Connecting Seas

NorthSEE – Baltic LINes MSP conference

Data session

Connecting Seas

NorthSEE – Baltic LINes MSP conference

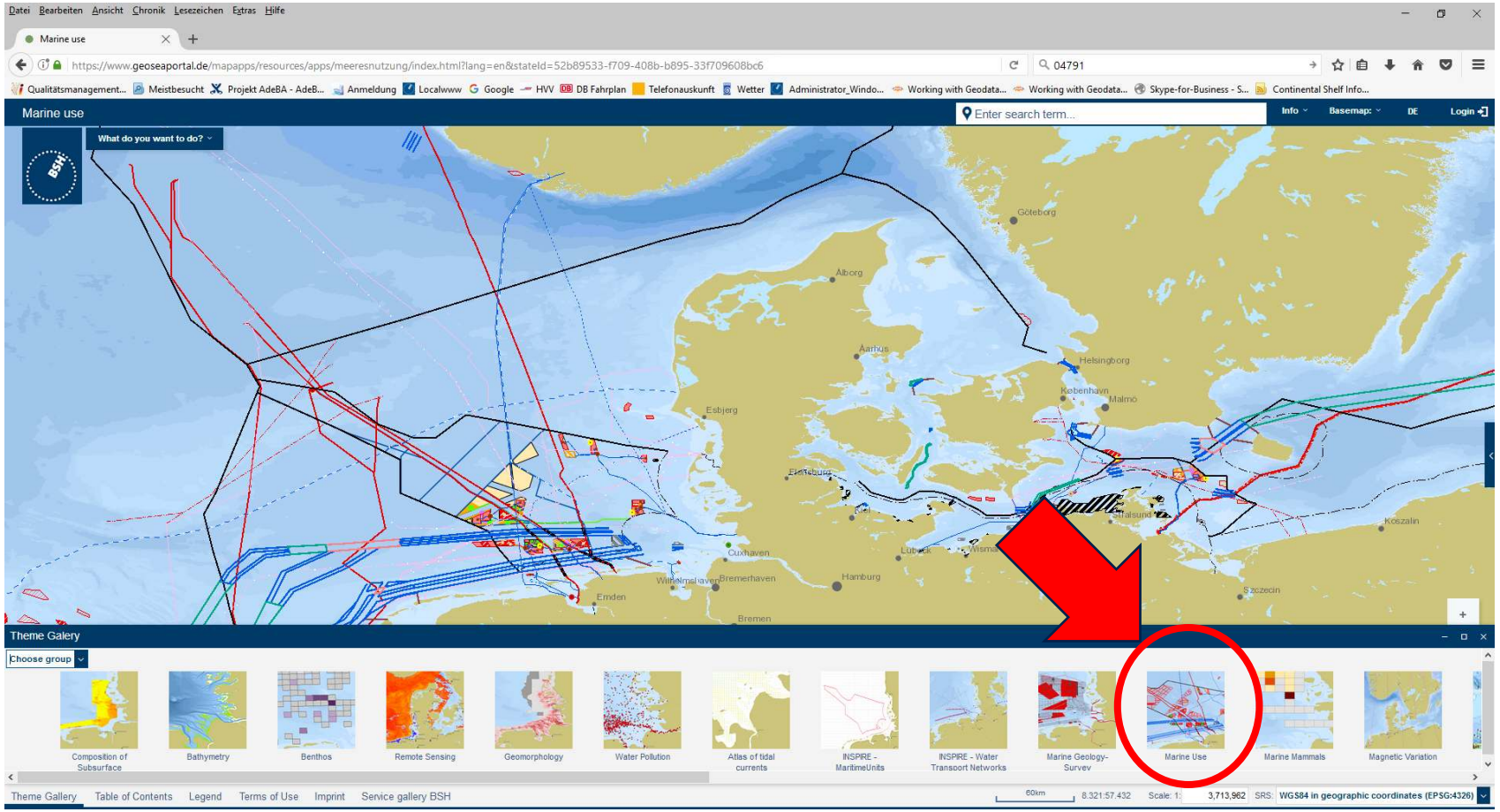
National data services in Germany

Olaf Gottensträter, *German Federal Maritime and Hydrographic Agency (BSH)*

Agenda

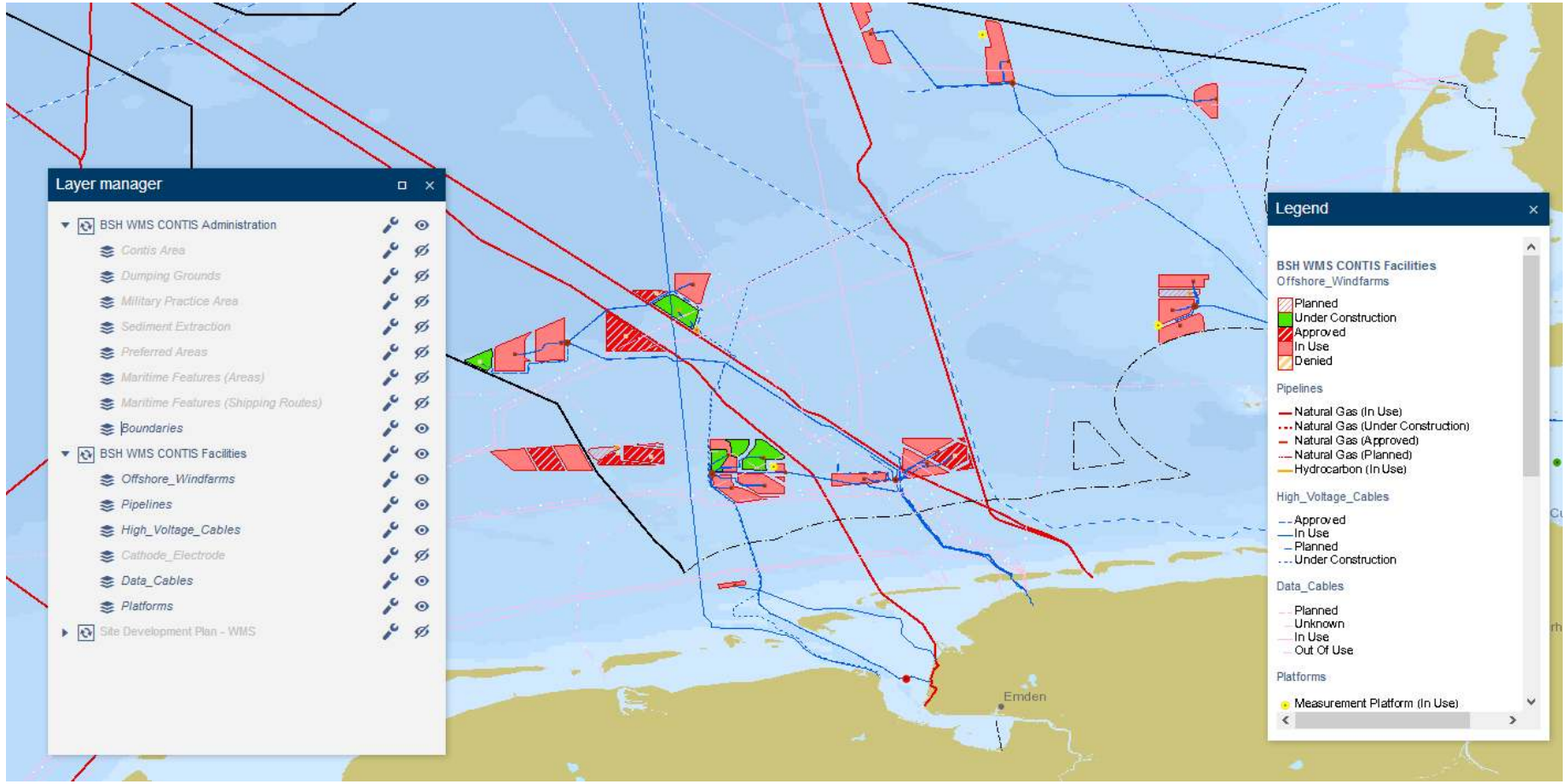
- Marine use in www.geoseaportal.de
- National Data Services: Data Input for MSP
  - CONTIS facilities
  - CONTIS Administration
- Draft of the Site Development Plan
- Download data with Web Feature Services
- The current MSP 2009
- The next steps

