Transnational mapping:
Towards a maritime spatial typology

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ThostPixelio

- **Wadden Sea World Nature Heritage**

- **Trilateral Cooperation on the Protection of the Wadden Sea**

- **Breeding and wintering area for up to 12 millions birds per annum**

- **Supports more than 10 percent of 29 species**

- **One of the last remaining natural, large-scale, intertidal ecosystems**
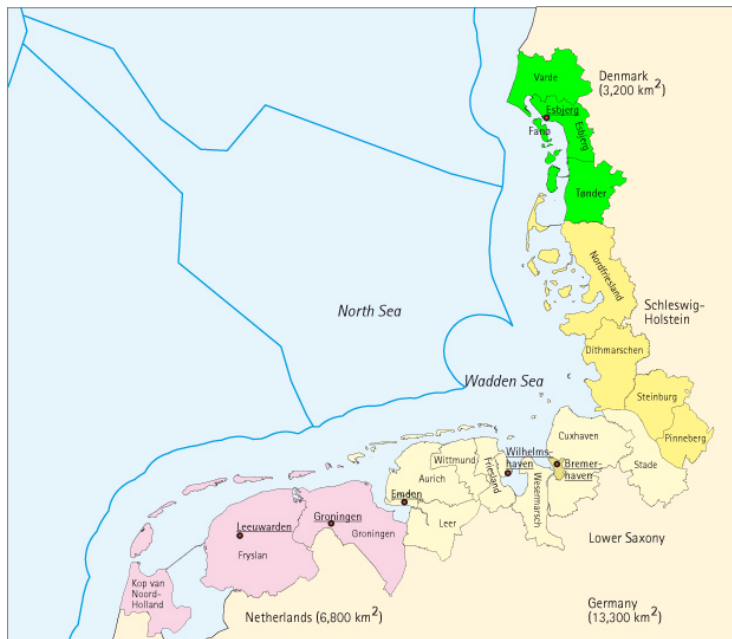
User: Trilateral stakeholder forum

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WSF tasks & working groups

Goals
- Sustainable development of the region
- Cross-border cooperation
- Cross-sectoral cooperation
- Transnational concepts
- Joint recommendation towards policy makers

WGs
- ICZM & MSP
- Energy and industry
- Shipping and ports
- Fishery
- Agriculture
- Cultural identity

Need for spatial information on
- existing uses
- protection regimes
- spatial plans
both on land and on sea

The idea!

Open and transparent spatial information for the Wadden Sea Region

- Trilateral

- Crossing administrative borders (e.g. land - coastal waters - EEZ)

- Cross sectoral

- Easy to access and easy to use

- Maps and information from different sources shown in one common symbolisation

- Information on both existing and planned uses

- A tool helping stakeholders to identify pressures, processes and conflicts in the Wadden Sea Region

- A tool helping stakeholders to develop own cross-border solutions and to participate actively in decision making processes

