

HELCOM Map and Data Service – system for making available assessment data products and underlying data for various use cases

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HELCOM

Helsinki Convention

CONVENTION
ON THE PROTECTION OF THE MARINE ENVIRONMENT
OF THE BALTIC SEA AREA,
1974
(HELSINKI CONVENTION)



The present issue of the Convention includes the amendments to its Annexes adopted by the Helsinki Commission in 1983, 1987, 1989, 1990, 1992 and 1993 and correction of a printing error appearing in the original text of the Convention. These amendments and the correction are listed on page 53.

December 1993

Helsinki Commission

HELCOM

Reykjavik

Northern Ocean

Swedish

Polish

Helsinki

Tallinn

Riga

Vilnius

Minsk

Berlin

Warsaw

Amsterdam

Brussels

London

Paris

Luxembourg

Vienna

Moscow

Kiev

Chisinau

Oslo

Stockholm

Helsinki

Tallinn

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Minsk

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Warsaw

Amsterdam

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London

Paris

Luxembourg

Vienna

Moscow

Kiev

Chisinau

Oslo

Stockholm

Helsinki

Tallinn

Riga

Vilnius

Minsk

Vision

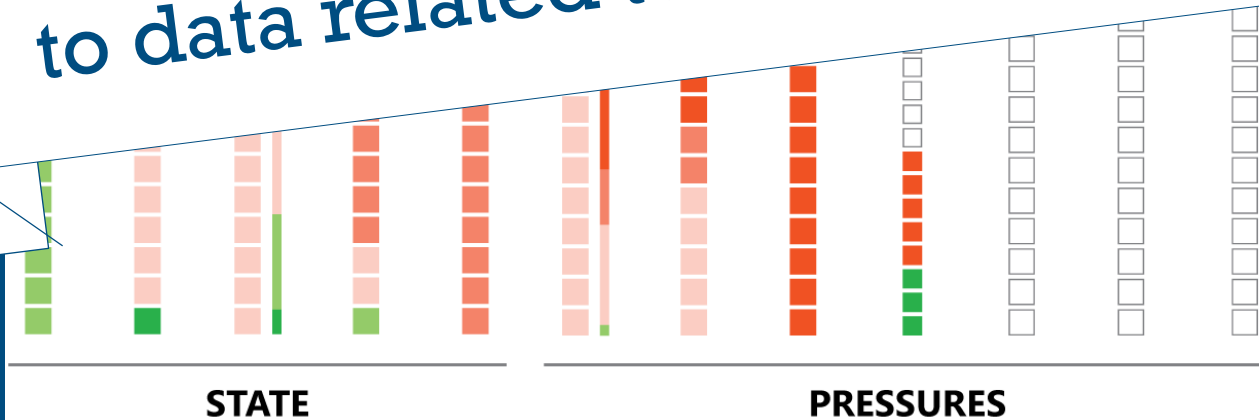
Healthy Baltic Sea



Eutrop

Benthic habitats
Pelagic habitats
Fish
Seals
birds
eutrophication
toxic substances
indigenous species
commercial fishing
ground
time

Strategy: HELCOM should facilitate access to data related to marine environment



HELCOM State of the Baltic Sea report (2018)



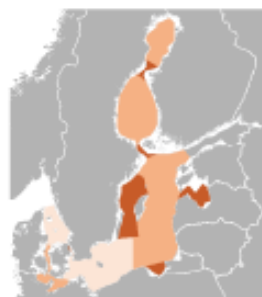
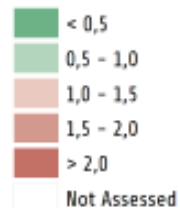
HELCOM

HELCOM Map and Data service is meant for...