Marine use in www.geoseaportal.de



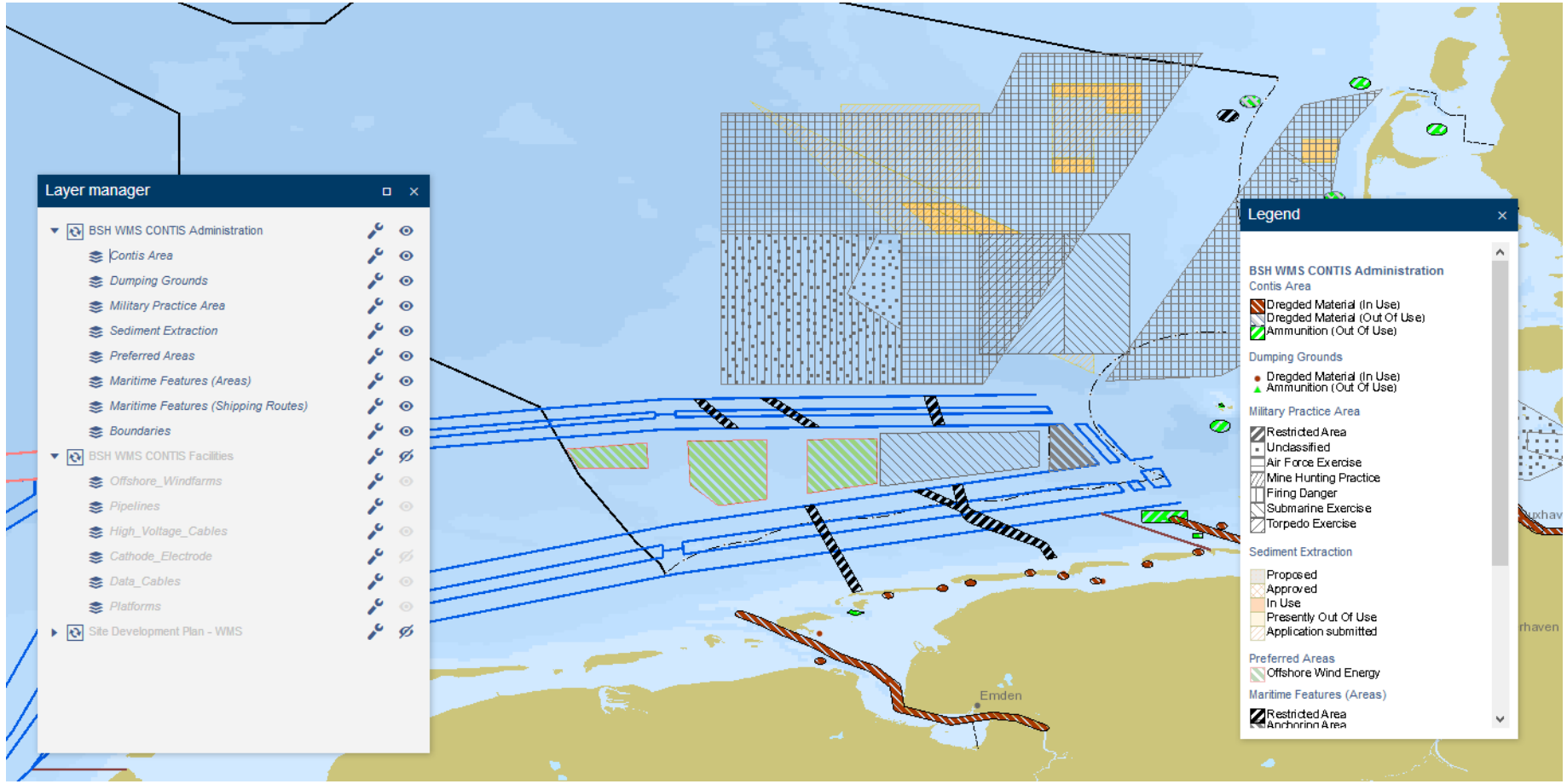
National Data Services: Data Input for MSP

