



Kartverket

# Marine Spatial Planning, a Norwegian user case

*NSHC33*



# Marine Spatial Management Tool

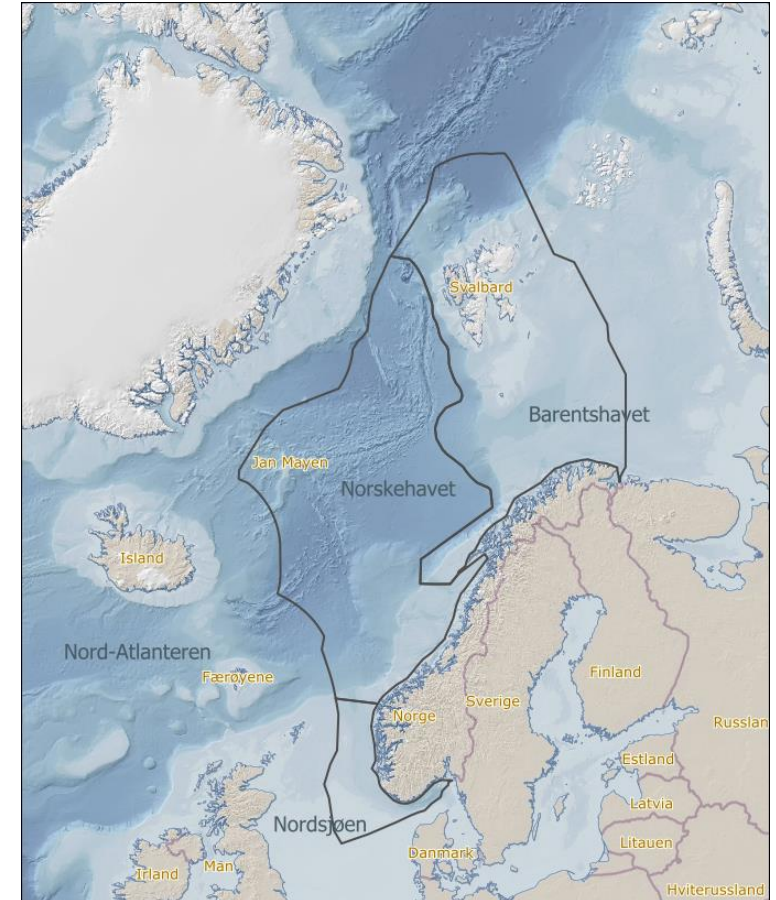
*Support the marine spatial planning process with updated and reliable geospatial information*

Marine management is important to Norway.

Aim to facilitate value creation whilst maintaining natural diversity.

The Ministry of Climate and Environment is responsible and leads an intergovernmental Steering Committee that has representation from all the ministries that work with issues relating to the marine area.

The foundation is an extensive collaboration, both between expert groups and between ministries



The Norwegian Government has developed integrated marine management plans for all Norwegian sea areas

# Marine Spatial Management Tool

*A cross-sectoral project through an intergovernmental cooperation*

Governmental initiative based on the need for a more coherent and uniform geographic information content, suitable for underpinning tasks attached to marine spatial planning and marine management

- More effective updates of the management plans
- Better overview over political decisions and actions related to marine management
- Contribute to more transparency, openness and increased involvement from the stakeholders