Role of EUCC

- ➤ Identify data sources

- ➤ Data collection, editing and merging

- ➤ Development of operation of a stakeholder-coordinated tool

reliable data

Federal authorities & scientific institutes DE

State authorities & municipalities SH

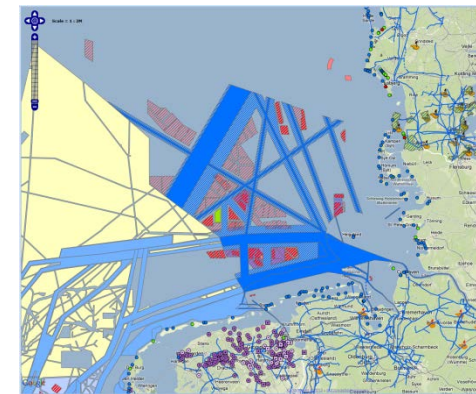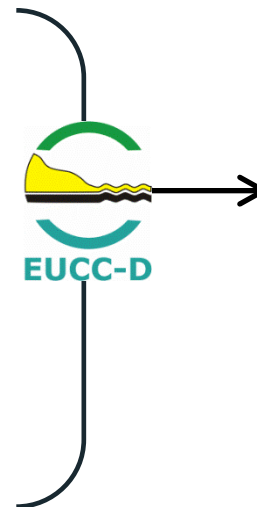State authorities & municipalities Nds.
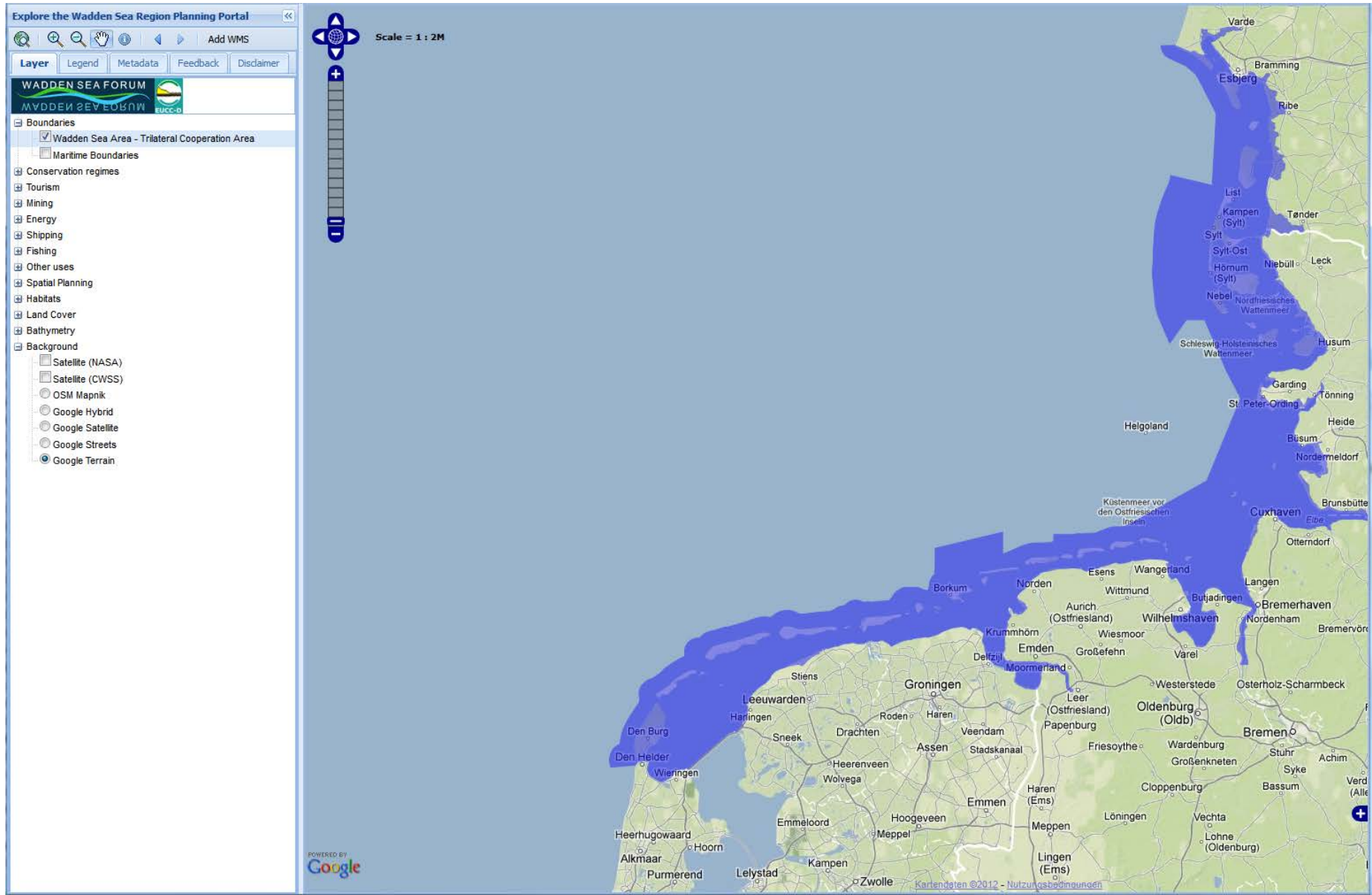
Authorities, municipalities & institutes NL