CONTIS facilities

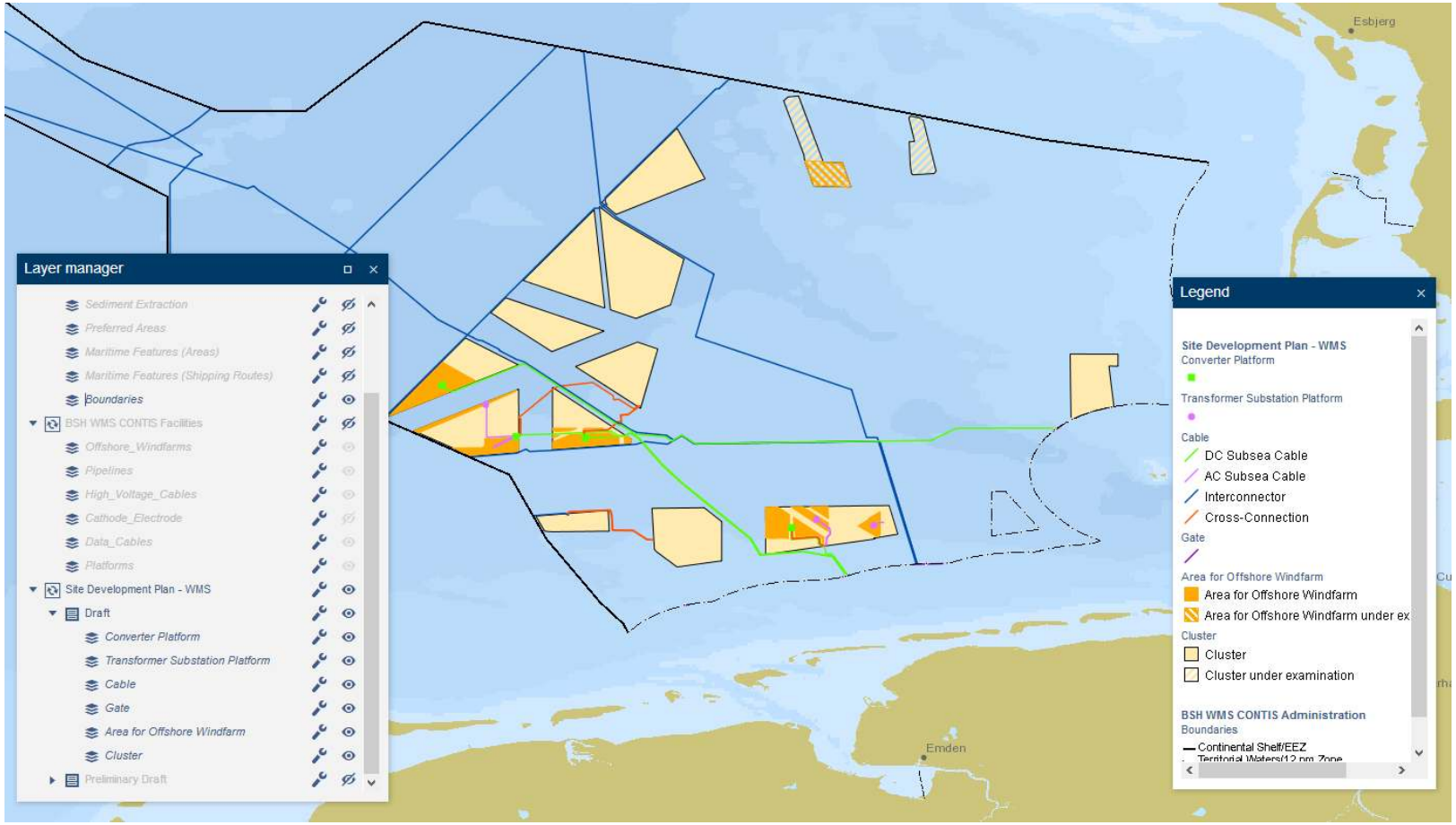


National Data Services: Data Input for MSP

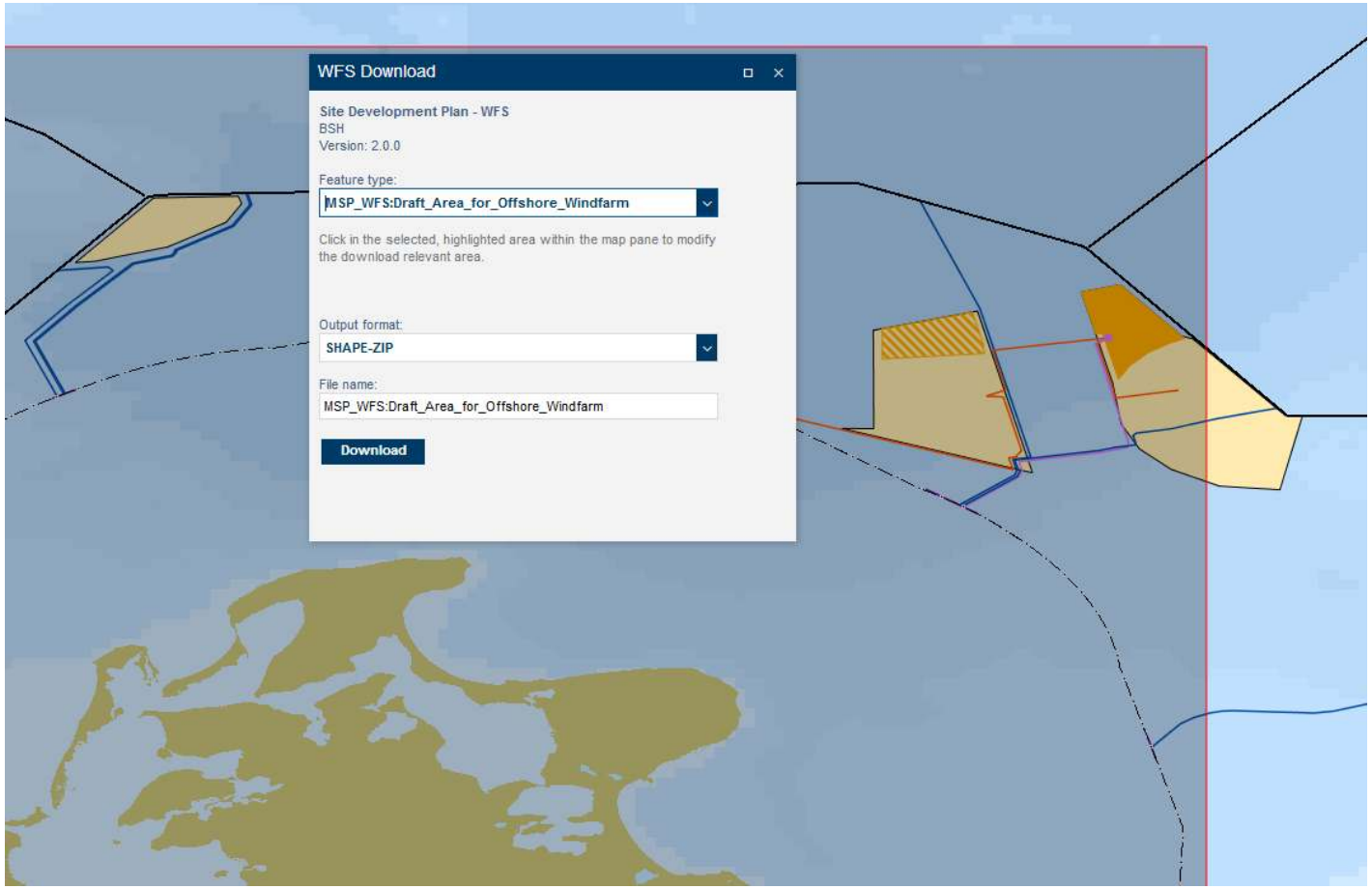
CONTIS Administration



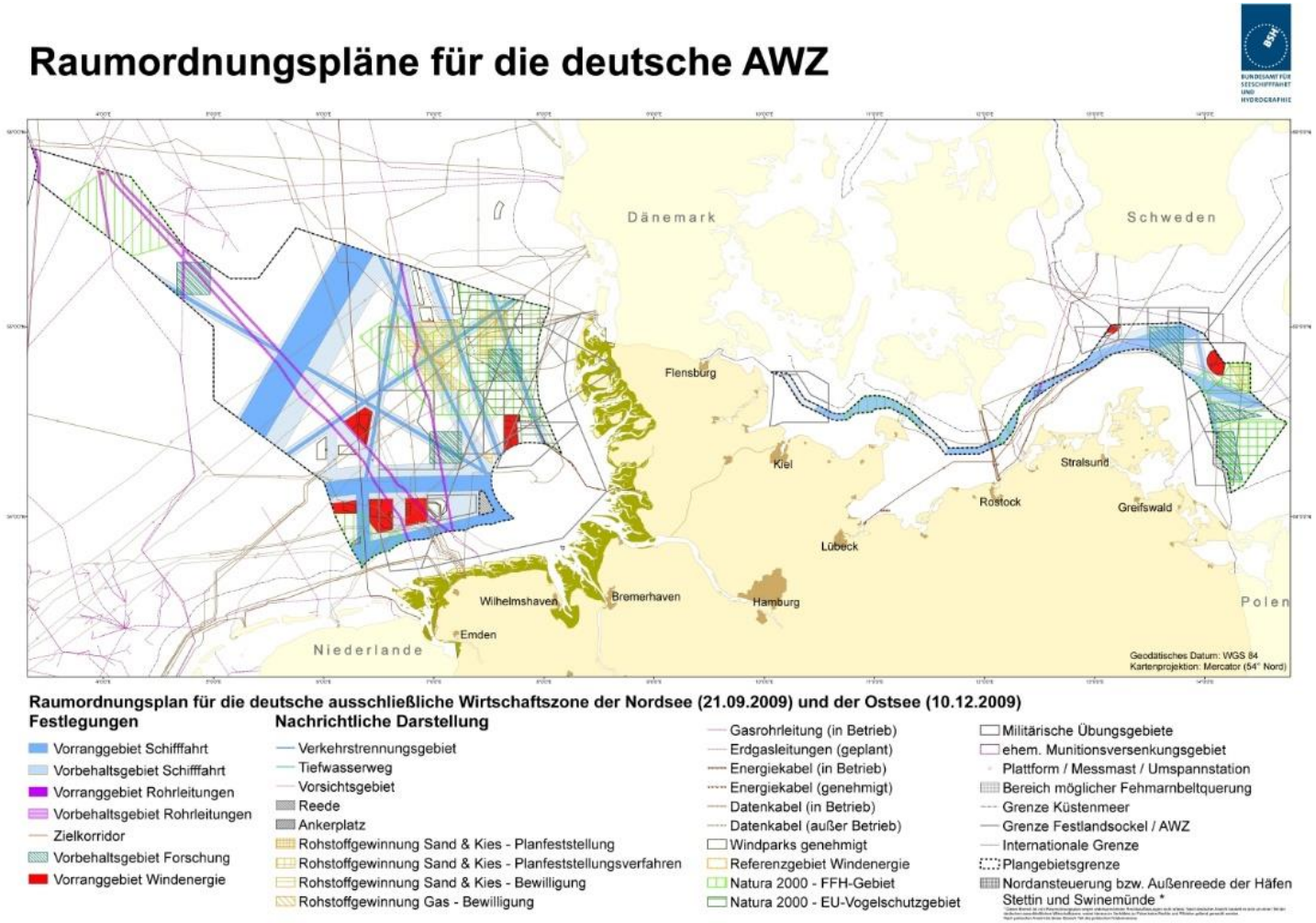
Draft of the Site Development Plan



Download data with Web Feature Services



The current MSP 2009



The next steps

- Publishing the current MSP 2009 as WMS and WFS
- International harmonisation of MSP data, e.g. recommandation of MSP output data of the HELCOM/VASAB data expert group
- Update the national MSP for the German EEZ (until 2021)
- Integration of services in other portals, e.g.