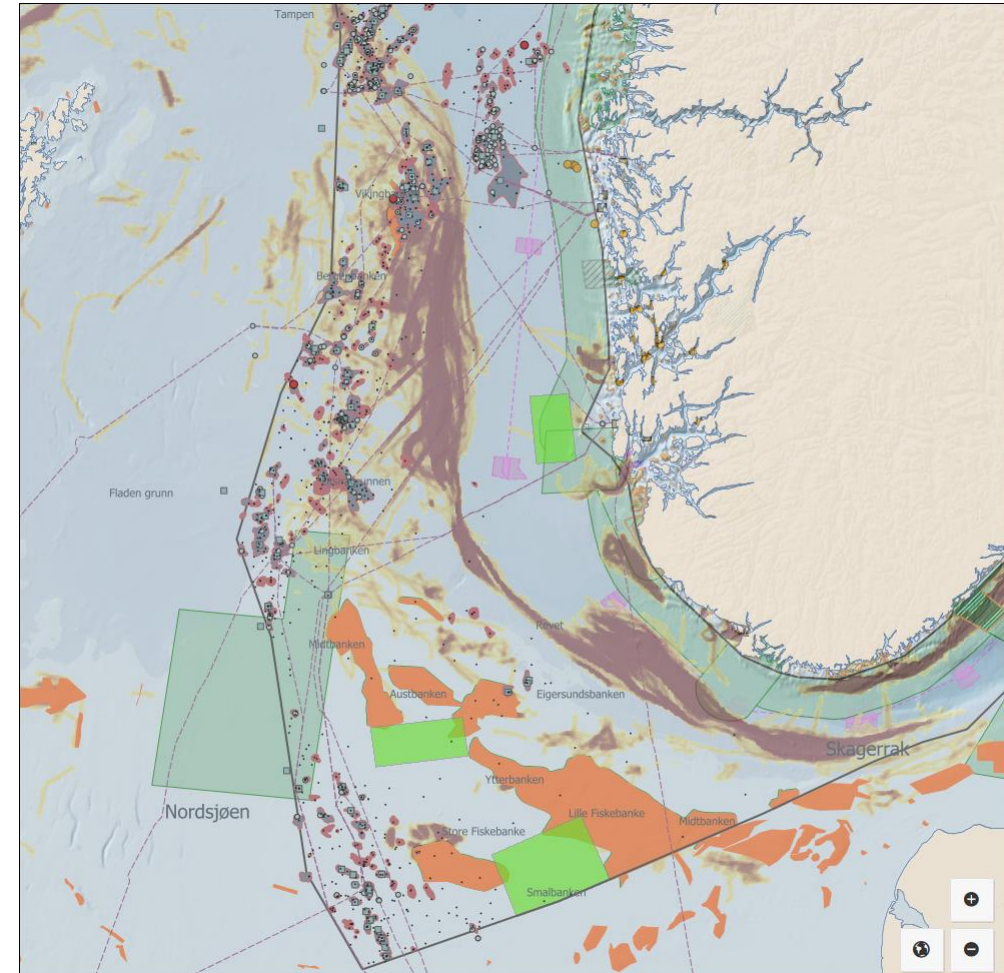


# Marine Spatial Management Tool

*Ecosystem-based marine management assumes access to knowledge, where geospatial information is a vital component*

A cross-sectoral cooperation (Professional Forum) sharing authoritative data through the national geospatial infrastructure

- Ministry of Climate and Environment
- BarentsWatch
- Norwegian Environment Agency
- Norwegian Mapping Authority
- Directorate of Fisheries
- Institute of Marine Research
- Norwegian Coastal Administration
- Norwegian Maritime Authority
- Norwegian Petroleum Directorate
- Petroleum Safety Authority
- Norwegian Radiation Protection Authority
- National Institute of Nutrition and Seafood Research
- Norwegian Polar Institute
- Norwegian Mapping Authority



# Mandate:

Develop the overall academic basis for updates and revisions of the management plans for the Barents Sea - Lofoten, the Norwegian Sea and the North Sea - Skagerrak. The work will be done in cooperation with the Monitoring Group.

The academic basis shall contain a summary of the environmental status of the marine area and provide a description of changes and trends for:

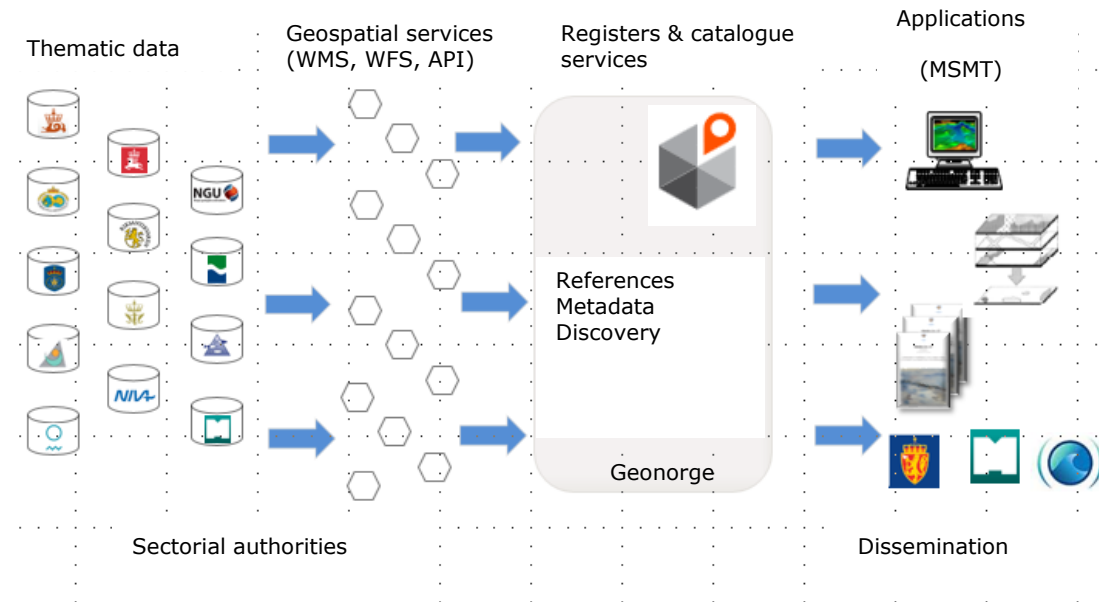
- environmental condition and overall load
- particularly valuable and vulnerable areas
- industry activity, current and future sea use and needs, and impact on the environment and other industries
- value creation of the sea-based industries and the foundation for value creation (ecosystem services)
- risk and emergency response to acute pollution
- knowledge requirements
- implementation of measures in previous management plans that have been added to participating institutions in the Professional Forum, and assess the impact of these measures.

# Marine Spatial Management Tool

## *Service based approach*

### Key elements:

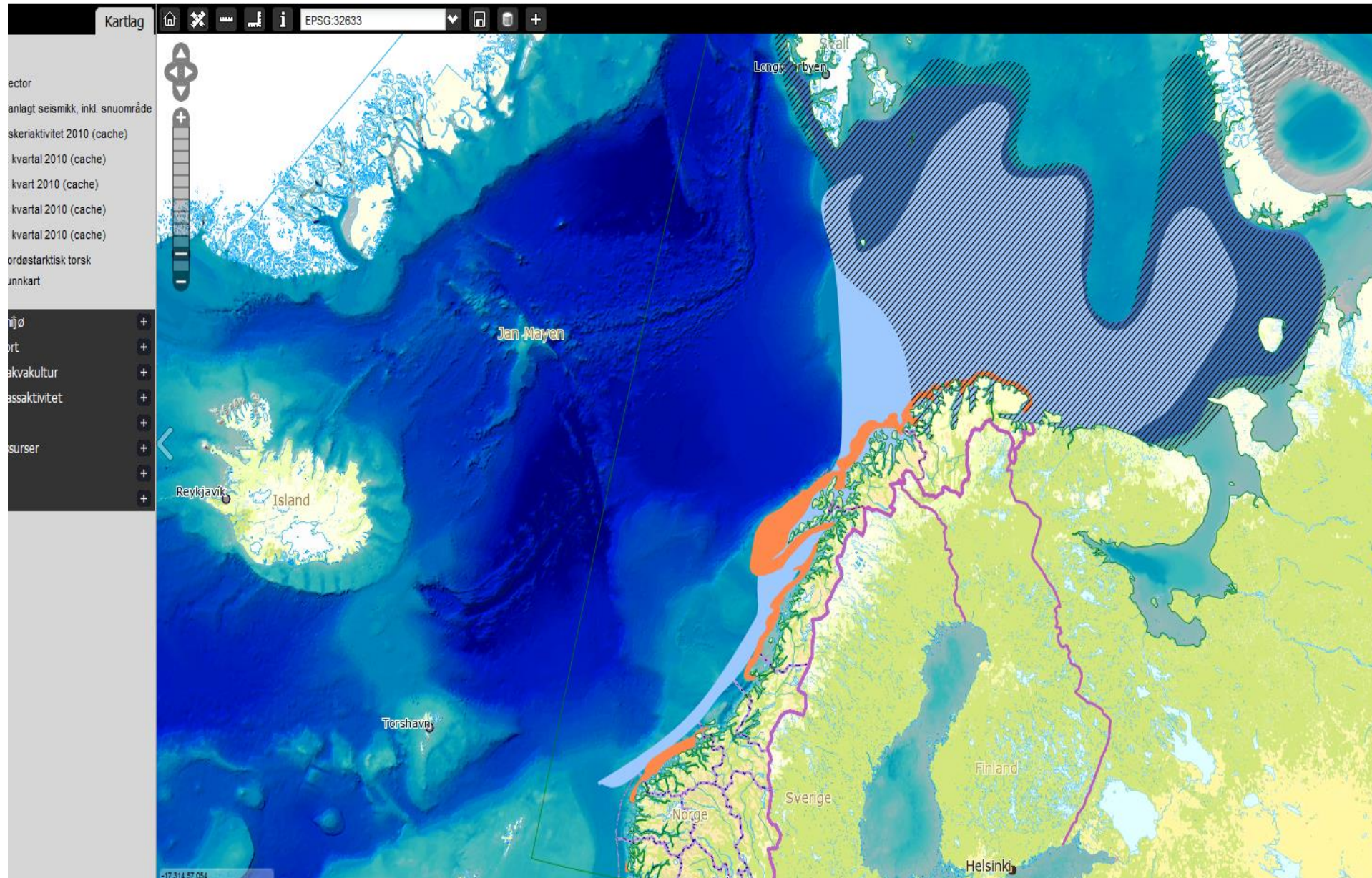
- Thematic geospatial information services offered from relevant sectorial authorities
- Standardized network based services enabling real time use of geospatial data content in user client (e.g. MSMT)
- Standardized and harmonized data content and user adapted presentation rules / cartography
- Real time access to associated metadata through network based services consumable in user client