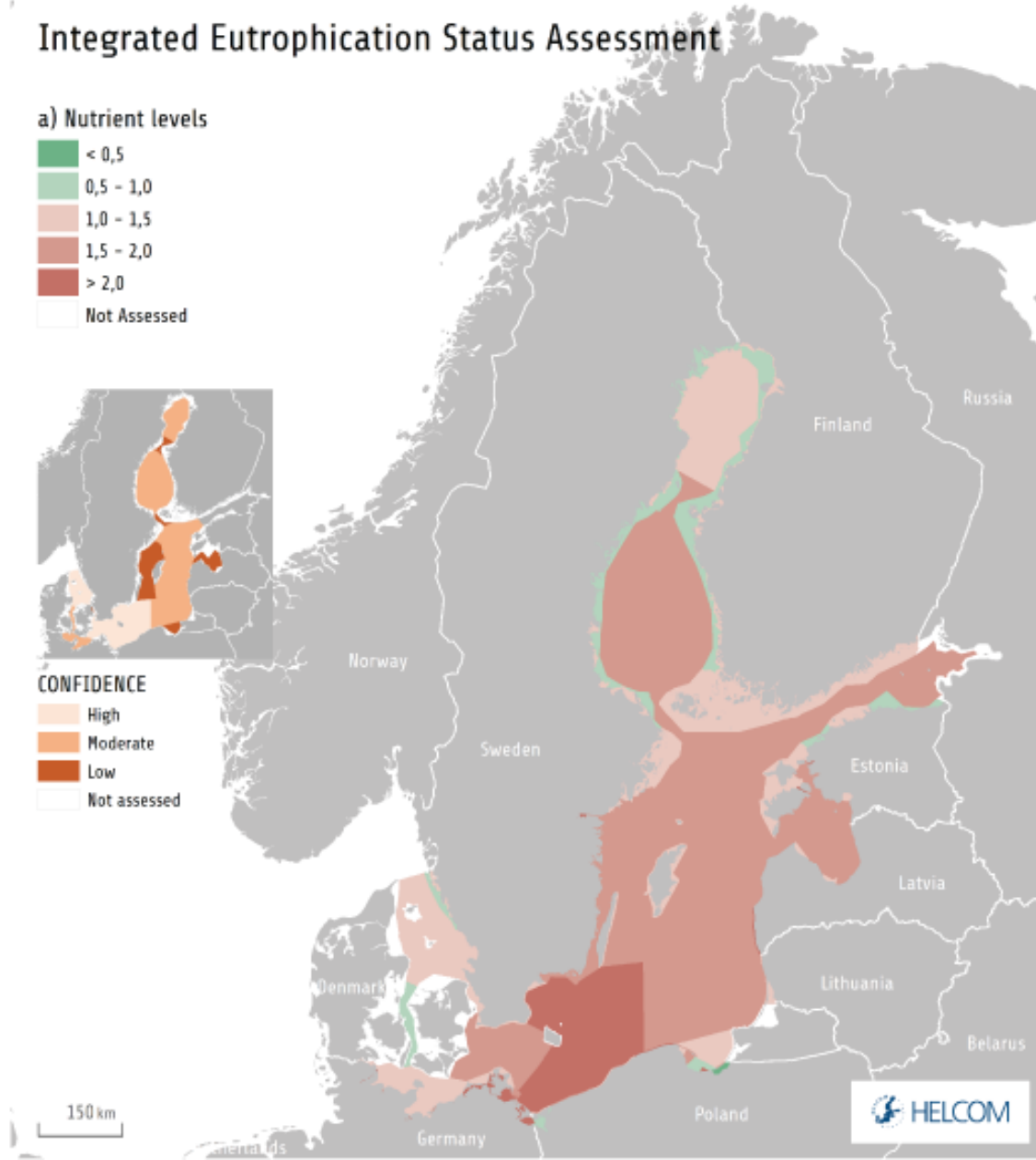
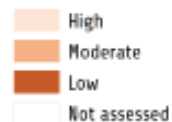
From simple maps...