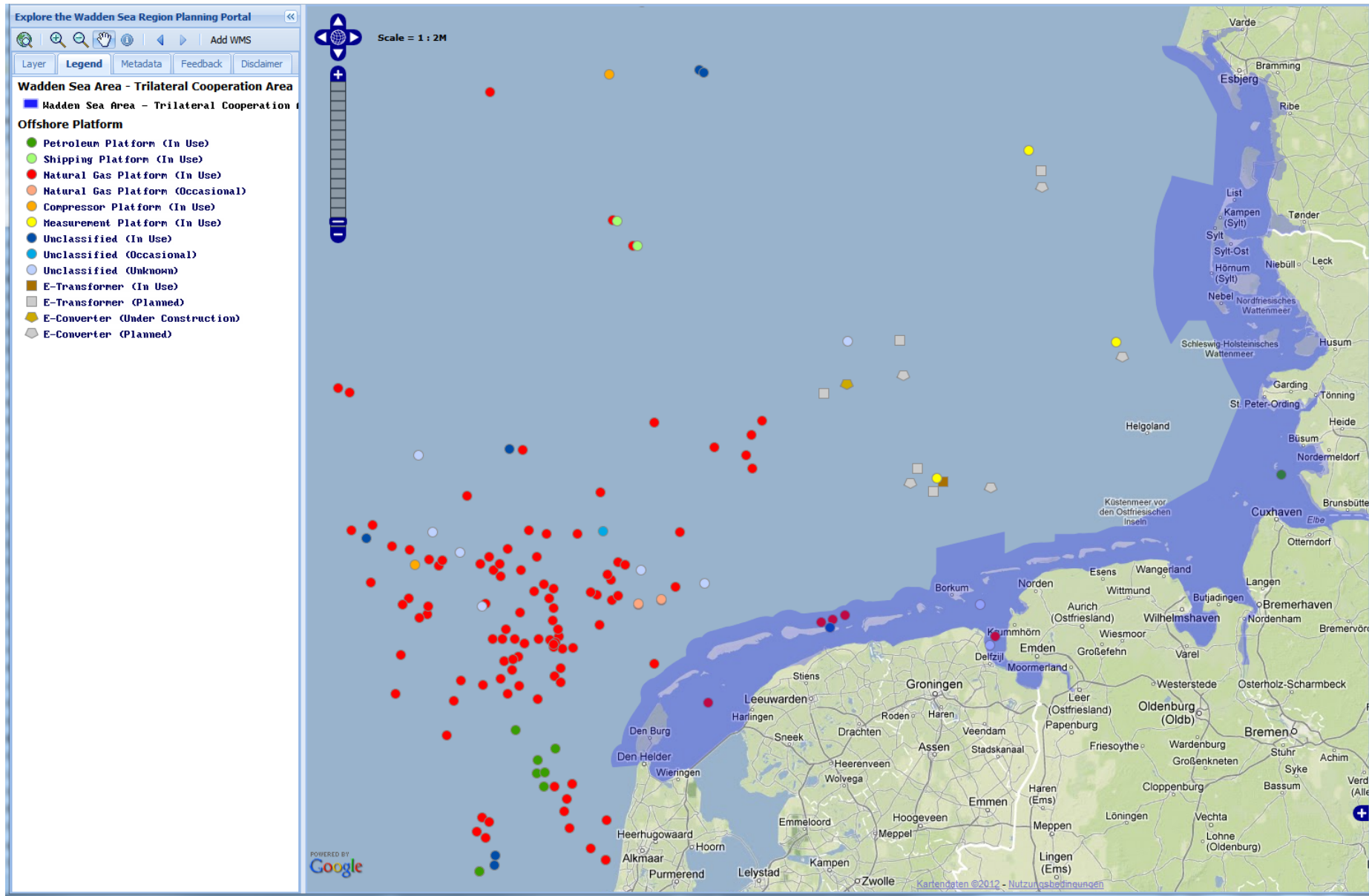
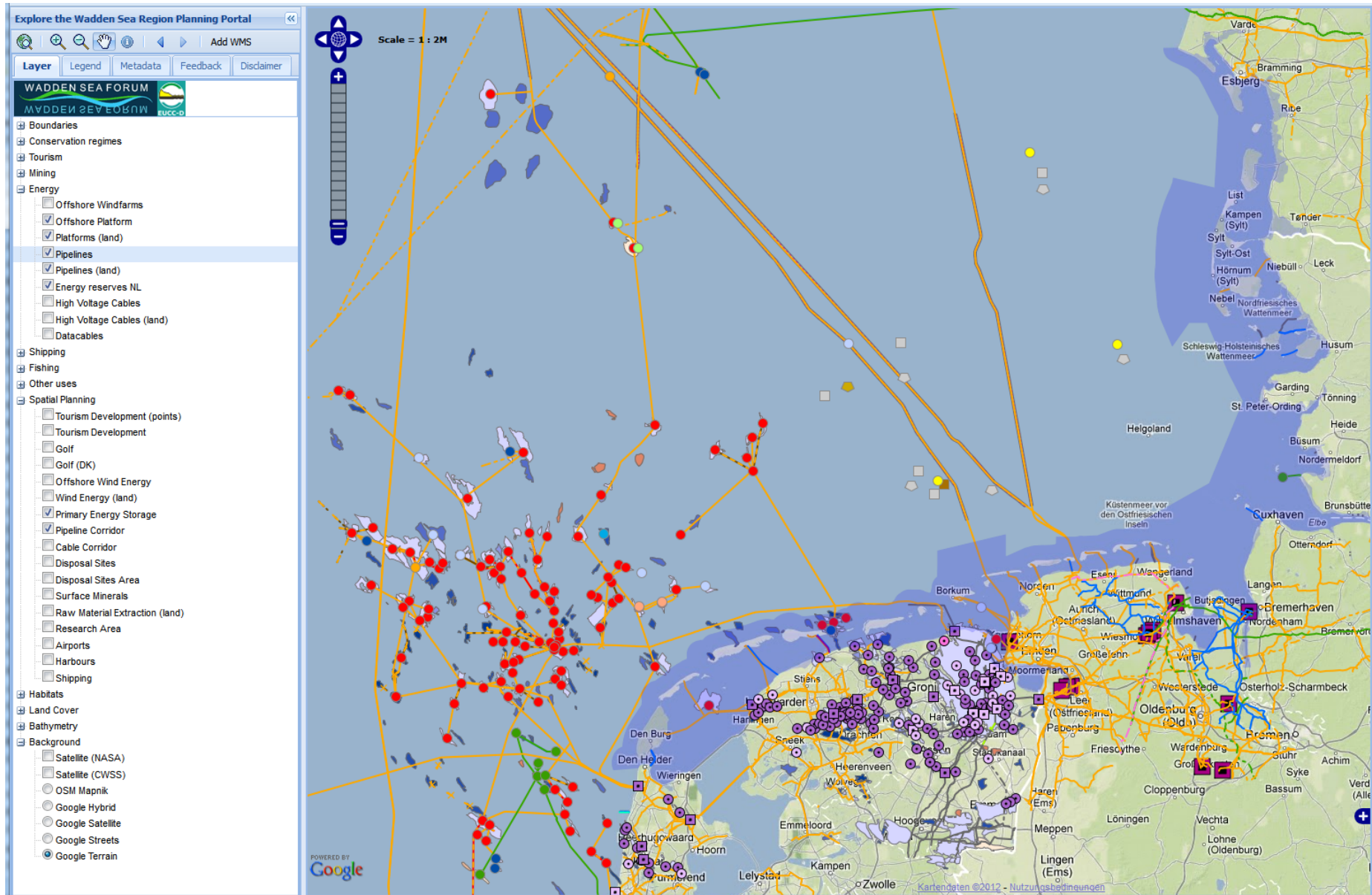Authorities, municipalities & institutes DK
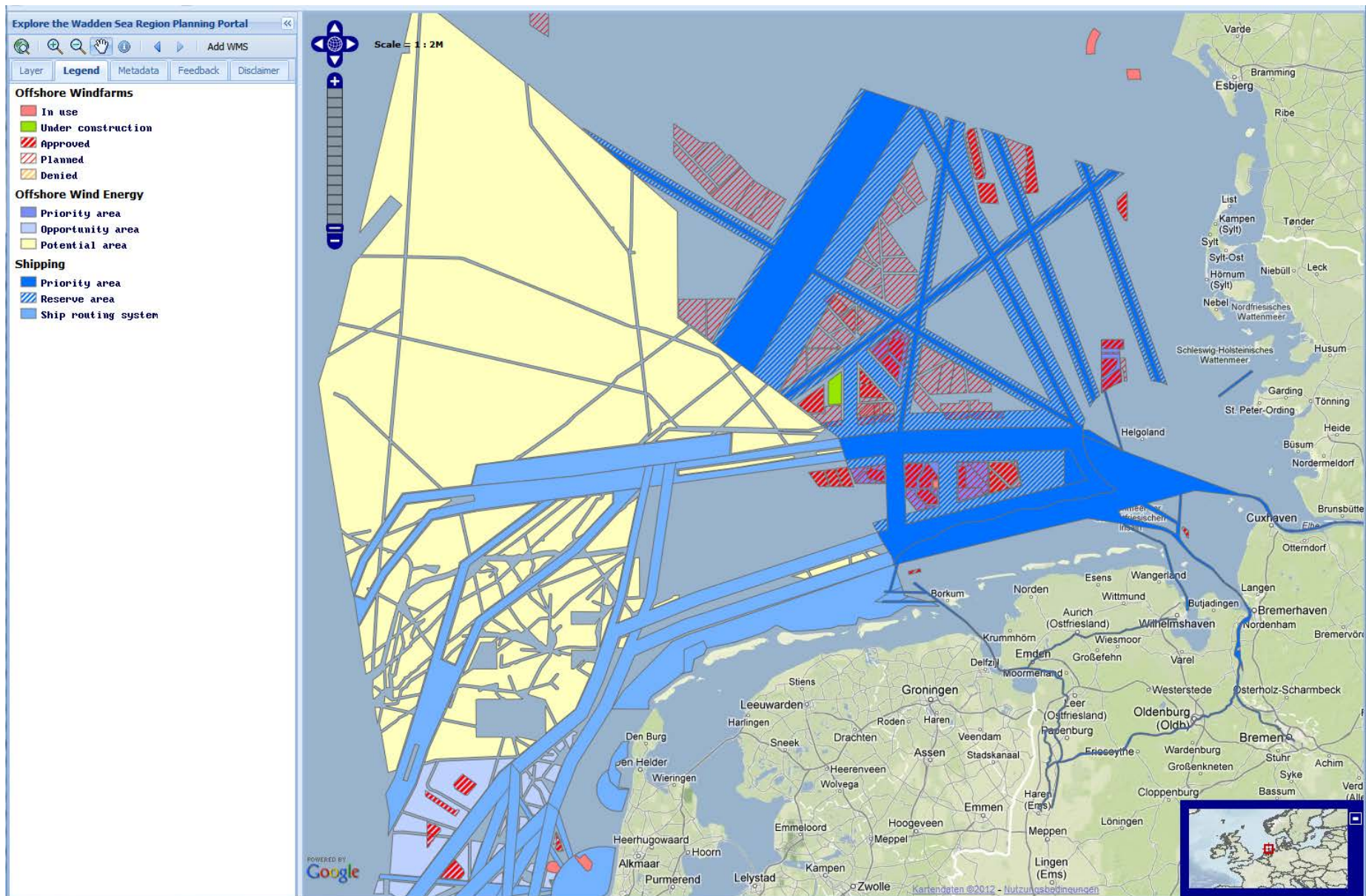
European agencies
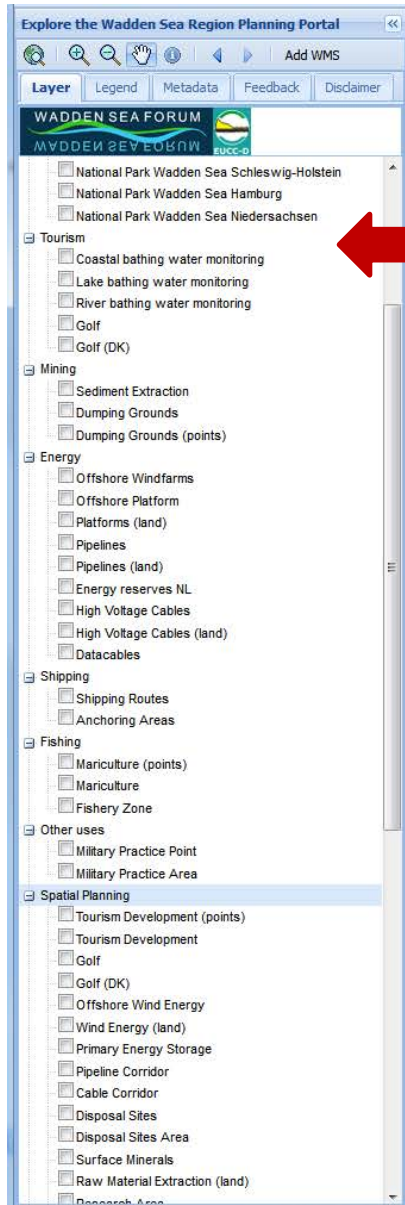
EUCC-D