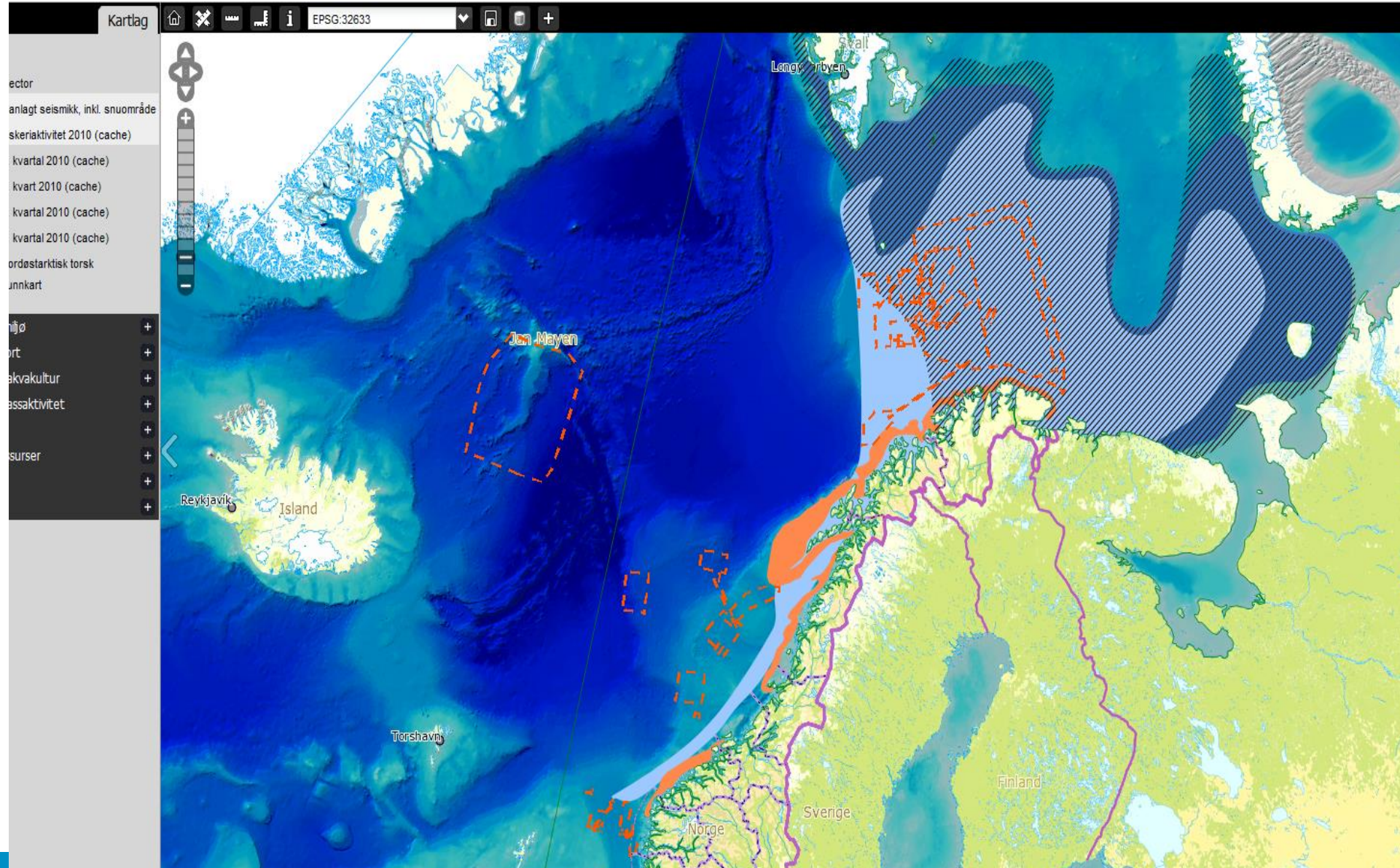
# NorthEast Atlantic Cod (breeding grounds)

