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*Your gateway to marine data in Europe*

# Development of the EU MSP Layer. EMODnet Human Activities portal

## Technical Expert Group on Maritime Spatial Planning data

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# Boosting the Marine Spatial Plans

- **The starting point**
- **The present**
- **The future**

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# What is EMODnet

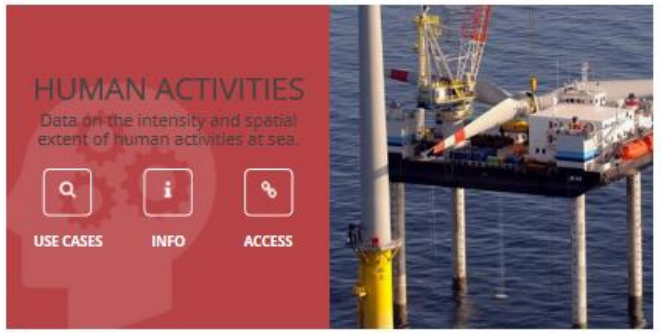
PUBLIC SECTOR

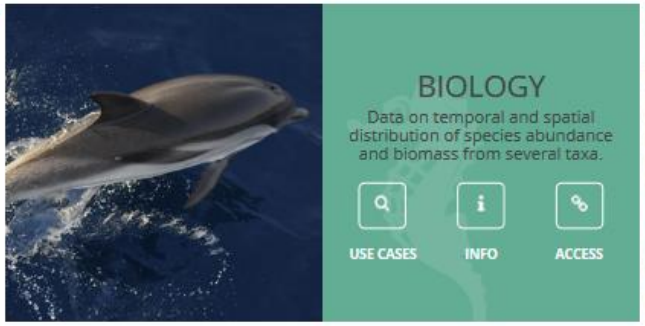
CIVIL SOCIETY

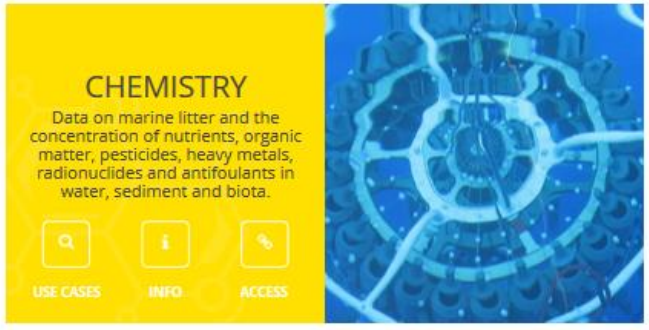
PRIVATE SECTOR

RESEARCH COMMUNITY

# COLLECT ONCE & USE IT MANY TIMES







# What is in EMODnet Human Activities

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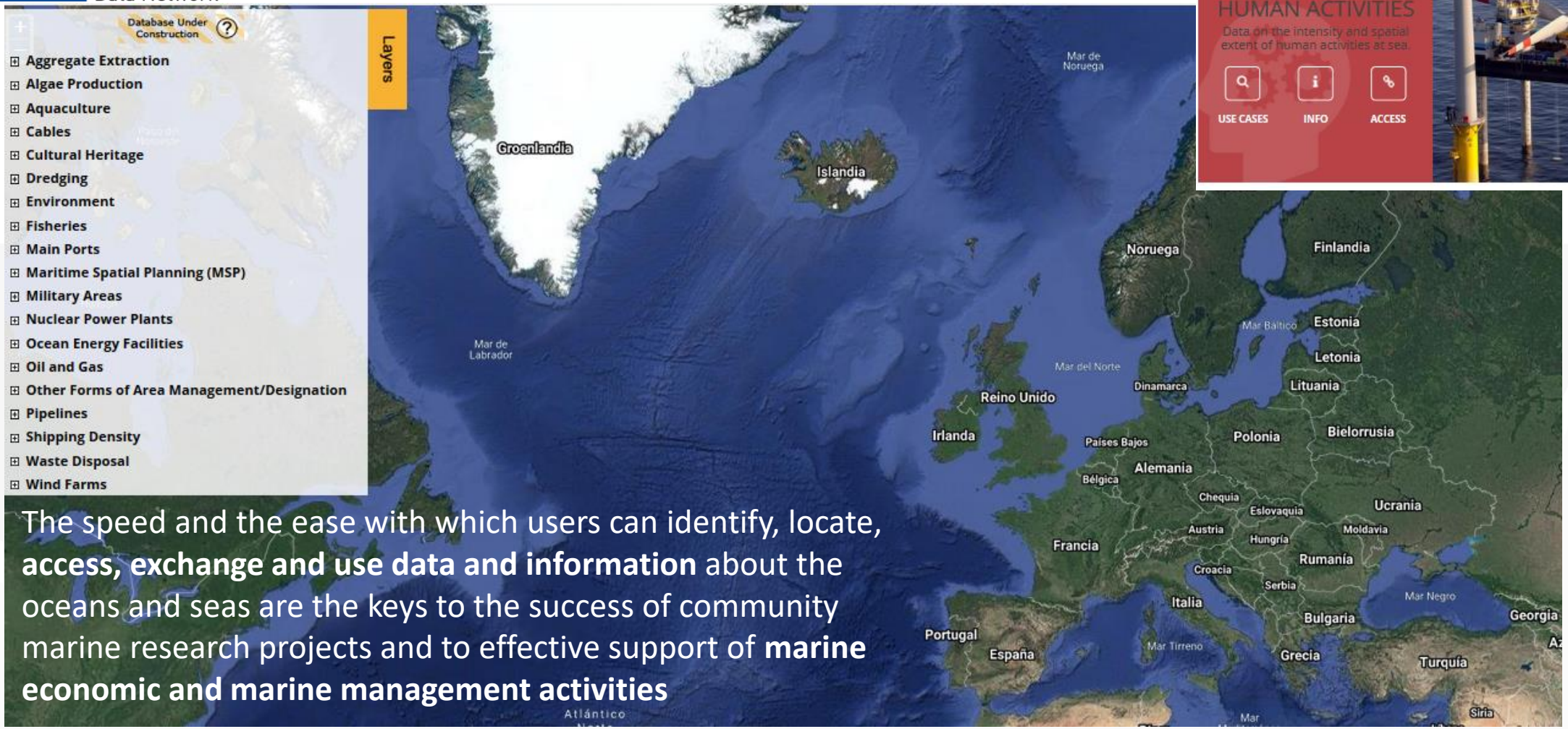


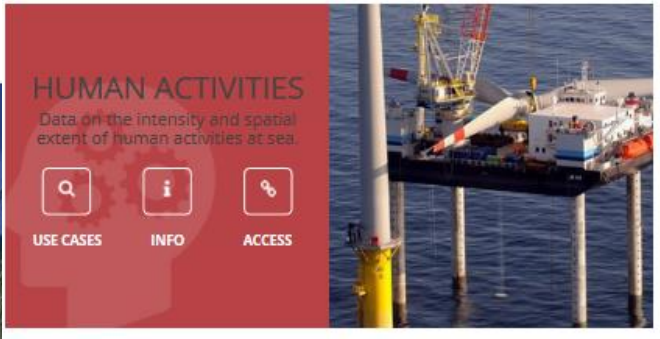


The speed and the ease with which users can identify, locate, **access, exchange and use data and information** about the oceans and seas are the keys to the success of community marine research projects and to effective support of **marine economic and marine management activities**

# Goals for an EU MSP layer

## UP-TO-DATE PICTURE OF CURRENT & ANTICIPATED USES OF THE MARINE SPACE IN THE EU

- **Simplicity:** usability without giving up relevant information.
- **Harmonization:** a nomenclature compatible with the MSP and Inspire Directives.
- **Integrity:** the original MSP of each Member State and the harmonize MSP are visualized at the platform.
- **Compatibility:** capability to interlink with other MSP models
- **Versatility:** to **visualize** and **compare** across countries, uses and activities.