Integrated Eutrophication Status Assessment

a) Nutrient levels



CONFIDENCE

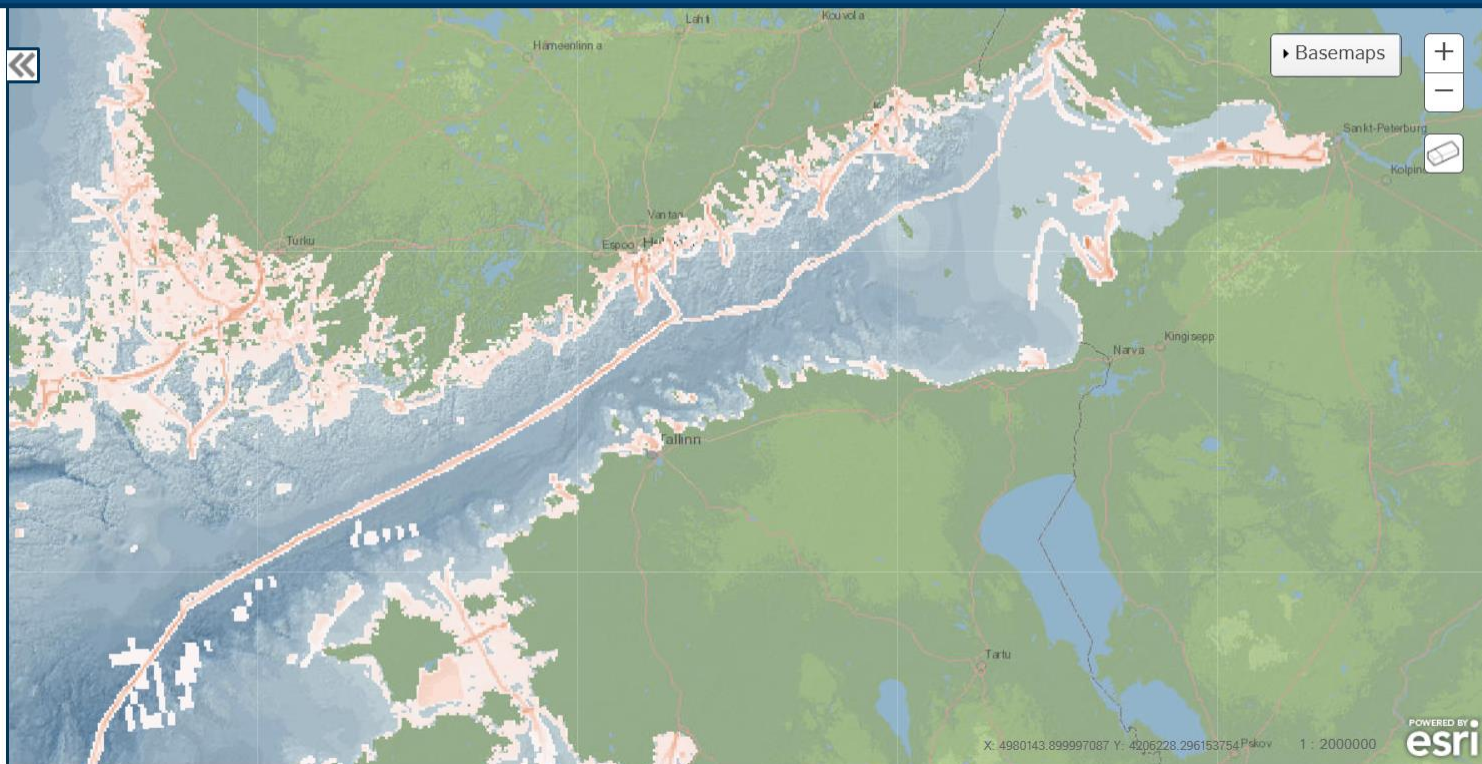


..to more complex ones (observations etc...)