## + Base map





# NorthEast Atlantic Cod (breeding grounds) + Planned Seismic Activity + Base map

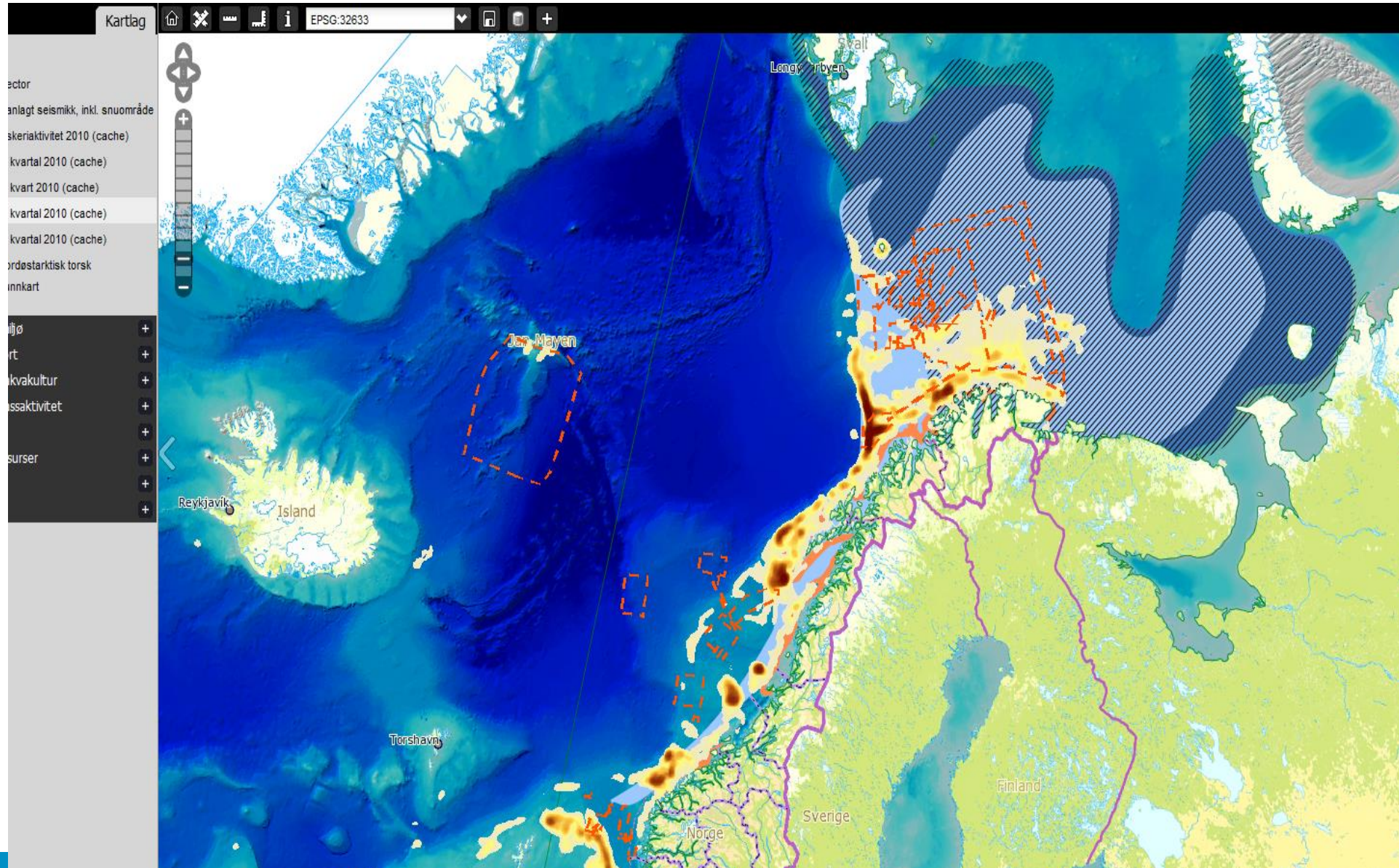