BASEMAPS: Dreams will be reality

Marine Spatial Magement tool

Gerhard Heggebo

Connecting Seas

NorthSEE – Baltic LINes MSP conference

The story of how we built BASEMAPS

North SEE

Interreg North Sea Region European Regional Development Fund EUROPEAN UNION

Baltic LINes

Interreg Baltic Sea Region EUROPEAN UNION EUROPEAN REGIONAL DEVELOPMENT FUND

BASEMAPS

Interreg Baltic Sea Region

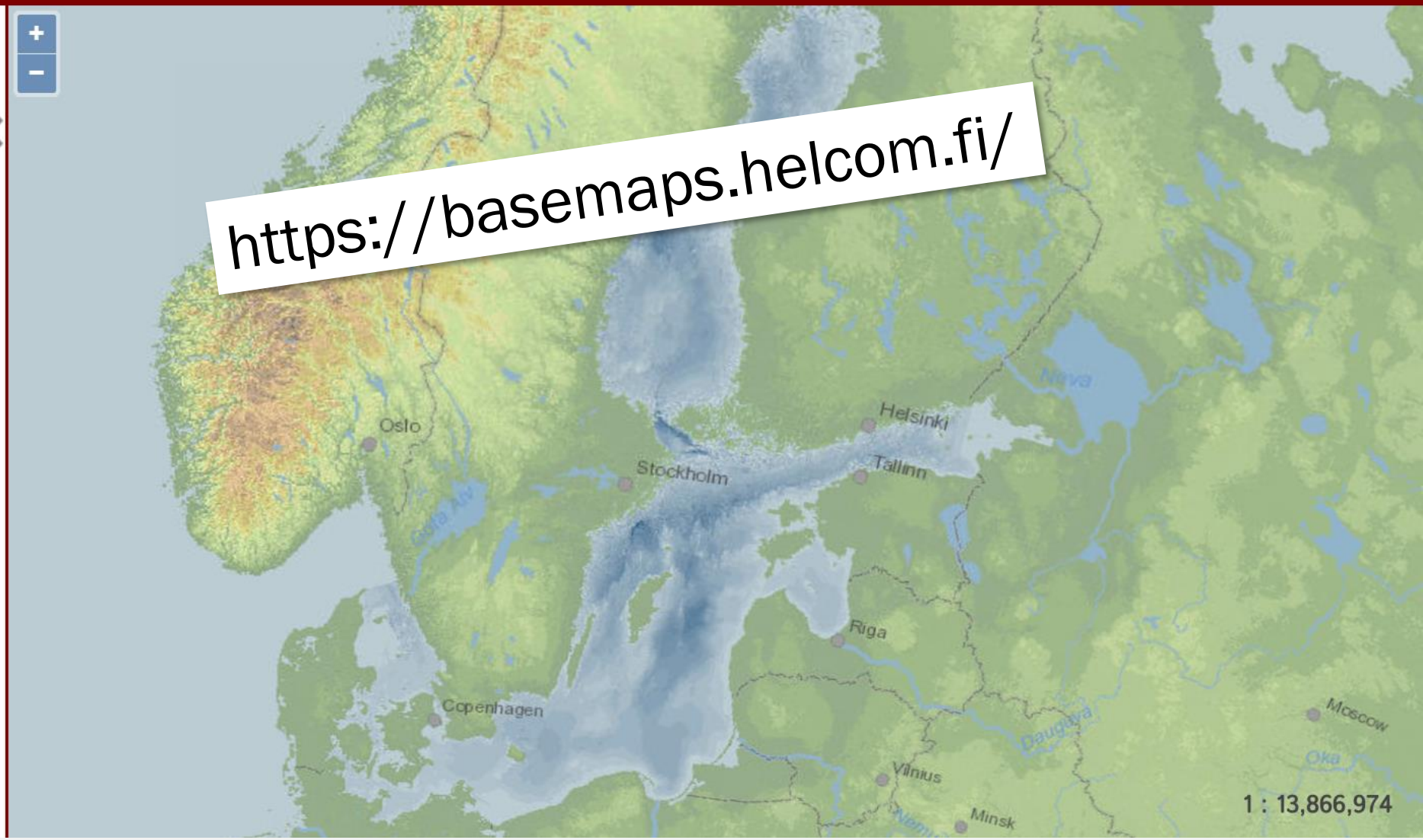
HELCOM

Admin

MSP input data | MSP output data

Collapse layer list | Hide all layers

- Administrative borders
- Aquaculture
- Fishing areas
- Installations and infrastructures
- Maritime transport
- Nature protection
- Military training
- Raw material extraction
- Scientific research
- Cables and pipelines
- Tourism and recreation
- Underwater cultural heritage

