the balance in EMODnet between providing access to raw data and developing digital map layers derived from the raw data across seabasins?"
- Q9: "Should control data, such as that derived from the Vessel Monitoring System that tracks fishing vessels, be made more available? If so, how can confidentiality concerns be resolved?"
- Q18: "Is a regular process needed to evaluate the effectiveness of the observation and sampling strategy for each sea-basin?"



# Summary

- Interlinkage of various thematic datasets provides added value to decision making and is essential to MSP and Ecosystem Approach
- Organizations producing/hosting data to provide standard interfaces for accessing the data → SEIS = Shared Environmental Information Systems, a paradigm facilitated in EC's Marine Knowledge 2020 Green paper