~ 60 data owners/holders

Trilateral cooperation area

Natural gas exploitation

Transport and storage of natural gas

Wind farms
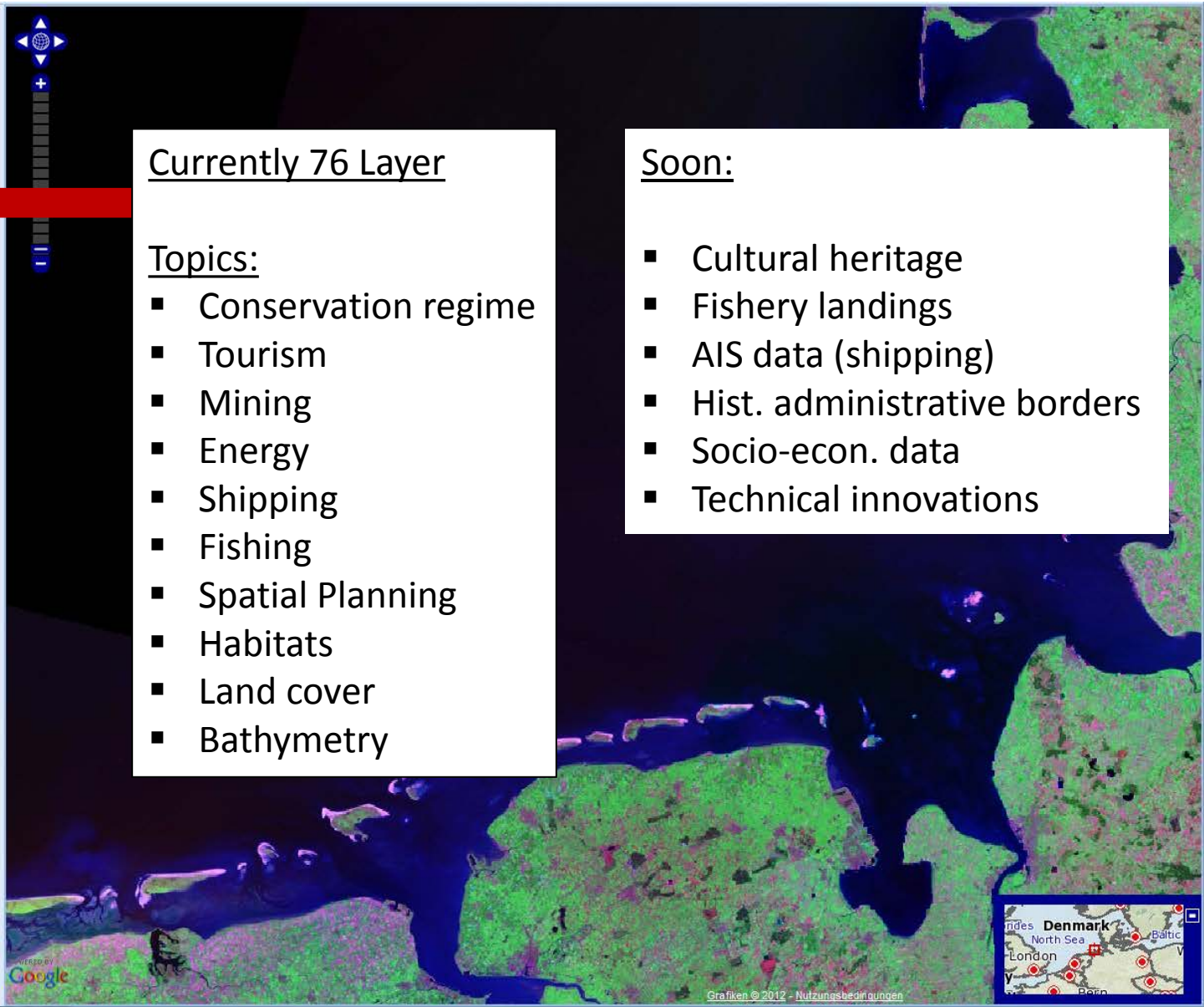
Cables

Cross-border MSP ?