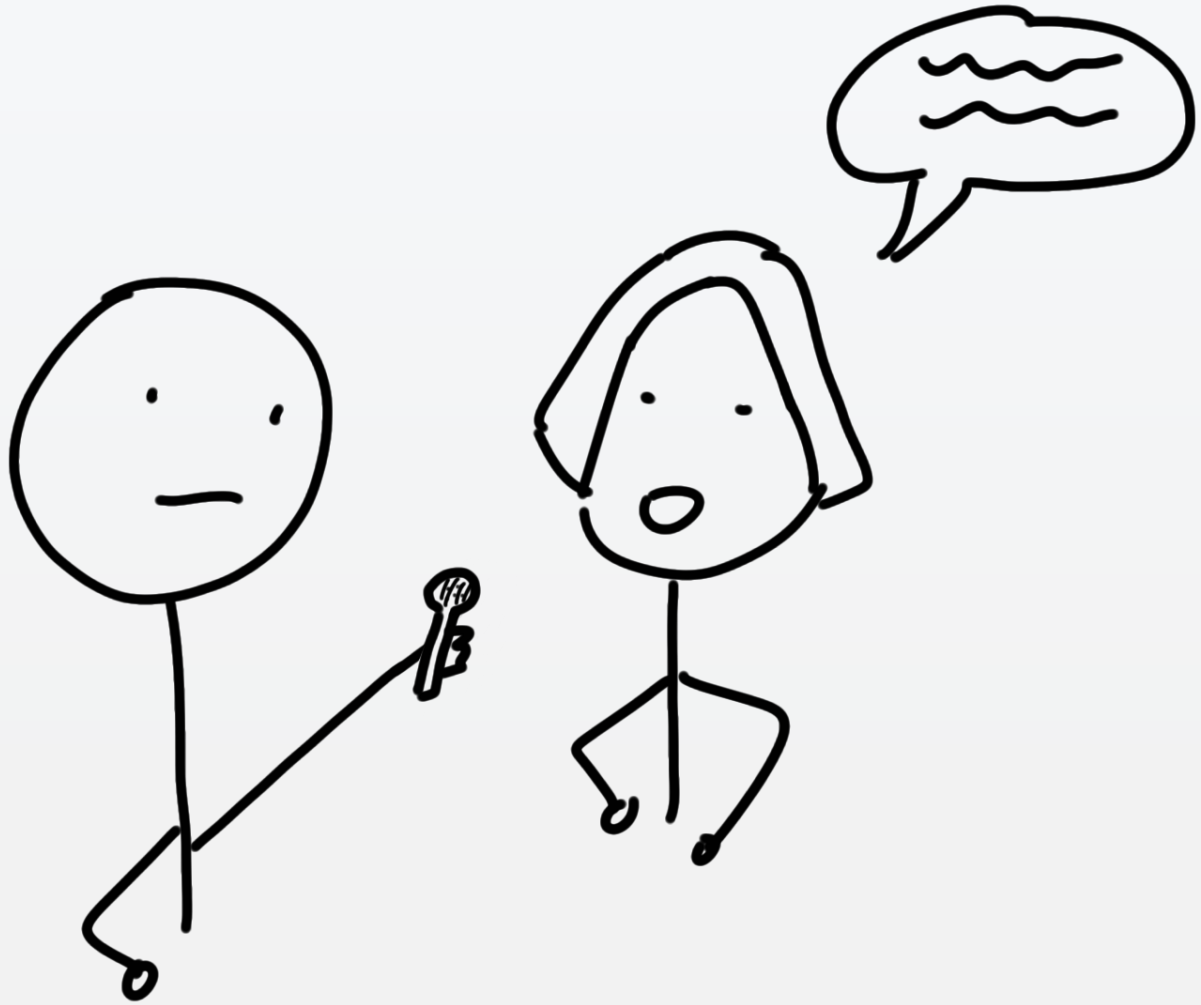


How did we do it

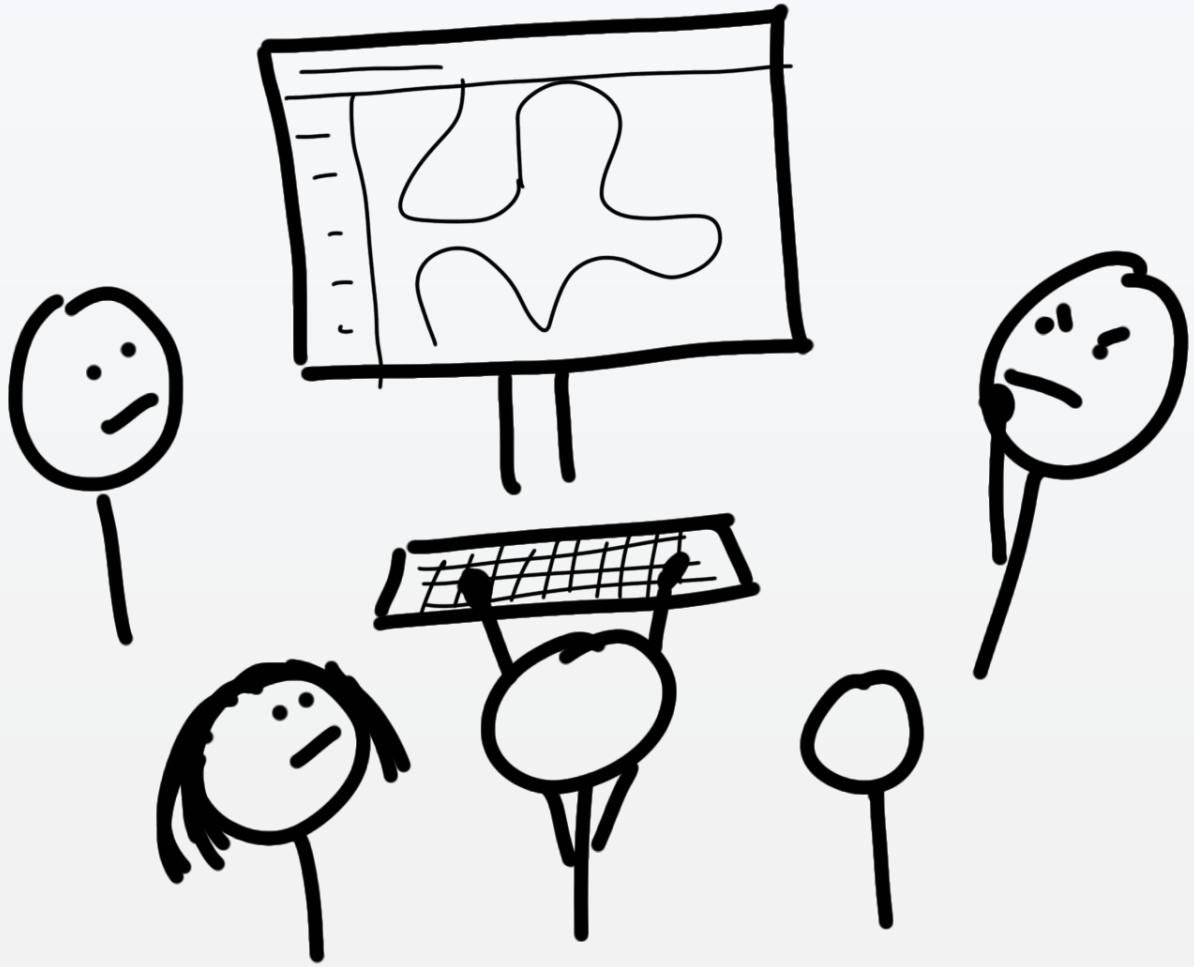
3 steps

1 Data gathering

2 Study and interviews



3 Develop



The challenges

A name!