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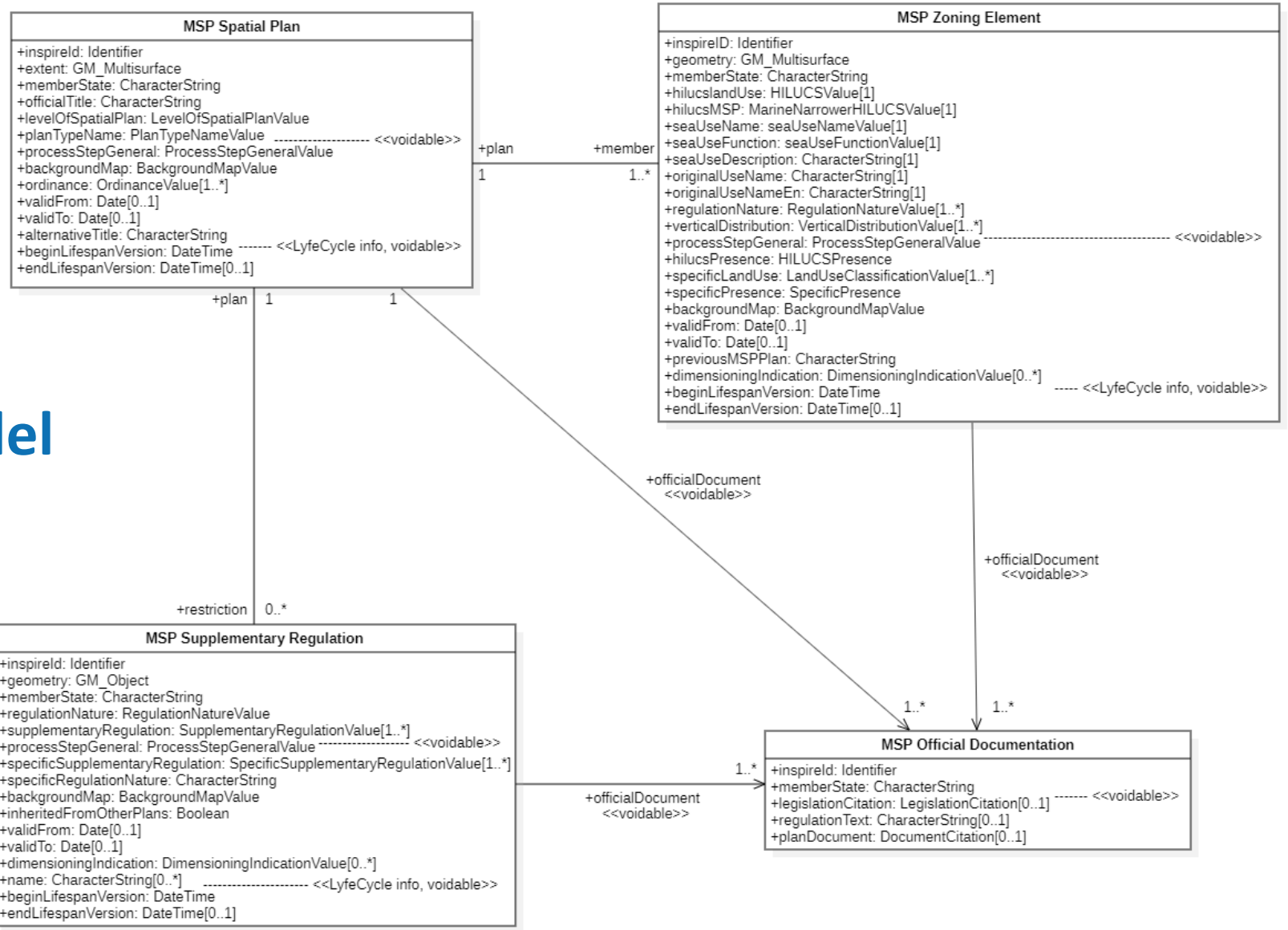
# Standing of the shoulders of giants

| MSP EMODNET THEMES | MSP DIRECTIVE THEMES 2014/89/EU Art.8.2 (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0089) | MSFD DIRECTIVE THEMES 2017/845/EU ANNEX III (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1495097018132&uri=CELEX:32017L0845) | INSPIRE LAND USE THEMES (https://inspire.ec.europa.eu/codelist/HILUCSValue) | HELCOM (https://vasab.org/wp-content/uploads/2019/04/Guidelines-on-transboundary-MSP-output-data-structure-ADOPTEDbyVASAB__HELCOM.pdf (Annex 2)) | MSP INSPIRE DATA MODEL THEMES (http://www.geoportal.ulpgc.es/registro/plannedLandUse/HilucsExt/) |
|---|---|---|---|---|---|
| Maritime Traffic flows | Maritime transport routes and traffic flows | Transport | 4_1_4 Water transport | Transport-flow | 4_1_6 Marine traffic lanes |
| Military areas | Military training areas | Security/defense | 3_3_1 Public administration defense and social security services | Military areas | 6_8_Militar Area |
| Nature Protection Conservation | Nature and species conservation sites and protected areas | - | 6_3 Natural areas not in other economic use | Nature | 6_7_1_Marine Protected Area |
| Raw material extraction | Raw material extraction areas | Extraction of non-living resources | 1_3_2 Mining of metal ores<br>1_3_1 Mining of energy producing materials | Extraction | 1_3 Mining and quarrying |
| Oil and Gas | Installations and infrastructures for the exploration, exploitation and extraction of oil, of gas and other energy resources, of minerals and aggregates, and for the production of energy from renewable sources | Extraction of non-living resources | 2_4_2 Fossil fuel based energy production | Installations<br>Extraction | 1_3_1_Mining Of Energy Producing Materials |

# The MSP backstage

## The EMODnet MSP model



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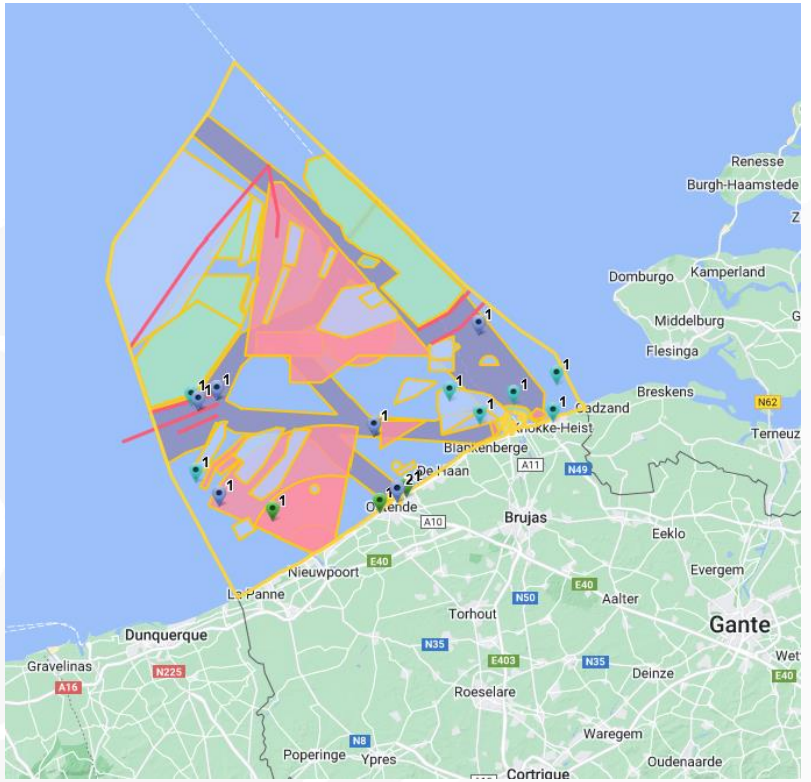
# The present