Content

Currently 76 Layer

Topics:
- Conservation regime
- Tourism
- Mining
- Energy
- Shipping
- Fishing
- Spatial Planning
- Habitats
- Land cover
- Bathymetry

Soon:

- Cultural heritage
- Fishery landings
- AIS data (shipping)
- Hist. administrative borders
- Socio-econ. data
- Technical innovations
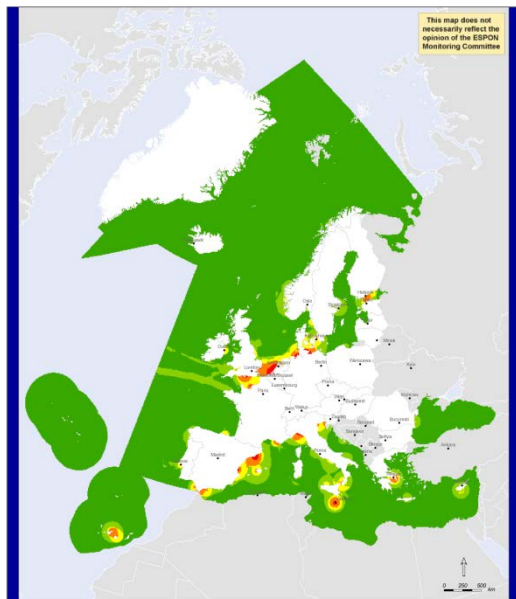
Towards a spatial typology

- Urban/rural, residential/industrial on land

- Different planning **goals and visions** linked to these categories

- **Legal regulations** differ from category to category

- Different **threshold values** (e.g. noise, pollutants, light) for each category

Approach

	European Core	High Density	Medium Density	Rural	Wildernes
Level of use	high				low
Footprint	high				low
Maritime connections	global				local
Land-sea interactions	high				low
Population density	high				low
Environmental risk	high				low
Environmental conditions	degraded				low degradation
Economic significance	high				low

Approach

Transport Flows

Transport Composite Map (Flows)

+

Environment Composite

Environment composite map

+
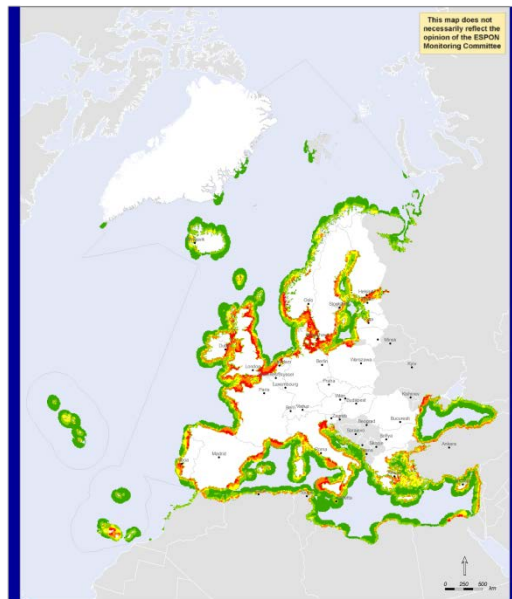
Maritime employment

Economic use composite map

Spatial intensities
Background data for a Baltic typology

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Norway
Sweden
Finland
Estonia
Latvia
Lithuania
Denmark
Germany
Poland
Minsk