# NorthEast Atlantic Cod (breeding grounds)

## + Planned Seismic Activity + Commercial Fishing (Q1)

### + Base map

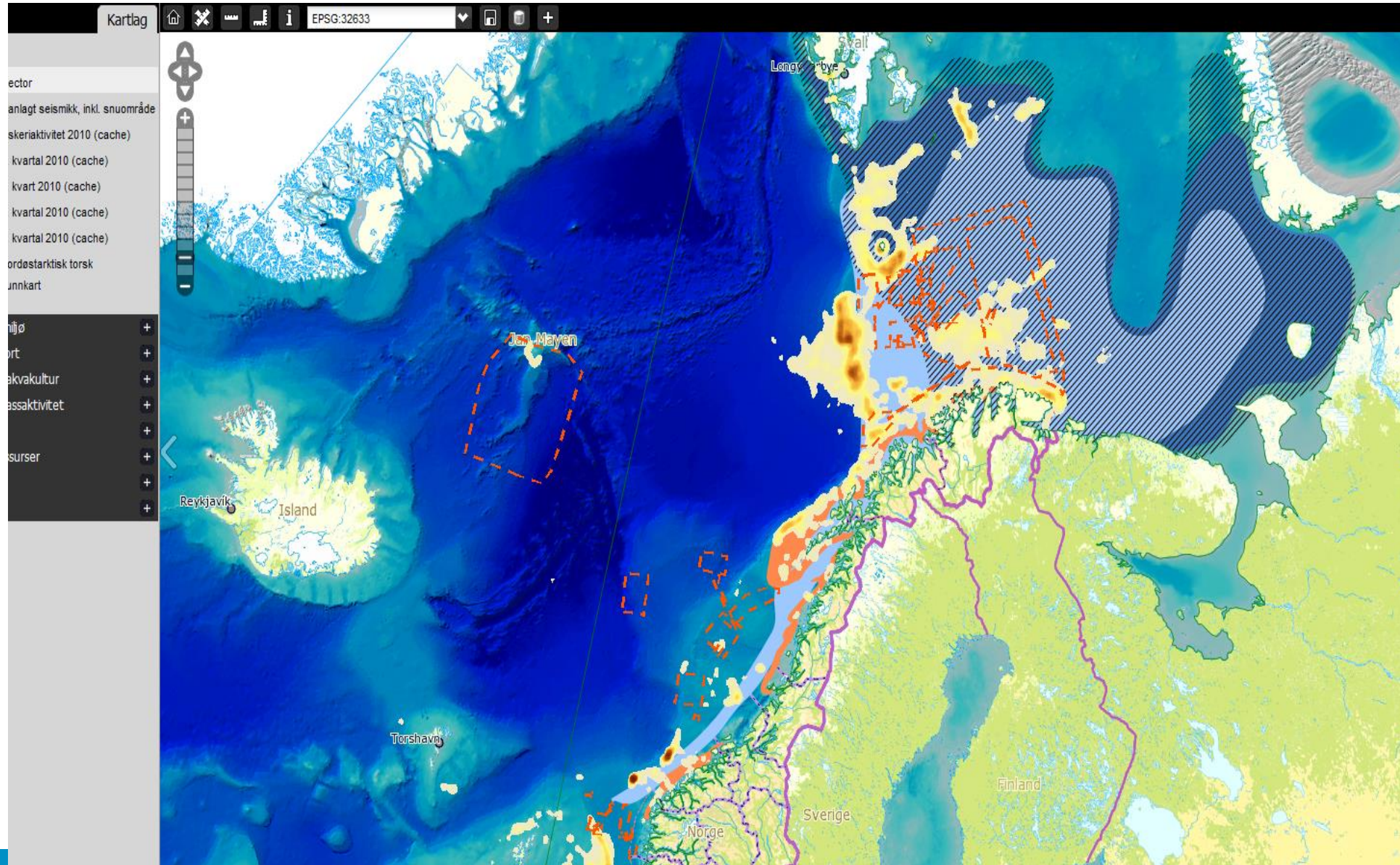