Lack of data

Data available

WMS

%

Data available

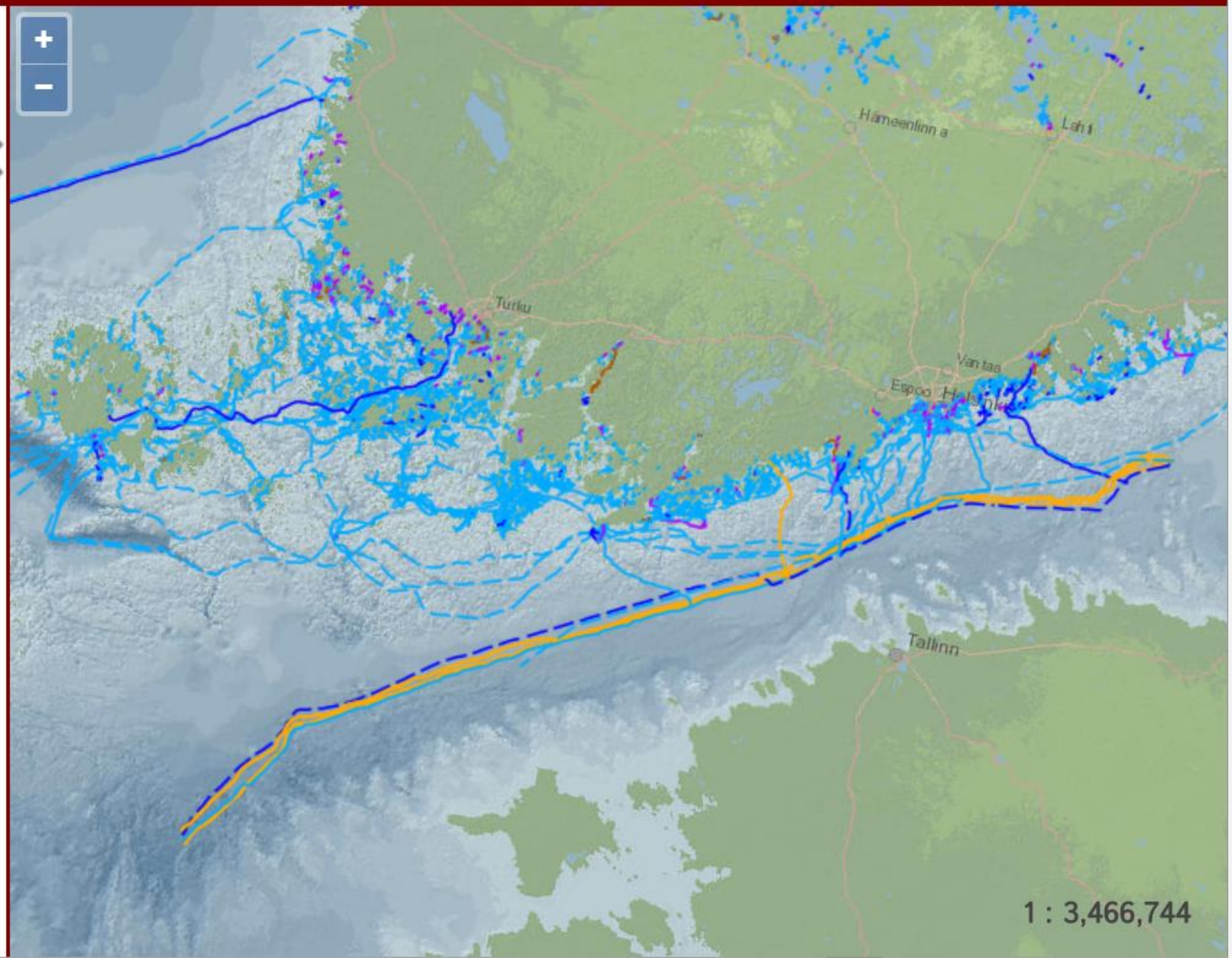
WFS

Lack of common language

MSP input data | MSP output data

Collapse layer list | Hide all layers

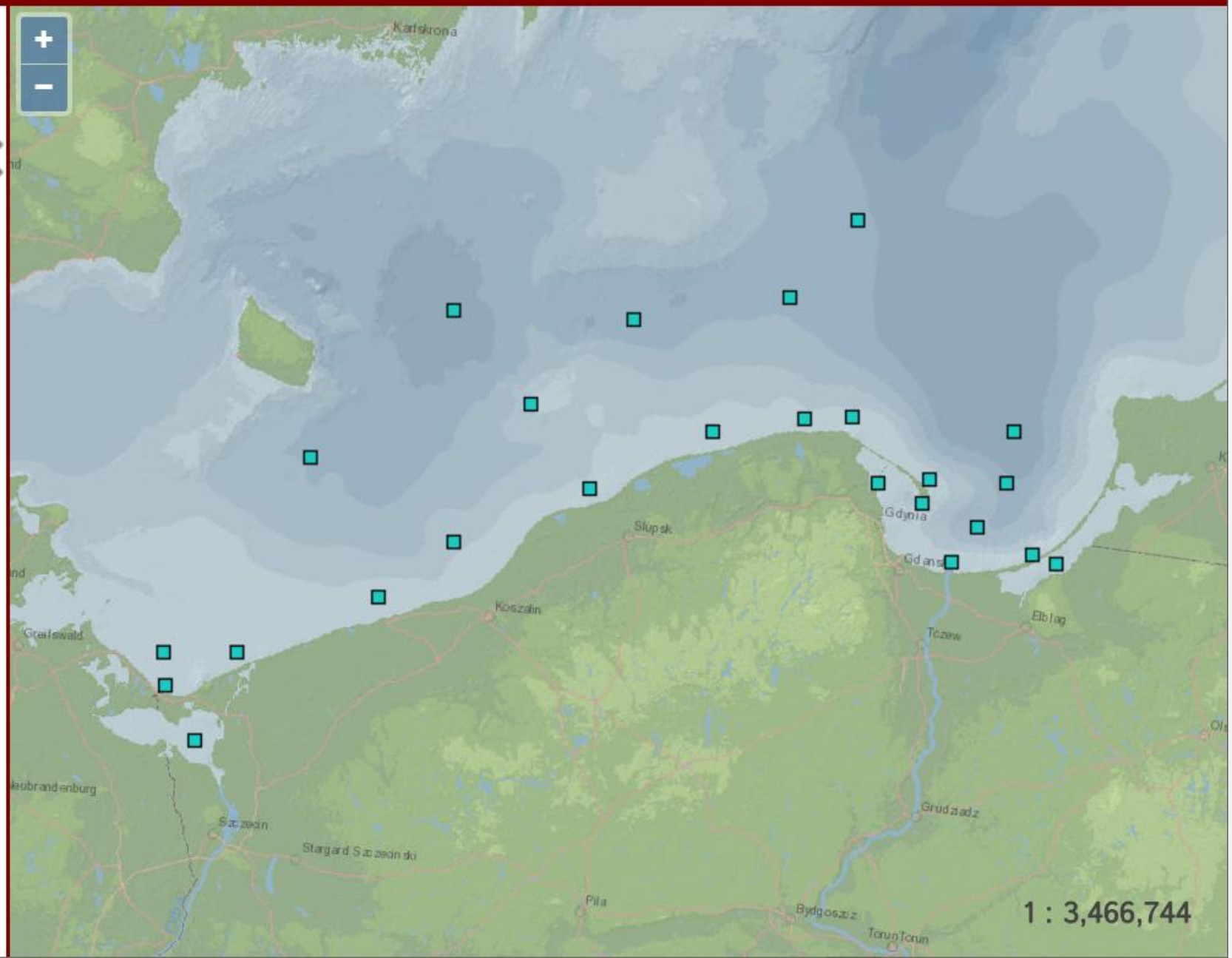
- Estonia
- Finland
  - Johdot ja putkilinjat (WFS)
  - Johdot ja putkilinjat (WMS)
    - Sähkö - matalajännite
    - Sähkö - korkeajännite
    - Tietoliikenne
    - Kaasu
    - Vesi
    - Viemäri
    - Tuntematon johto
    - Tuntematon putki
    - Öljy
    - Köysirata
- Germany
- Latvia
- Sweden



MSP input data | MSP output data

Collapse layer list | Hide all layers

- Scientific research
  - Measuring stations / networks
    - Germany
    - Poland
      - [x] INSPIRE Urządzenia - PMŚ - Monitoring środowiska morskiego Bałtyku 2008 (urządzenia) WMS
      - [ ] INSPIRE Urządzenia - PMŚ - Monitoring środowiska morskiego Bałtyku 2009 (sieć) WMS
      - [ ] INSPIRE Urządzenia - PMŚ - Monitoring środowiska morskiego Bałtyku 2009 (program) WMS
      - INSPIRE Urządzenia - PMŚ -