# BELGIUM

## 1st MSP MODEL FIREPROOF: NO SIGNIFICANT INFORMATION LOSSES IN THE HARMONIZATION PROCESS

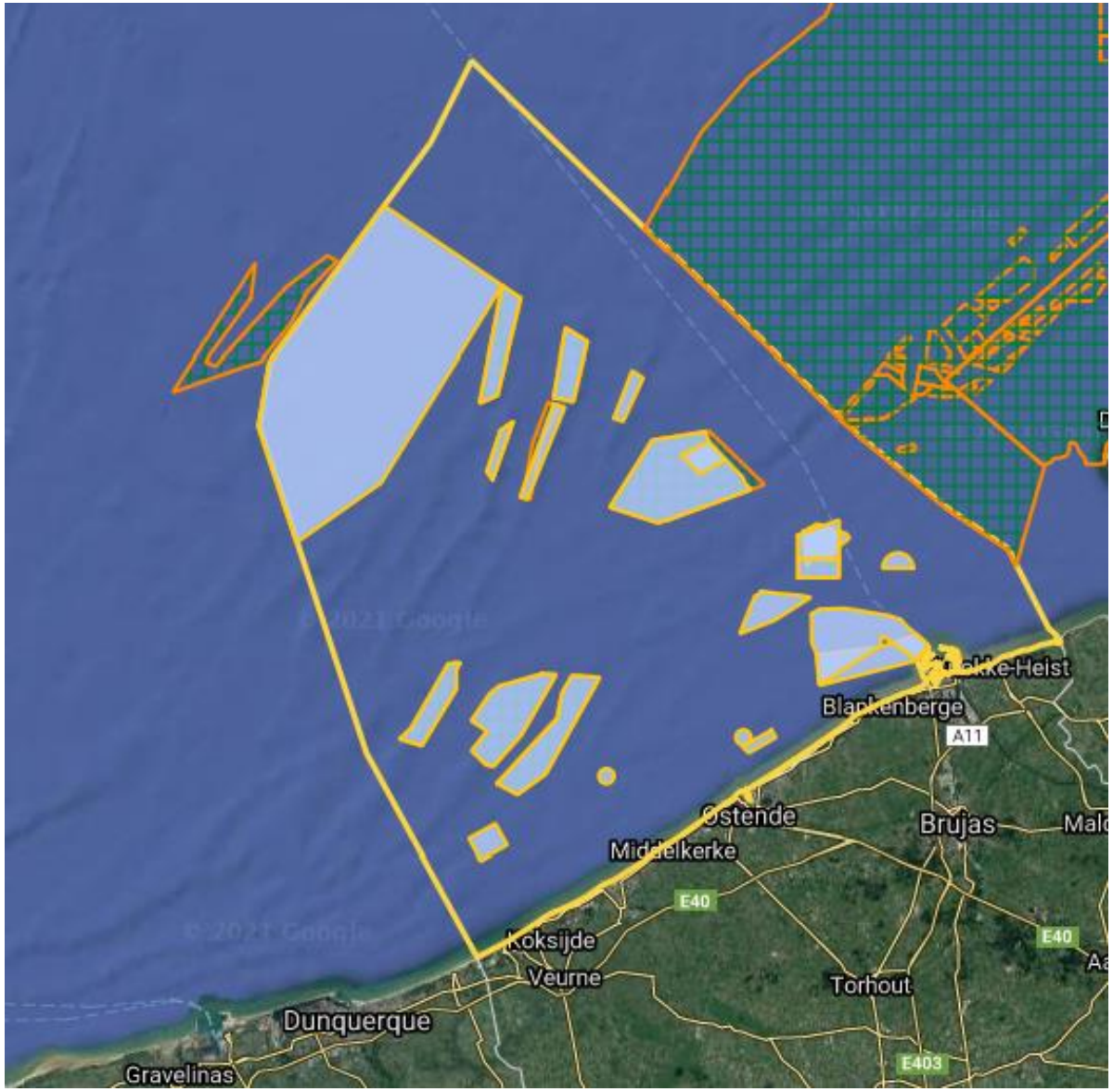
- Marine spatial planning: 2020-2026
- Availability of data for each marine zone (uses, description, coordinates, etc.) and GIS application.
- The **data details for each zone and use** facilitates the harmonization.
- No information for the vertical distribution attribute




*Belgium is the perfect example of MSP. Very detailed information on each marine area and uses both in GIS format and in its official documentation.*

# ACTIVE AGGREGATE EXTRACTION AREAS BELGIUM

Present




Planned

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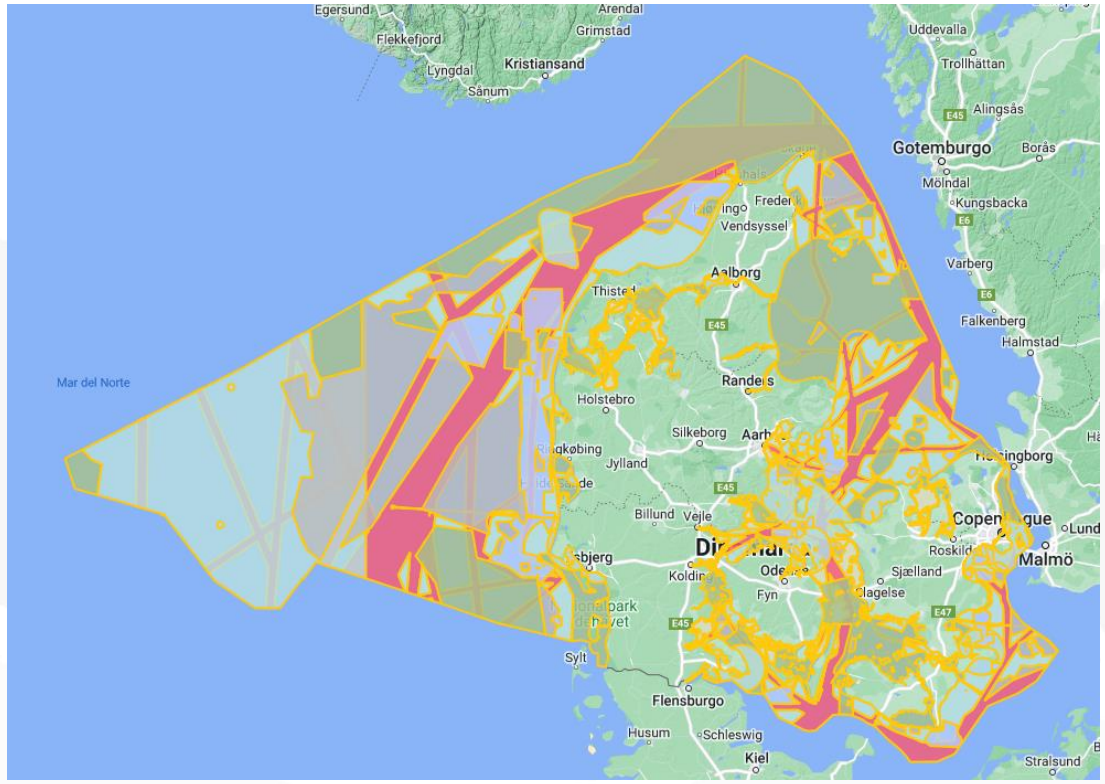
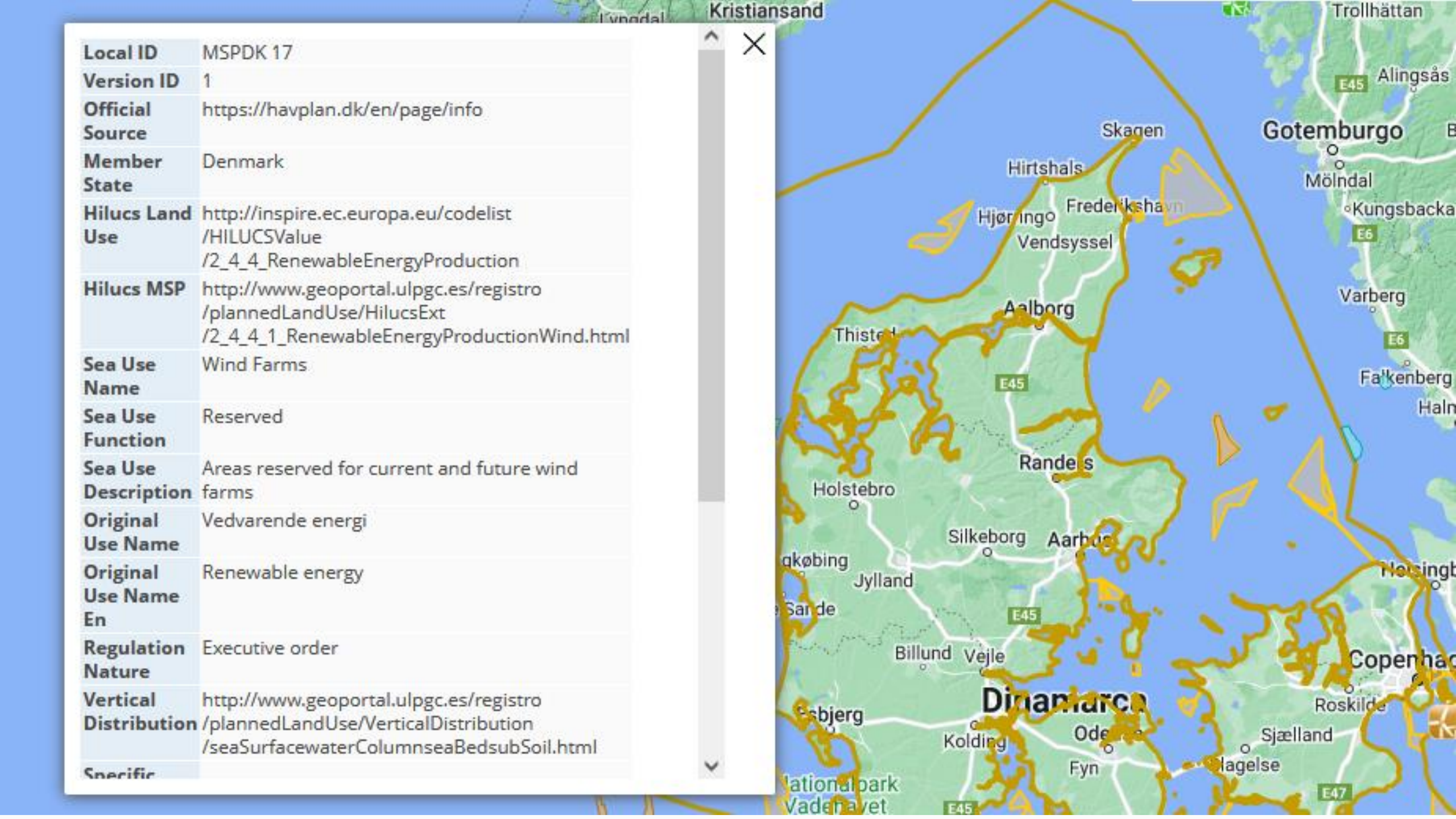
# DENMARK