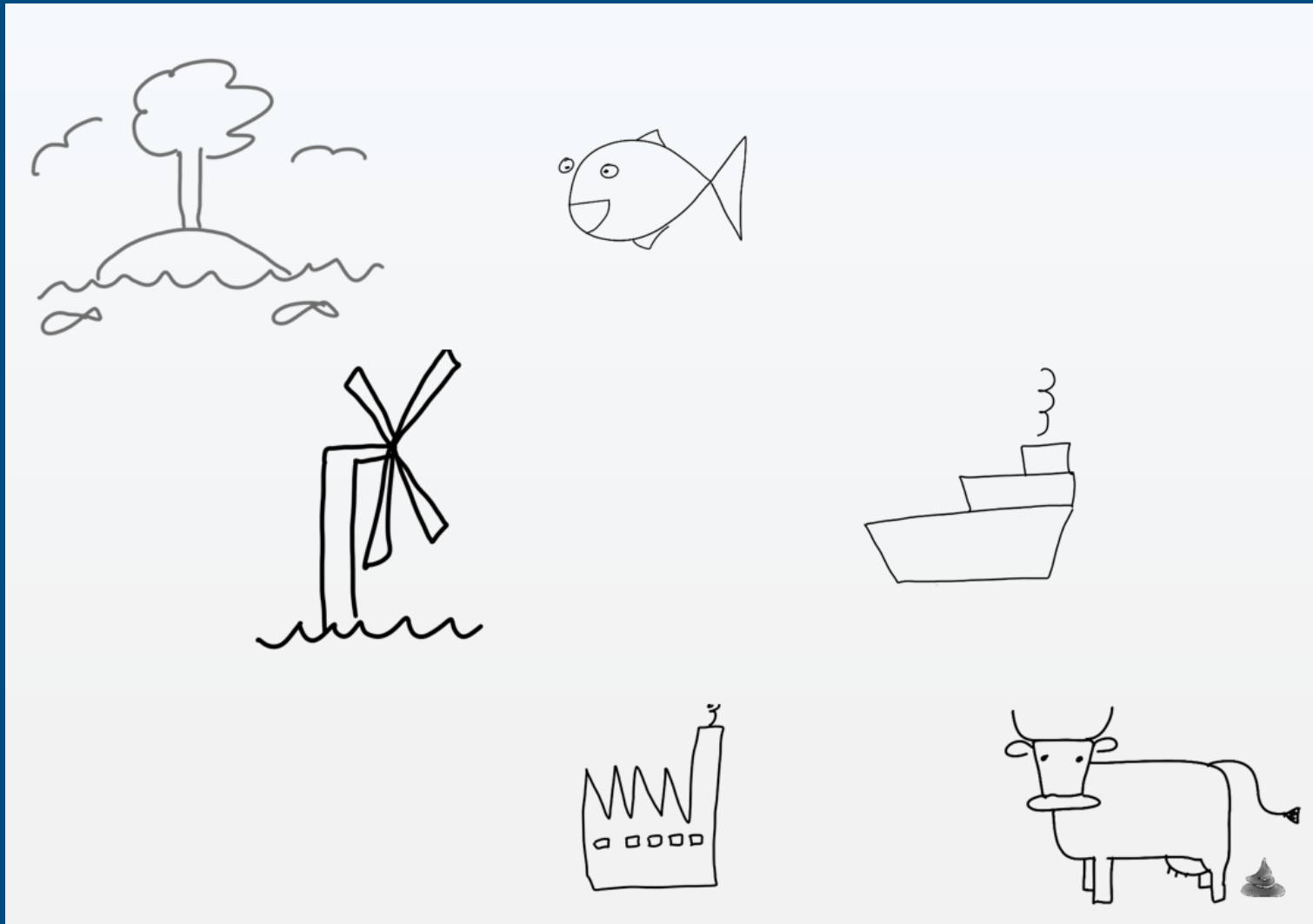
Search...

- (landings)
- Extraction of mammals - Seal hunting
- Extraction of seabirds - bird hunting
- Input of continuous anthropogenic sound
- Input of hazardous substances
- Input of heat
- Input of impulsive anthropogenic sound
- Introduction of non-indigenous species and translocations
- Introduction of radionuclides
- Oil slicks and spills
- Physical disturbance
 - High : 1
 - Low : >0
- Physical loss
- Relative distribution of nutrient concentration - Total Nitrogen
- Relative distribution of nutrient

[Collapse layer list](#) [Hide all layers](#)



..related to different themes...