# NorthEast Atlantic Cod (breeding grounds)

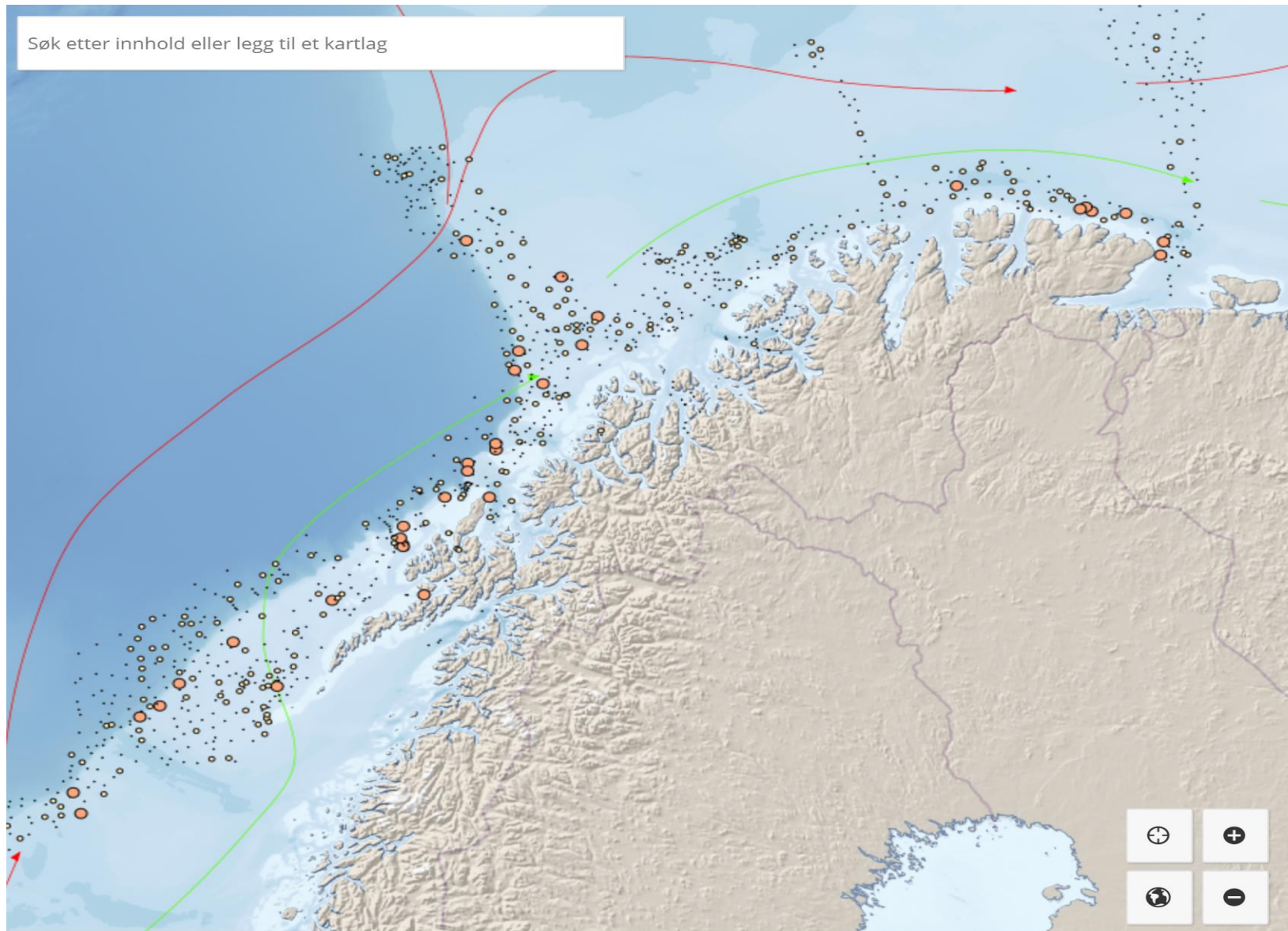
## + Planned Seismic Activity + Commercial Fishing (Q4)