## 2nd MSP MODEL FIREPROOF: IT IS USABLE AND HAS BEEN USED




*Denmark is an example of how the authorities of the Member States can carry out the original MSPs following the TEG model.*

- Marine spatial planning introduces **holistic spatial planning** for the entire marine area
- Information sent by the Danish authorities **using the model proposed by the TEG**.
- Zones are not individually defined. The zones by use appear together in the same geometry.




| | |
|---|---|
| **Local ID** | MSPDK 17 |
| **Version ID** | 1 |
| **Official Source** | https://havplan.dk/en/page/info |
| **Member State** | Denmark |
| **Hilucs Land Use** | http://inspire.ec.europa.eu/codelist /HILUCSValue /2_4_4_RenewableEnergyProduction |
| **Hilucs MSP** | http://www.geoportal.ulpgc.es/registro /plannedLandUse/HilucsExt /2_4_4_1_RenewableEnergyProductionWind.html |
| **Sea Use Name** | Wind Farms |
| **Sea Use Function** | Reserved |
| **Sea Use Description** | Areas reserved for current and future wind farms |
| **Original Use Name** | Vedvarende energi |
| **Original Use Name En** | Renewable energy |
| **Regulation Nature** | Executive order |
| **Vertical Distribution** | http://www.geoportal.ulpgc.es/registro /plannedLandUse/VerticalDistribution /seaSurfacewaterColumnseaBedsubSoil.html |
| **Specific** | |

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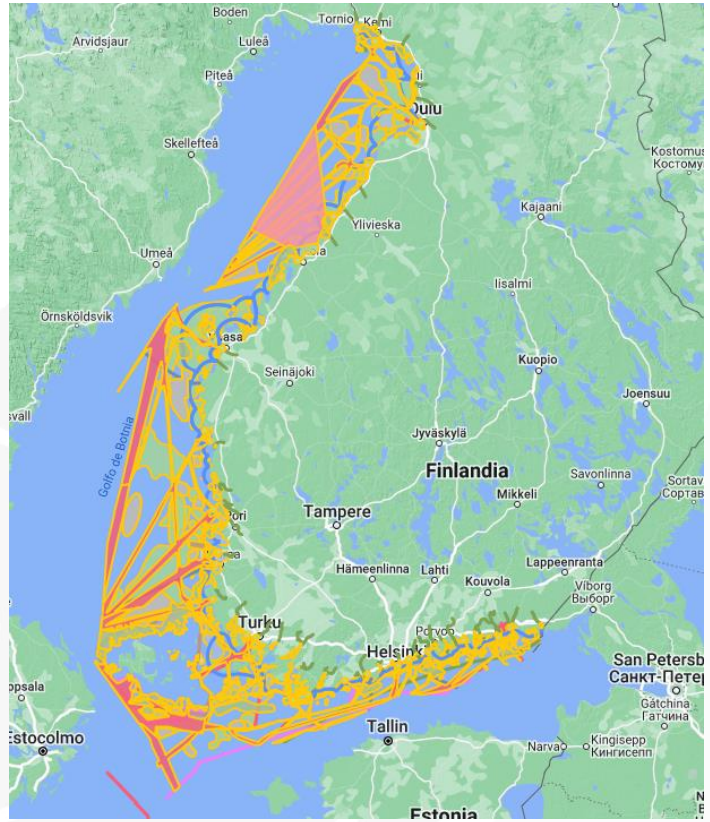
Tallin
Estonia
Mar Báltico
Riga
Letonia
Mar del Norte
Dinamarca
Lituania
Vilna
Minsk
Мінск
Hamburgo
Bielorrusia
Berlín
Polonia
Amsterdam
Países Bajos
Varsovia
Alemania
Kiev
Київ
Bélgica
Praga