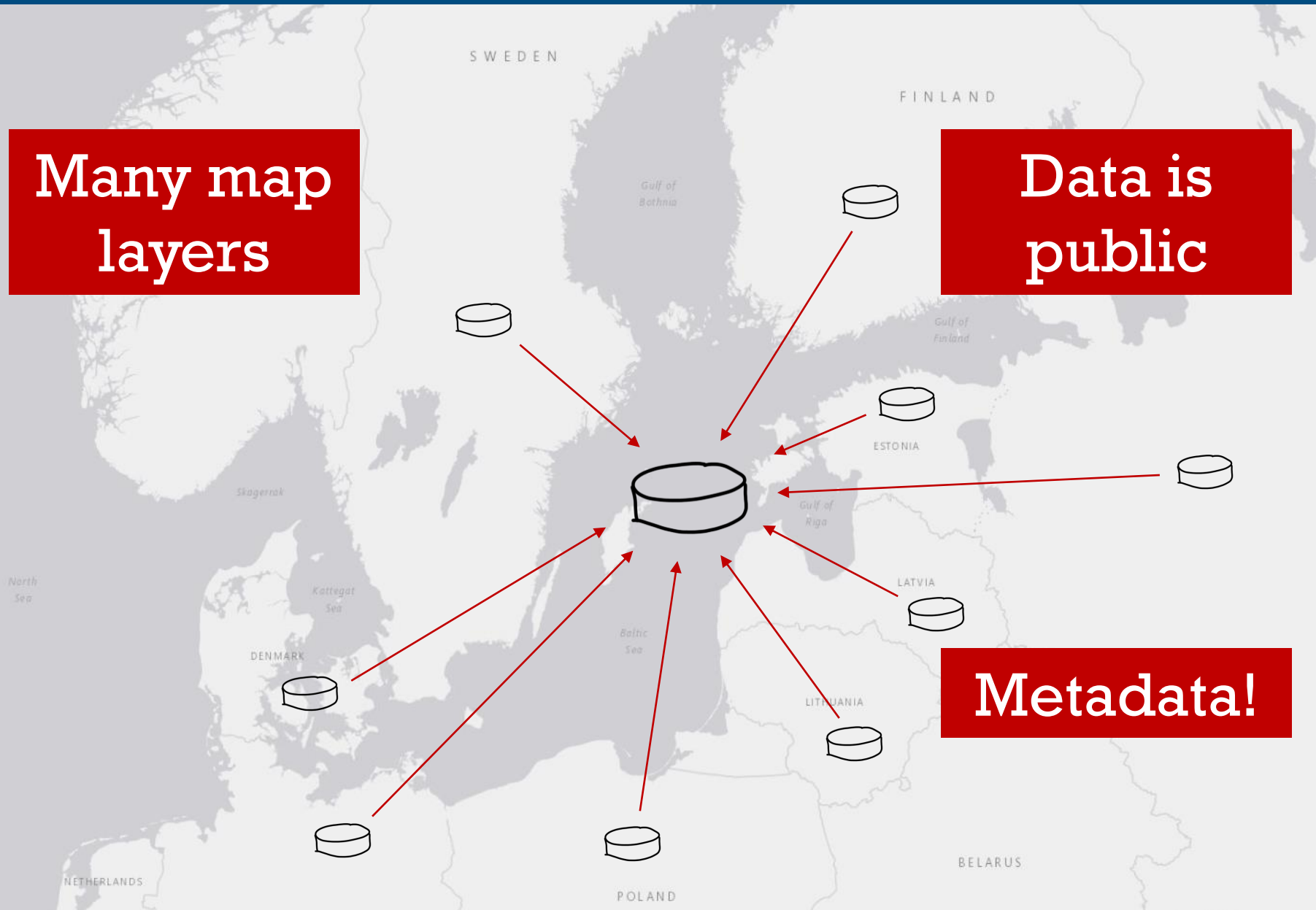


HELCOM Map and Data service

Many map layers

Data is public

Metadata!