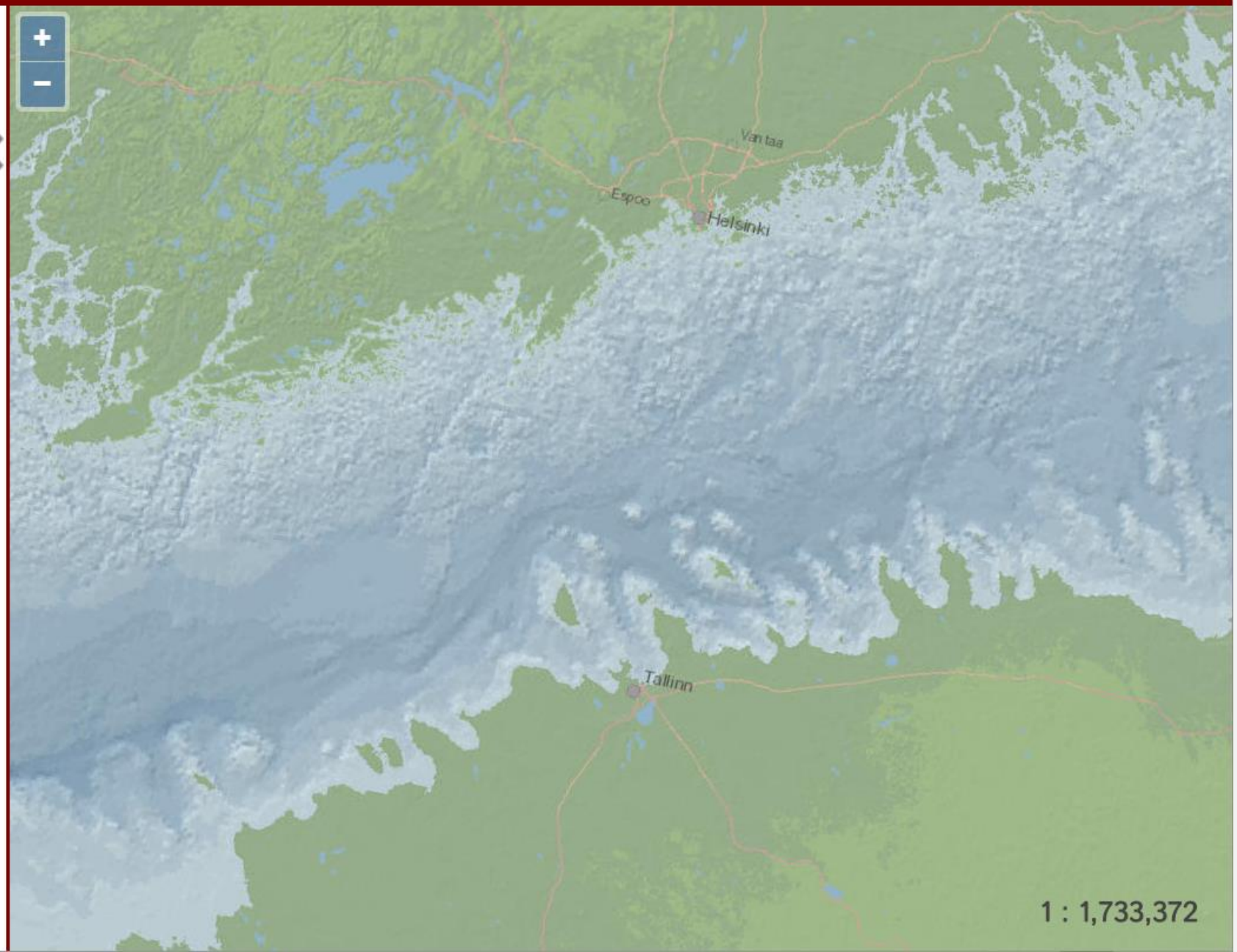
Lack of common symbology

Example: IMO routes

MSP input data | MSP output data

Collapse layer list | Hide all layers

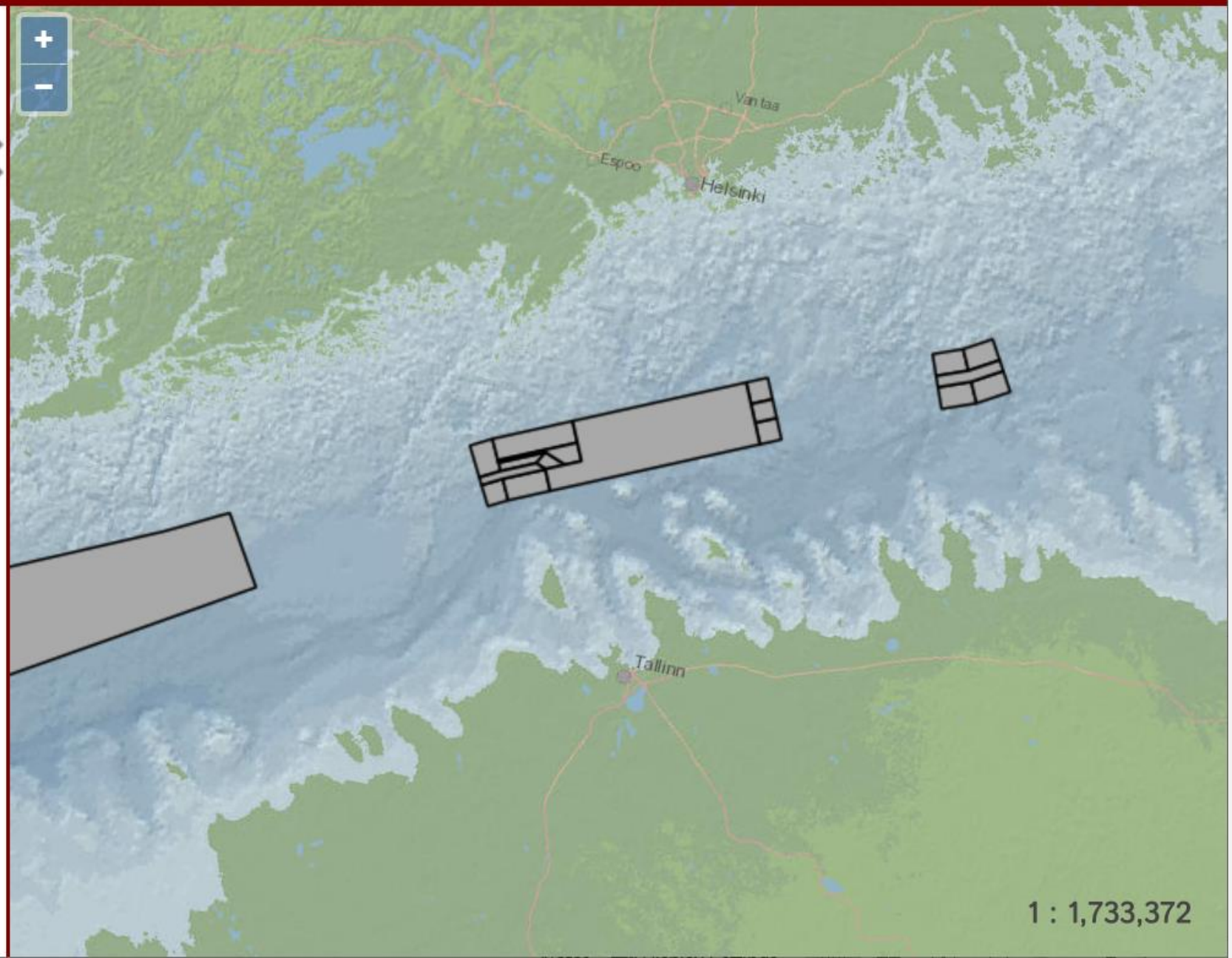
- Estonia
- Finland
  - Traffic Separation Scheme Crossing (WFS)
  - Traffic Separation Scheme Lane (WMS)
  - Traffic Separation Scheme Separator (WMS)
  - Traffic Separation Scheme Roundabout (WMS)
  - Traffic Separation Scheme Crossing (WMS)
- Germany
- HELCOM data
- Restricted areas for shipping
- Ports
- Fairways



MSP input data | MSP output data

Collapse layer list | Hide all layers

- Finland
  - Traffic Separation Scheme Crossing — WFS
  - Traffic Separation Scheme Lane — WMS
  - Traffic Separation Scheme Separator — WMS
  - Traffic Separation Scheme Roundabout — WMS
  - Traffic Separation Scheme Crossing — WMS
- Germany
- HELCOM data