# FINLAND

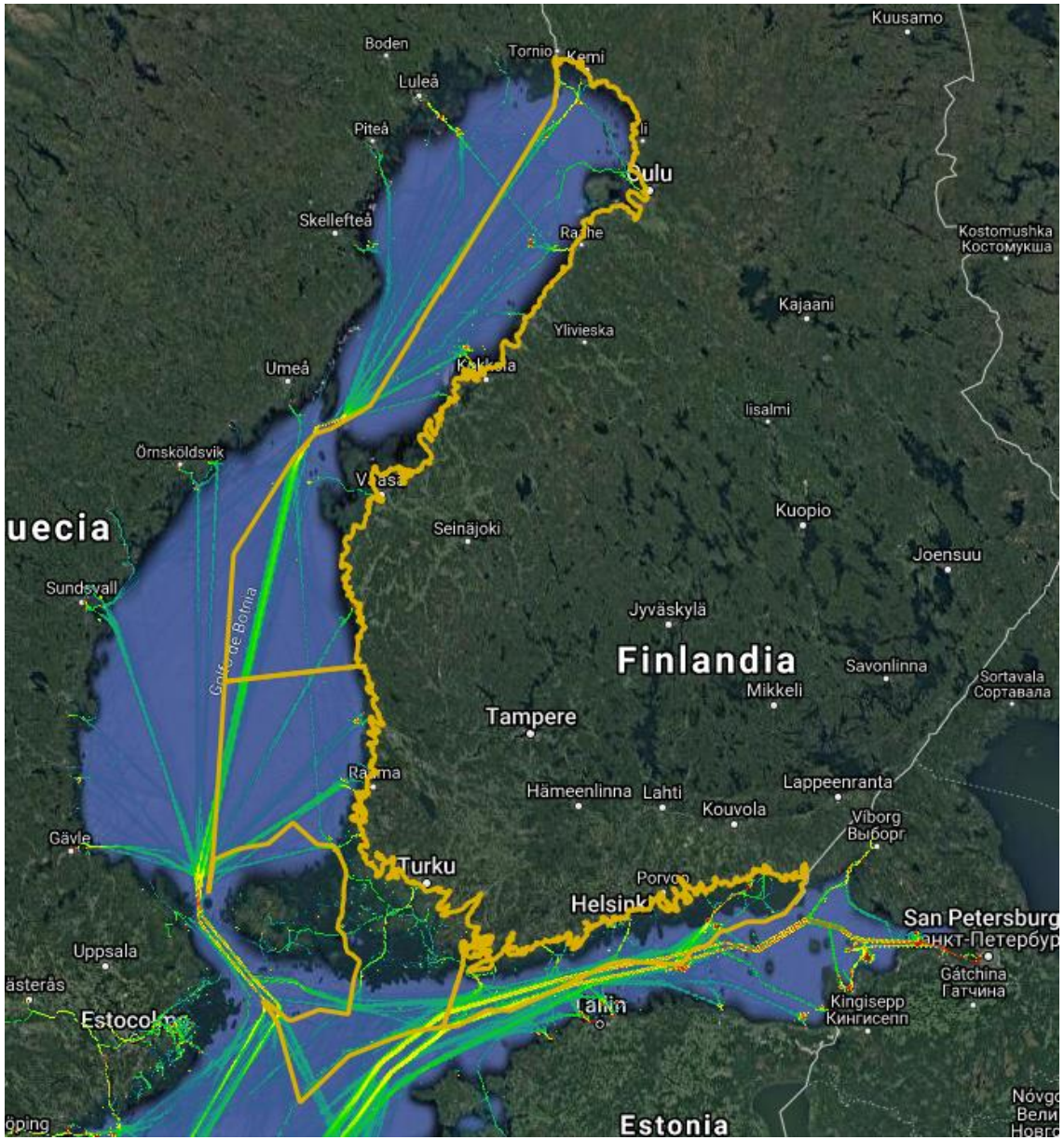
# 3rd MSP MODEL FIREPROOF: IT IS COMPATIBLE

- The Finnish Maritime Spatial Planning 2030: divided into 4 supra-regional MSPs, including 2 competent authorities.
- The 4 MSPs use the **HELCOM data model** **compatible with the EMODNET model**.
- Availability of details for each zone and uses eases the harmonization.
- No information for the vertical distribution attribute

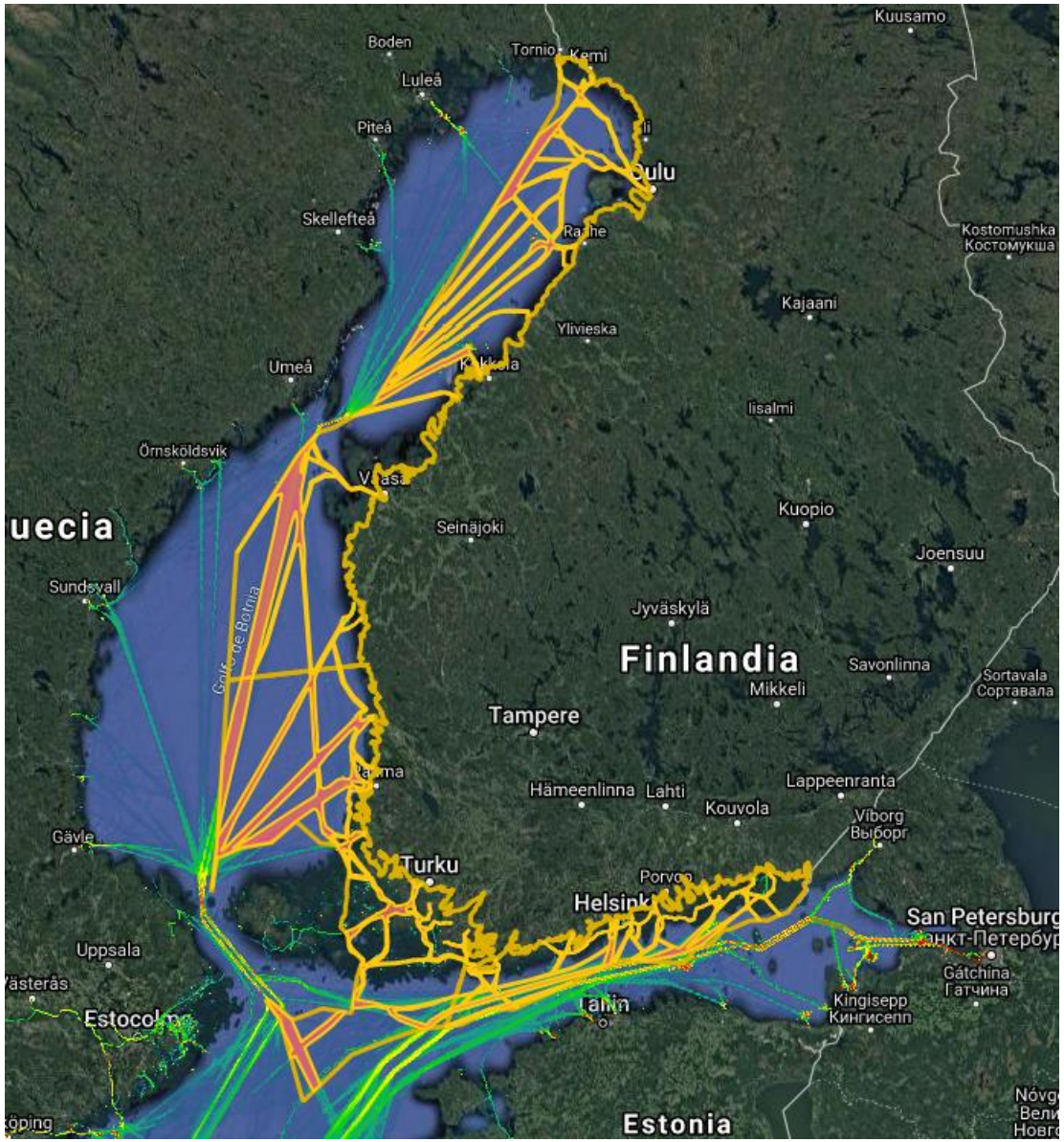



*The original Finnish MSP was a validation test of how well the TEG model fits the HELCOM data model.*