Map & Data Service 2010-2016

Baltic Sea data and map service

- Protected areas
 - HELCOM MPAs
 - Designated and managed
 - Designated and partly managed
 - Designated
 - Natura 2000 sites
 - Baltic Sea fisheries closure
 - Cod fisheries closures
 - Ramsar sites
 - UNESCO sites
- Harbour porpoise
- Salmon rivers (SALAR)
- Birds
 - Important bird areas
 - Wintering grounds of sea birds
- Maritime & Response
- Maritime Spatial Planning
 - Defence and scientific research
 - Ecology
 - Energy
 - Oil platforms
 - Oil terminals over 3 million tonnes (2008)
 - Nuclear facilities**
 - Cables and pipelines
 - Offshore wind farms
 - Fish and aquaculture
 - Nature protected areas
 - Physical features (BALANCE project)
 - Plans
 - Sand and gravel extraction
 - Shipping
 - Illegal oil discharges
 - Emergency capacity
 - Shipping accidents
 - Risk assessment (BRISK project)
 - Emissions
 - Routing measures
 - Maritime traffic statistics
 - AIS density (monthly average 2011)

maps.helcom.fi/website/getMetada...

maps.helcom.fi/website/getMetadata/htm/All/Nuclear

Summary

This dataset describes the nuclear facilities in the Baltic Sea drainage area and their main discharge nuclides.

Description

This dataset describes the nuclear facilities in the Baltic Sea drainage area and their main discharge nuclides. The facilities include nuclear power plants, research reactors and other facilities dealing with e.g. fuel fabrication and waste handling.

Credits

HELCOM

Use limitations

Data can be used freely given that the source is cited.

Extent

Problems with previous version (2010-2016)

Difficult to find a dataset

Time consuming and not proper metadata maintenance

Flex API **not supported**

Impossible to refer to a dataset

Requirements and use cases

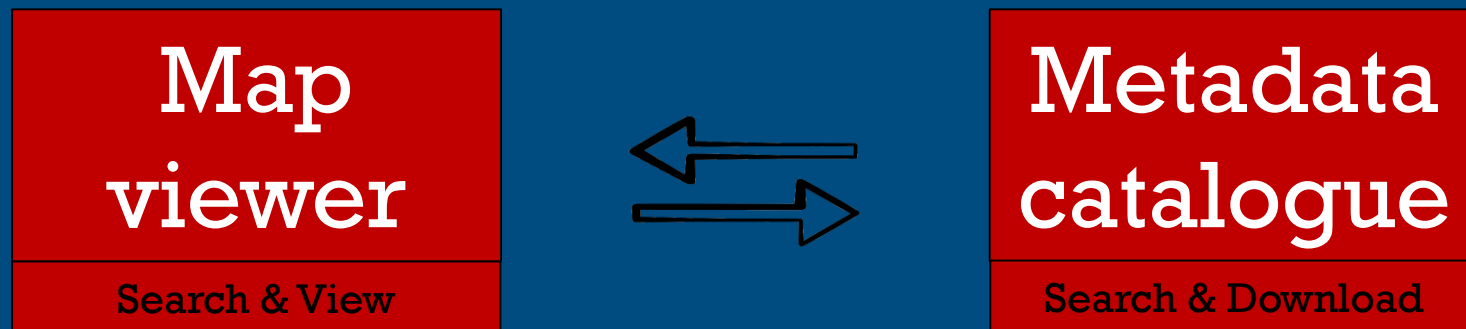
”Data used in assessment should be made publicly available”

- Assessment data products (GES or not)
- Underlying data (evidence base)

”Data should be interoperable and usable in other policy purposes”

- MSFD (Article 19.3, prefilling), other use cases
 - Referencing to indicator datasets (URL)
 - Metadata documentation (standards)
 - Standards for sharing data as service