Regional level: NUTS 2

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Source: BSH, Eurostat, European Cluster Observatory, HELCOM, 2011/2012
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0 45 90 180 270 360 Km
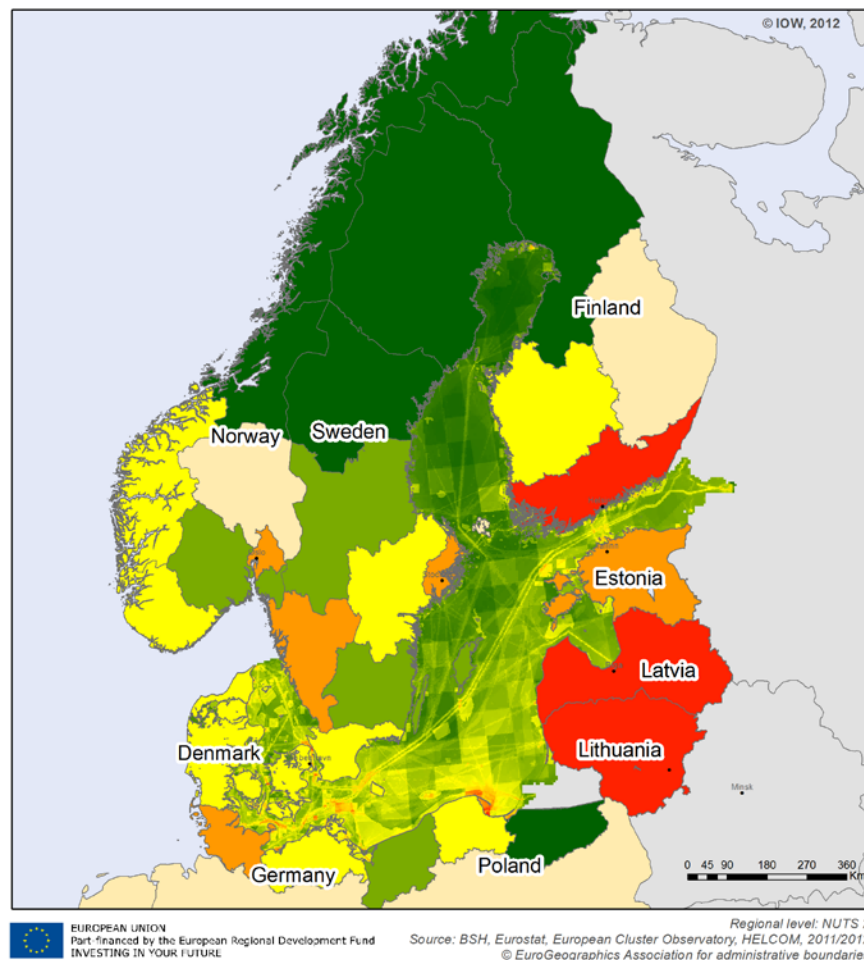
Sea intensity (IMSC + BSII)

Low

High

Land intensity
(share of maritime employment per NUTS-2 in total employment (BSR level) [%])

|	
■	0,136000 - 0,246600
■	0,246601 - 0,396100
■	0,396101 - 0,628700
■	0,628701 - 0,957100
■	0,957101 - 1,267300

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BALTIC SEA RESEARCH
WARNEMÜNDE
IOW
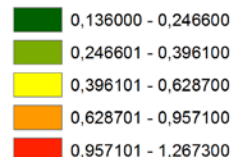
Quantitative & qualitative gradients
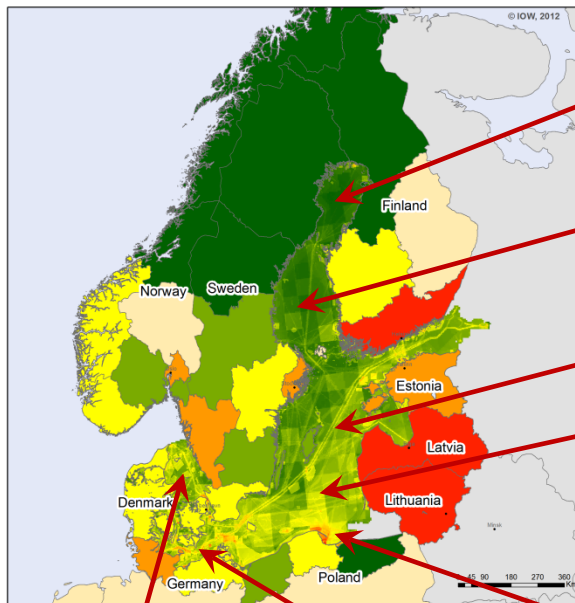
- Nearly untouched, very few environmental impacts, temporary uses only

- Rural (extensive): Main activities are food production (fisheries) and limited maritime traffic

- Motorway of the seas: shipping is dominant

- Rural (intensive): Main activities are food production (fisheries) and limited maritime traffic, both with increased intensity leading to increased environmental impacts

- Local hub: high intensity caused by all kinds of activities, limited to a small region and linked to local urban complexes

- Regional hub: high intensities and a strong node between land and sea (linking Scandinavia to central and western Europe)