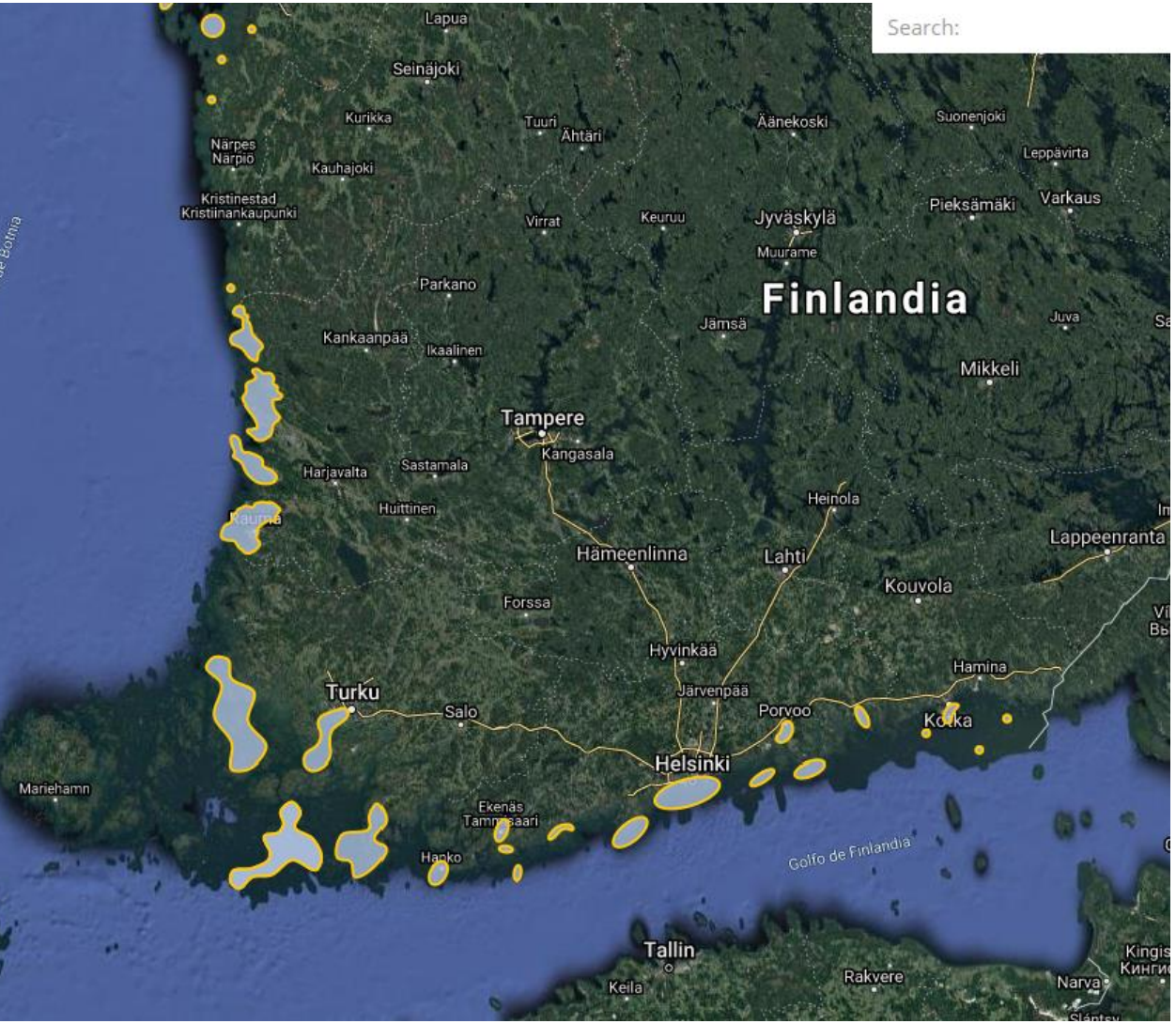
Shipping traffic



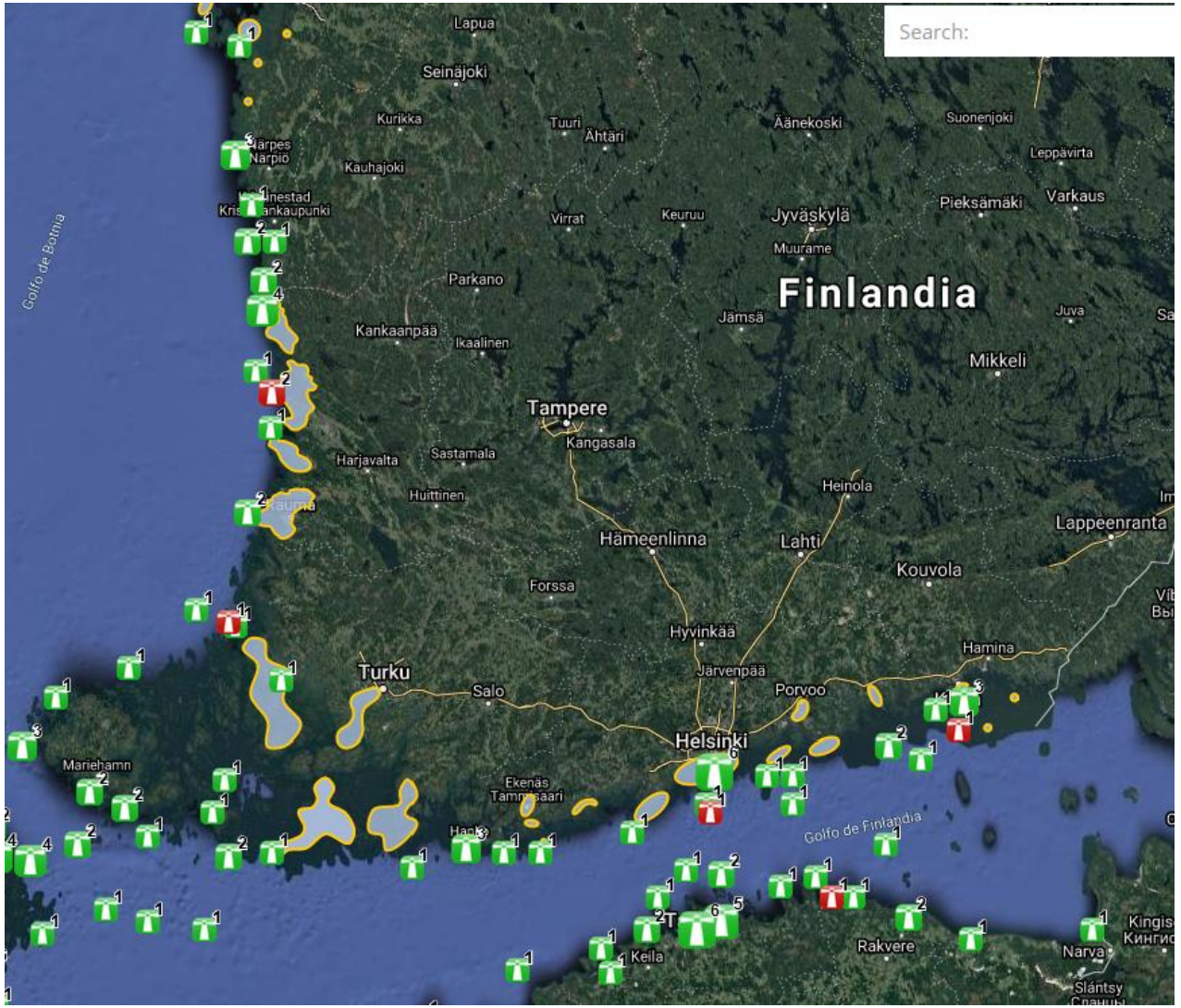

Planning for Maritime Transport

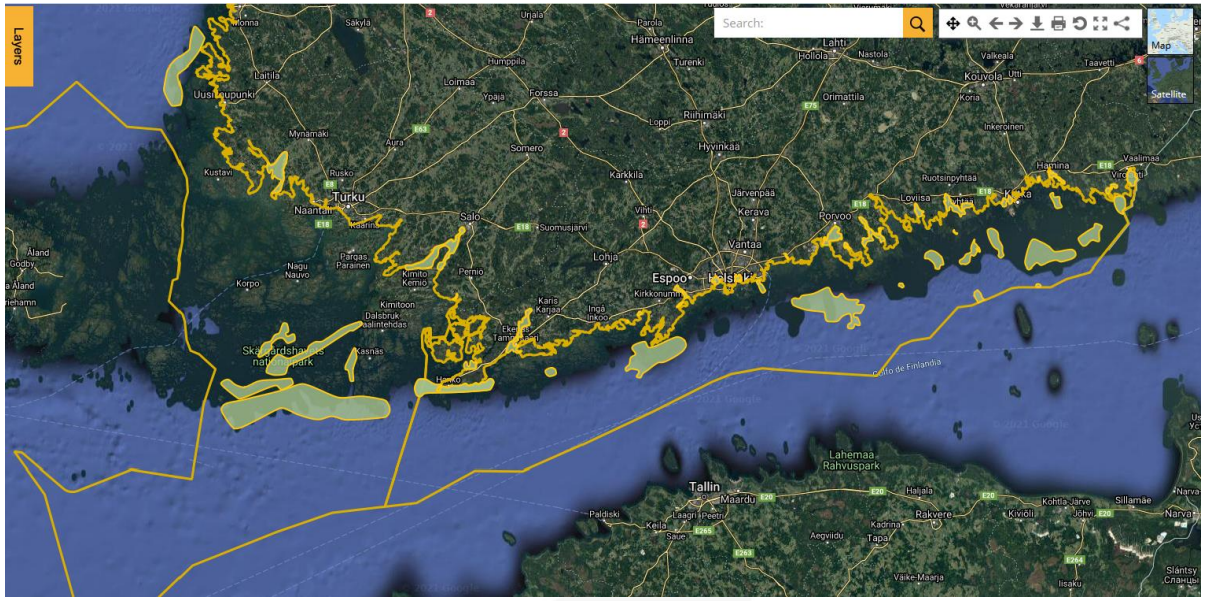


Cultural heritage: planning areas

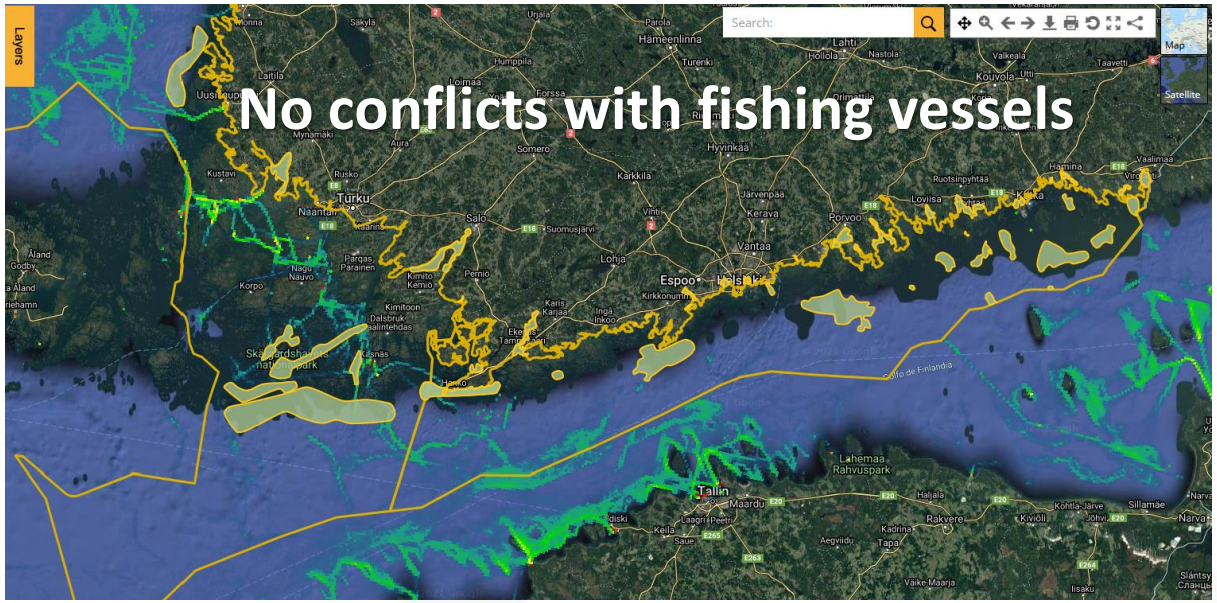


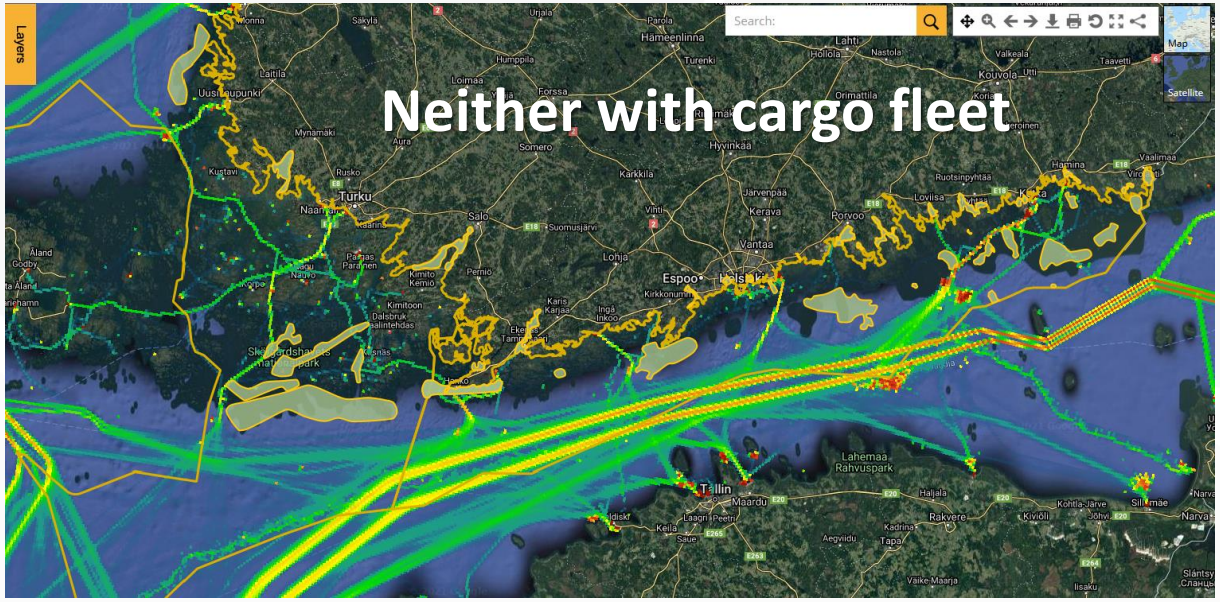

Available information in EMODNET HA

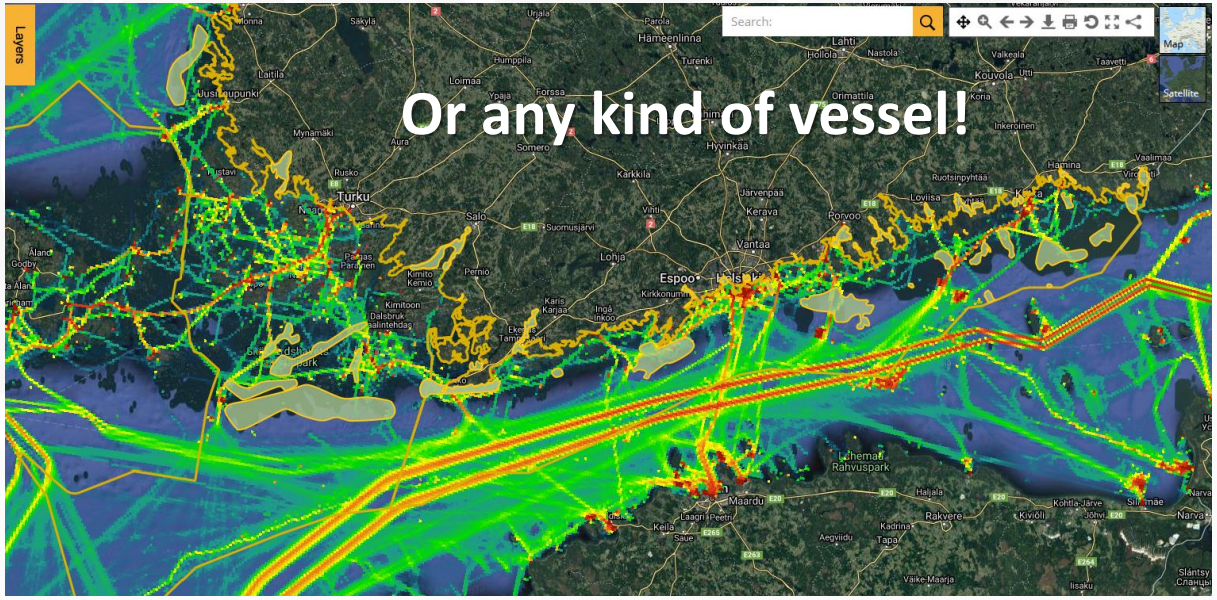





Nature protected areas



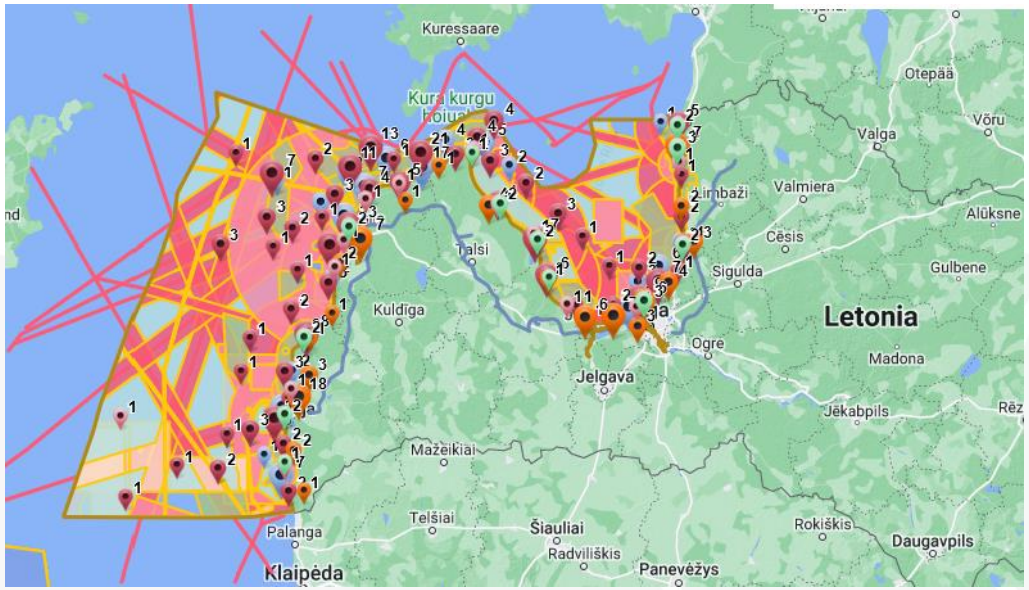
# GERMANY (*in process*)

- Marine spatial planning: Exclusive Economic Zone (EEZ).
- **One layer per each defined use**, including data such as Name, Sea, Data publishing, Type (Use) & Remark (Notes).
- No major difficulties in the harmonization process, combining GIF and PDF files.

# DETAILED MSPs SUPPORT HARMONIZATION

*As in the case of Belgium, Germany has created an MSP with very detailed information. Both countries are very good examples of MSP.*