### + Base map

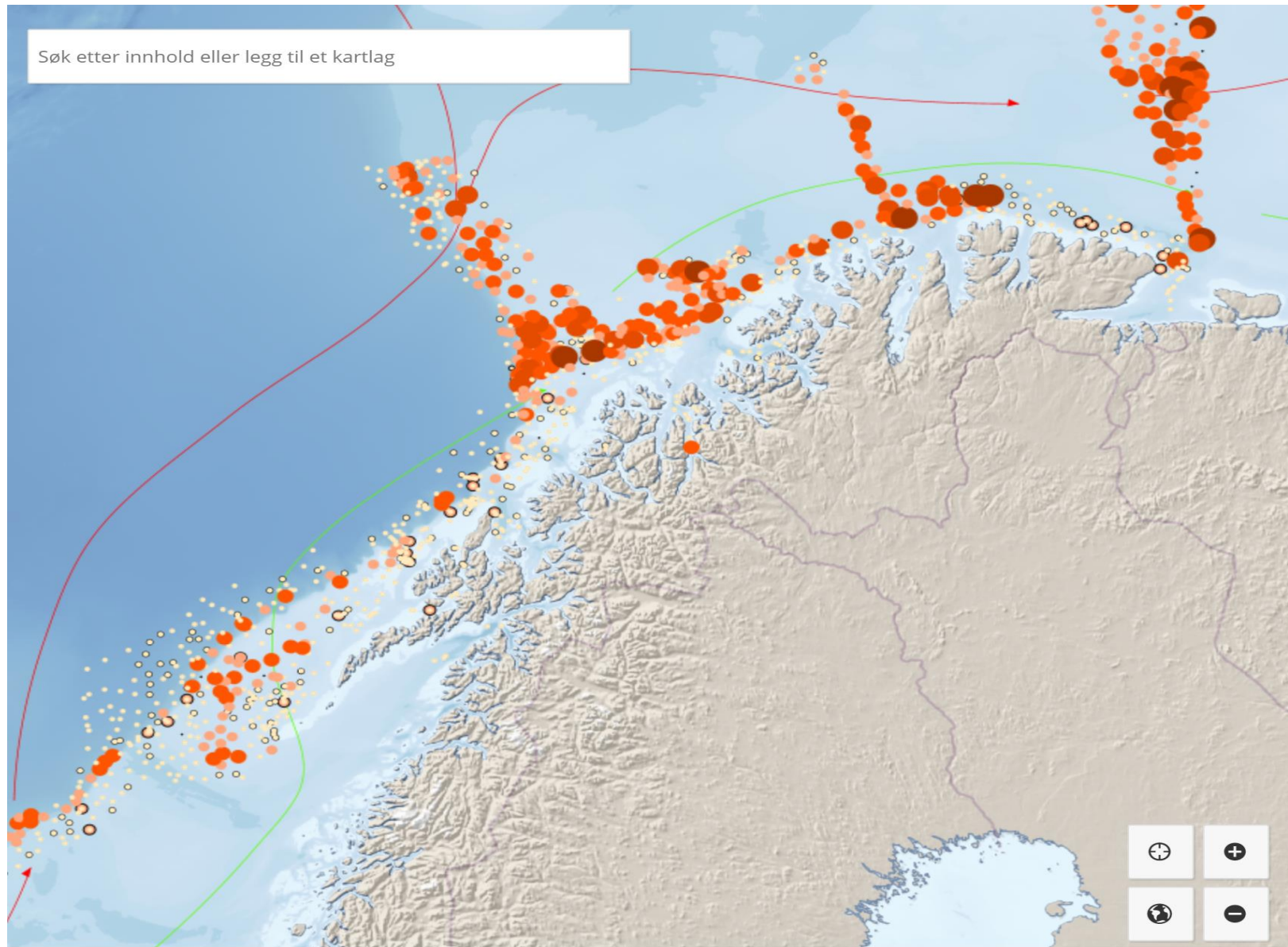




# Marine litter



# Trawl tracks





# National Spatial Data Infrastructure