- The gate: transition zone,
Uses and environmental situation are characterised by the change from North Sea to Baltic
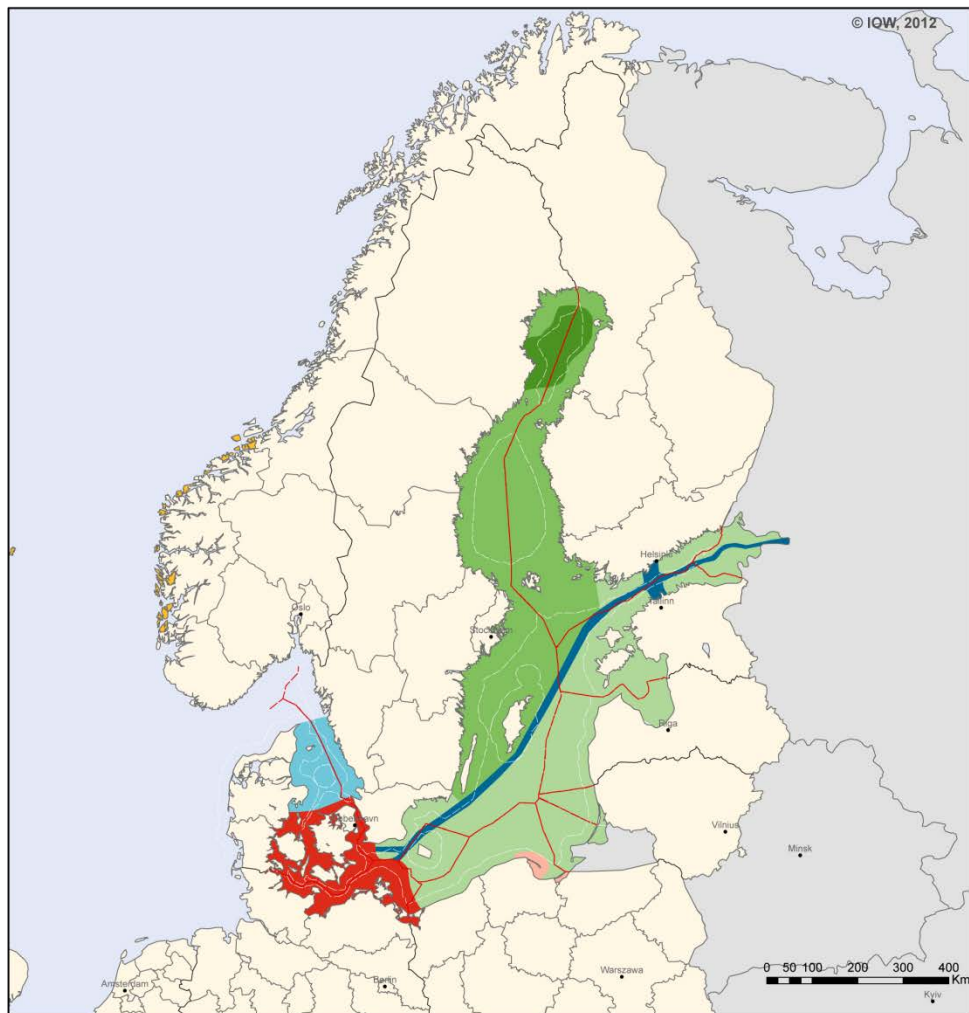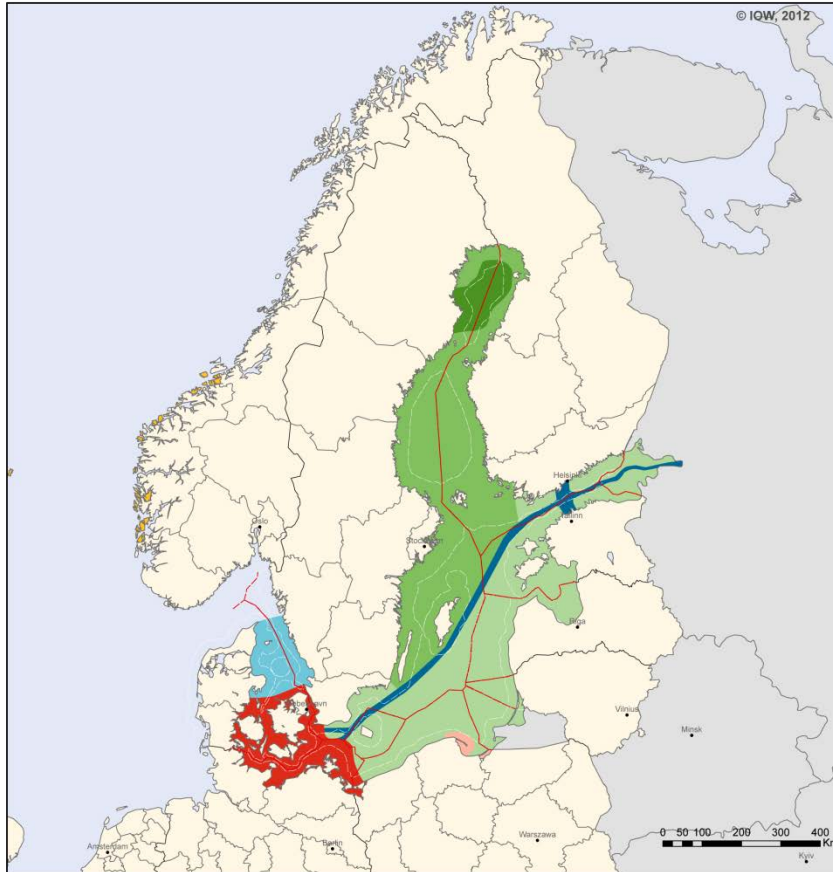
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Wilderness
Extensive rural
Intensive rural
Transport corridor
Transition
Local hub
Regional hub

Conclusions

- **Fuzzy** boundaries

- **Transnational strategic** MSP on seas/**macro-regional level**

- **Common visions and goals** for spatial classes

- **Integrated** spatial planning **land/sea**

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