# LATVIA

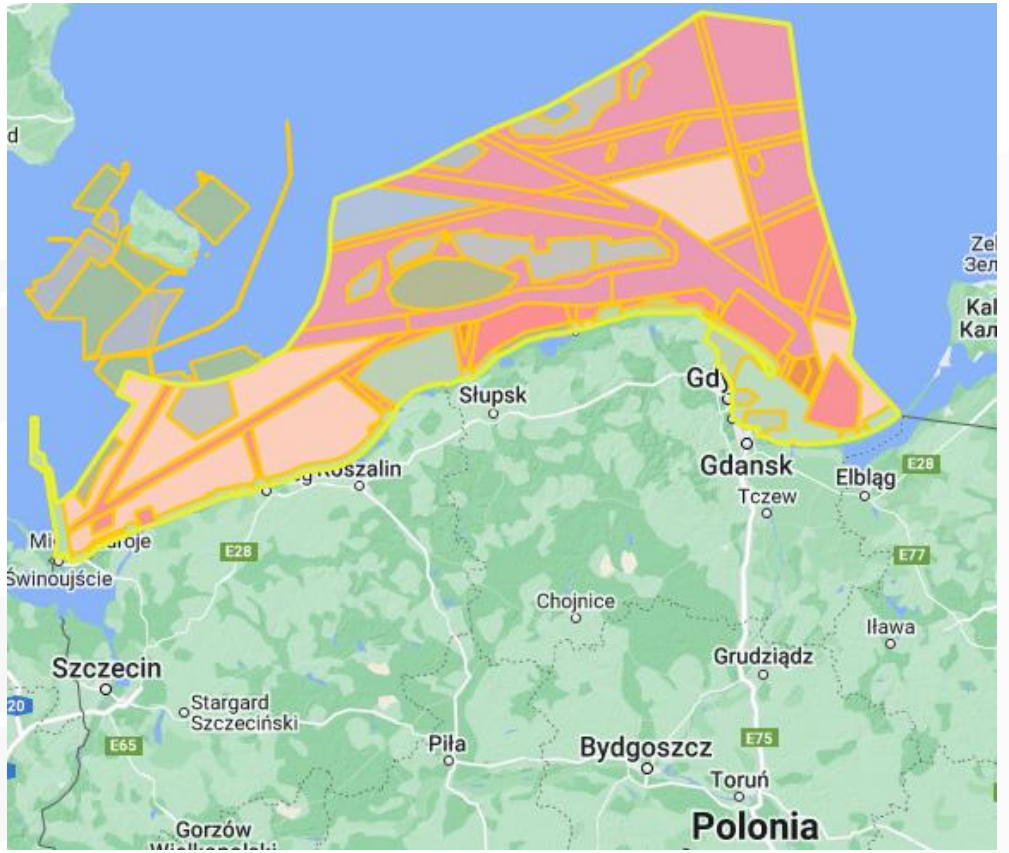



*As in the case of Finland, Latvia also demonstrates the great compatibility between the HELCOM data model and the one proposed by the TEG.*

- Marine spatial planning 2030 defines priorities for the use of maritime space.
- Data: WFS format, including detailed information of each marine zone (Uses, function, description, etc.).
- The geographic data was obtained in WFS format and transformed into SHP format.
- The WFSs contain a data model **similar to HELCOM**
- The vertical distribution attribute is not described.

# POLAND

- MPS defines the different marine areas by uses categorized in the official documentation.
- Layers developed beyond the MSP area:
  - (2more) to define specifically and in detail the zones and the uses allowed.
  - (2more) to describe specific areas.
- Data model is **compatible with HELCOM**.
- Official plan is only available in Polish
- “Other/miscellaneous” category used for original uses not included in the EMODnet classification.




*Poland has created a very detailed MSP of information for each of the sea zones. In this specific case.*

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# The future

# What is next

- Working on your MSP
- Almost ready? Ireland, Slovenia, Sweden, Portugal
- Wondering about the data model
- Wondering  if EMODnet can be of any help in developing your plan

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# What is next

- **16 MSP** to be harmonized!
- The input: lessons learned from the harmonization process. E.g. review Emodnet Clasiffication based on the “Others” and suggested to DG-MARE.
- The output: **Using it many times!**
  - For companies
  - For researchers
  - For policy-makers: regional/MS/RSO/EU
- Use case MS: data model

# Thank you!

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