New Map & Data Service concept



User can choose system to search data
and at any time switch to other

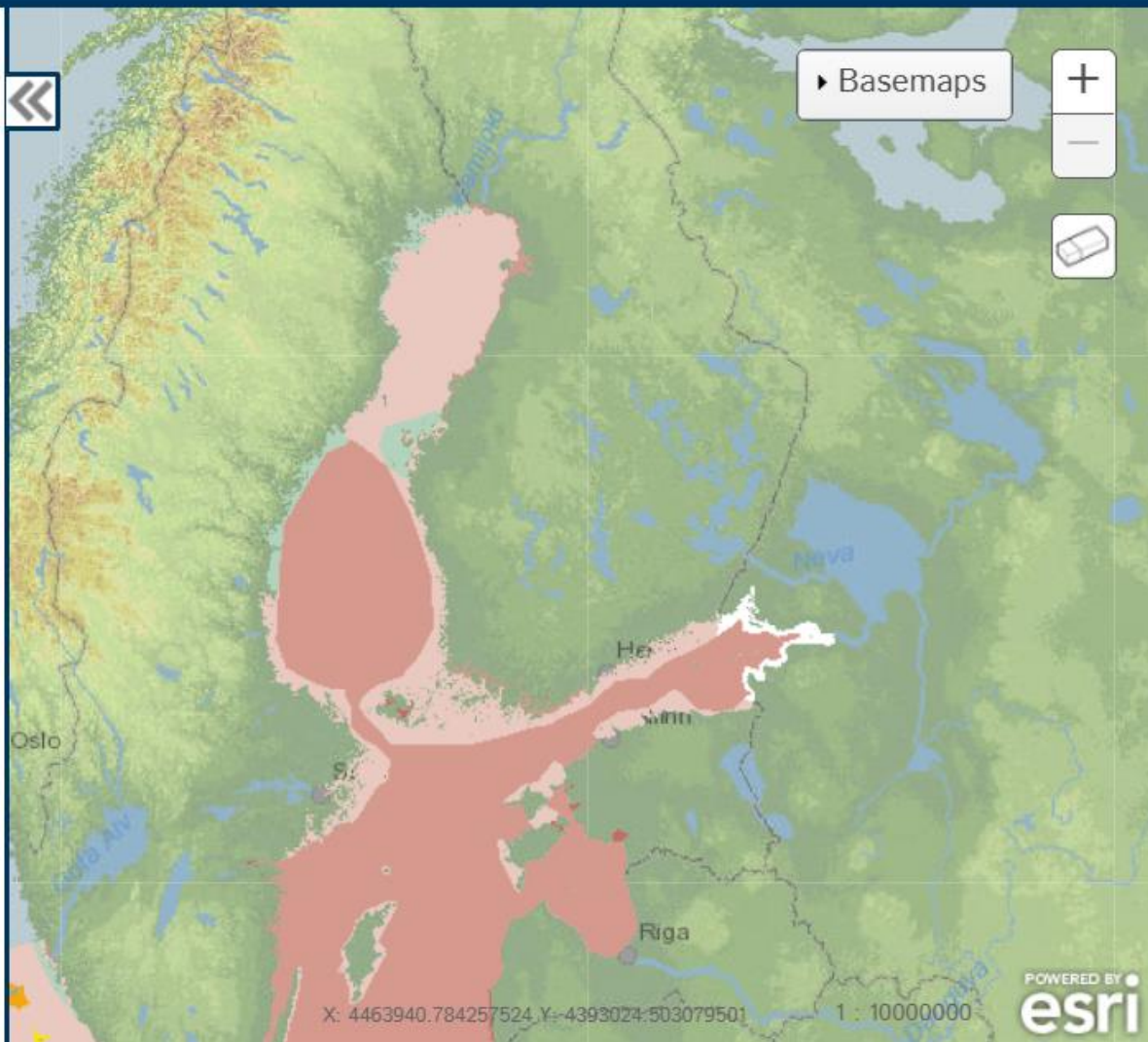


- Integrated eutrophication status assessment 2018
 - 0.5-1
 - 1.0-1.5
 - 1.5-2.0
 - >2.0
 - Not assessed
 - WFD: Bad
 - WFD: Good
 - WFD: Moderate
 - WFD: Moderate potential
 - WFD: Poor

- Integrated eutrophication status assessment 2018 - Nutrient levels
- Integrated eutrophication status assessment 2018 - Direct effects
- Integrated eutrophication status

[Collapse layer list](#) [Hide all layers](#)

identifier 12b6-47b4-a520-a54331bdbf41



coastal water, Kattegat

Results

Search, view and download functionalities implemented

Metadata editor implemented

Migrated from Flex to Javascript

Possibility to add external dataset hosted elsewhere

Possibility to refer to dataset with URL and query using URL parameters

Users can more easily find needed data

Thank you

The development of the HELCOM Map and Data service has been supported by:



Source code in GitHub:

<https://github.com/helcomsecretariat/MADS>