BASEMAPS

Interreg Baltic Sea Region

EUROPEAN REGIONAL DEVELOPMENT FUND

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MSP input data

MSP output data

Collapse layer list

Hide all layers

Separator

Traffic Separation Scheme Roundabout WMS

Traffic Separation Scheme Crossing WMS

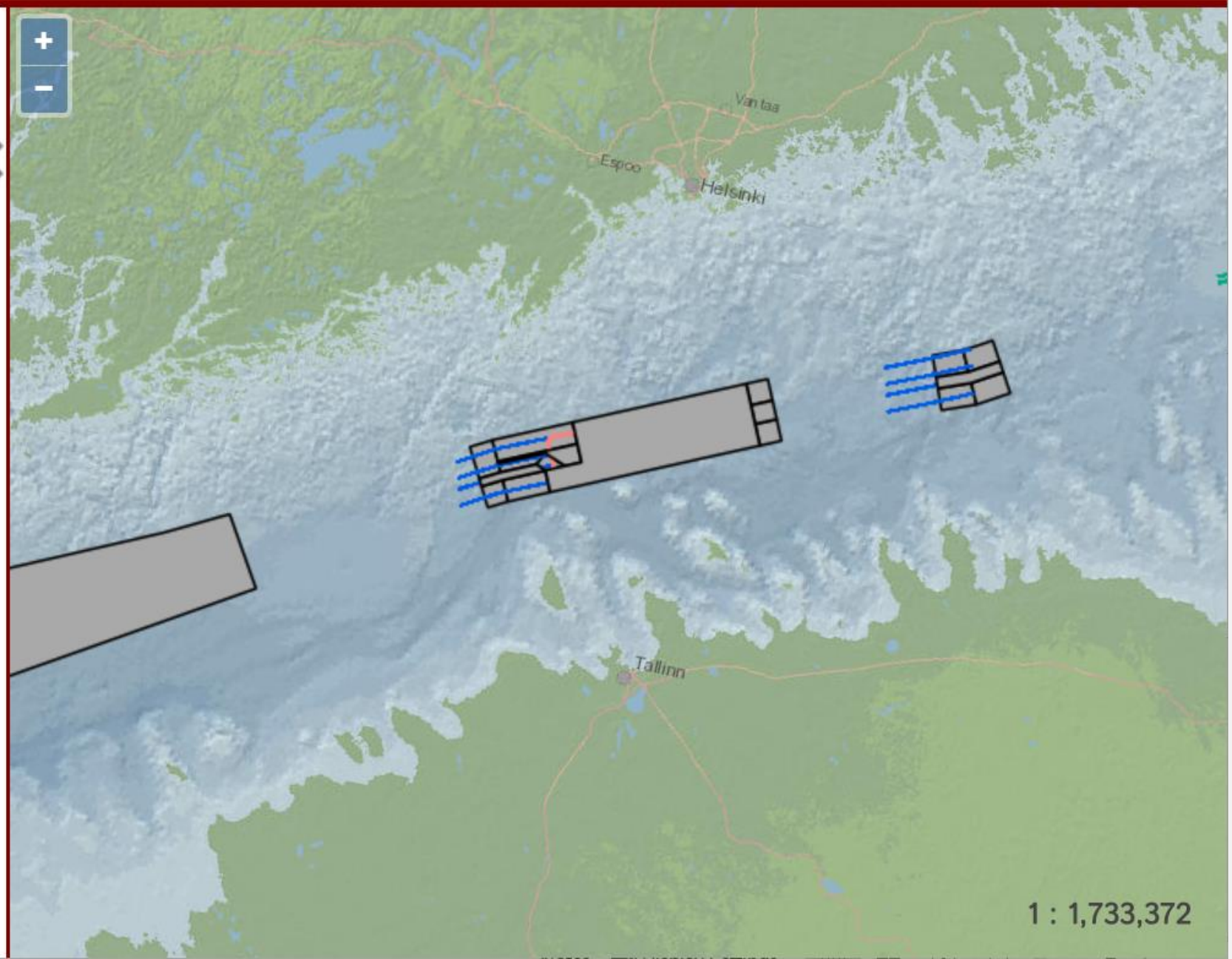
Germany

Maritime Features (Shipping Routes) WMS

- Traffic Separation Scheme
- Deep-Water Route
- Precautionary Area
- Inshore Traffic Zone
- Shipping Route, Recommended
- Shipping Route, Unclassified

HELCOM data

Restricted areas for shipping

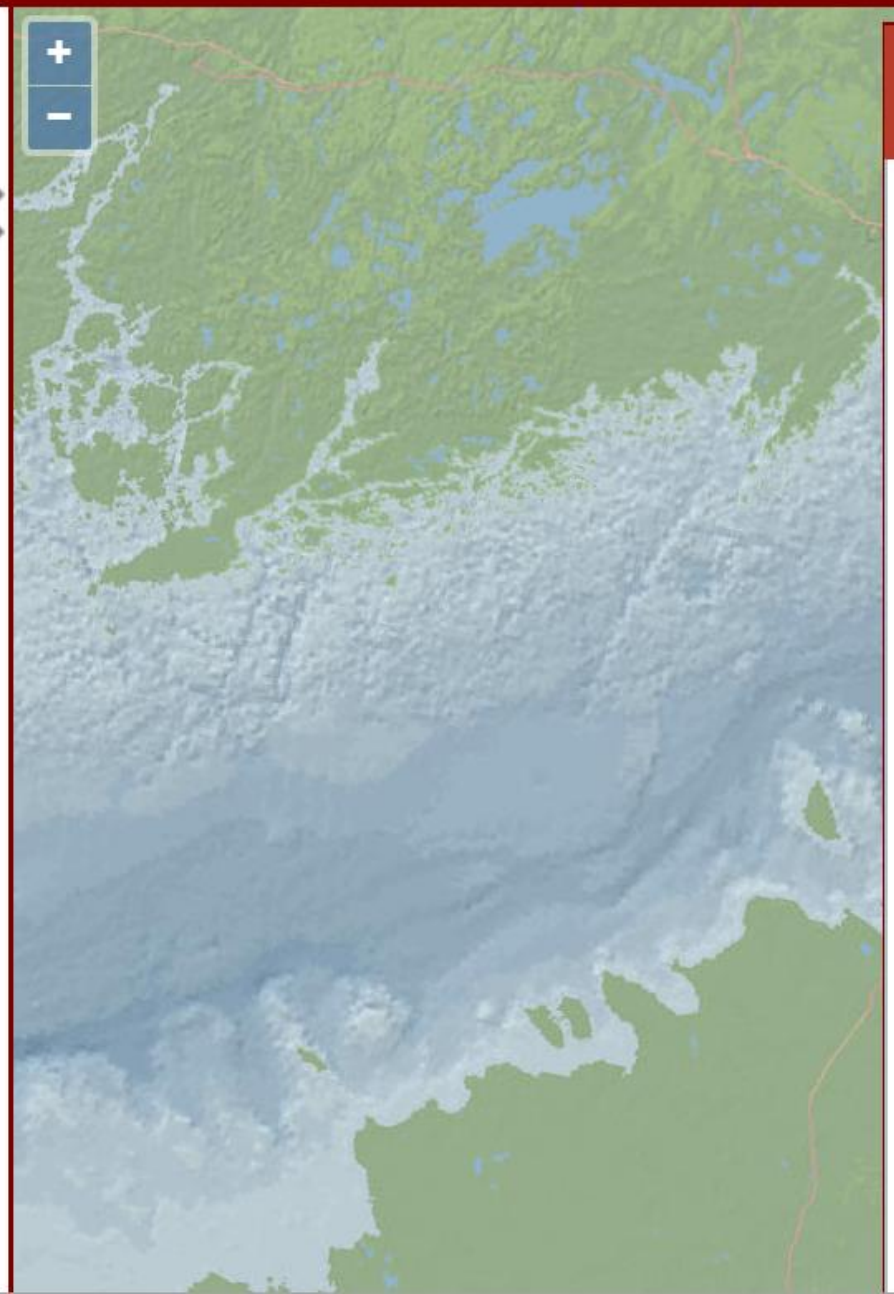


Example: fairways

MSP input data | MSP output data

Collapse layer list | Hide all layers

- Shipping traffic density
- IMO routes
- Restricted areas for shipping
- Ports
- Fairways
  - Estonia
    - Transport Link (WMS)
      - <all other values>
      - hynWatercourseLink
      - tnaAirRouteLink
      - tnaInstrumentApproachProcedure
      - tnaProcedureLink
      - tnaStandardInstrumentArrival
      - tnaStandardInstrumentDeparture
      - tncCablewayLink
      - tnraRailwayLink
      - tnroRoadLink
      - tnwWaterwayLink
  - Finland



Maritime transport -> Fairways -> Estonia -> Transport Link

	data originates from Estonian Topographic Database and from Estonian Civil Aviation Administration and from Estonian Maritime Administration.
Language support:	est,eng
Identification support:	true
Max display scale:	47247.02381
Min display scale:	No min display scale limit or information about it is not provided

Metadata:

Metadata format:	XML

MSP input data | MSP output data

Collapse layer list | Hide all layers

- Shipping traffic density
- IMO routes
- Restricted areas for shipping
- Ports
- Fairways
  - Estonia
    - Transport Link (WMS)
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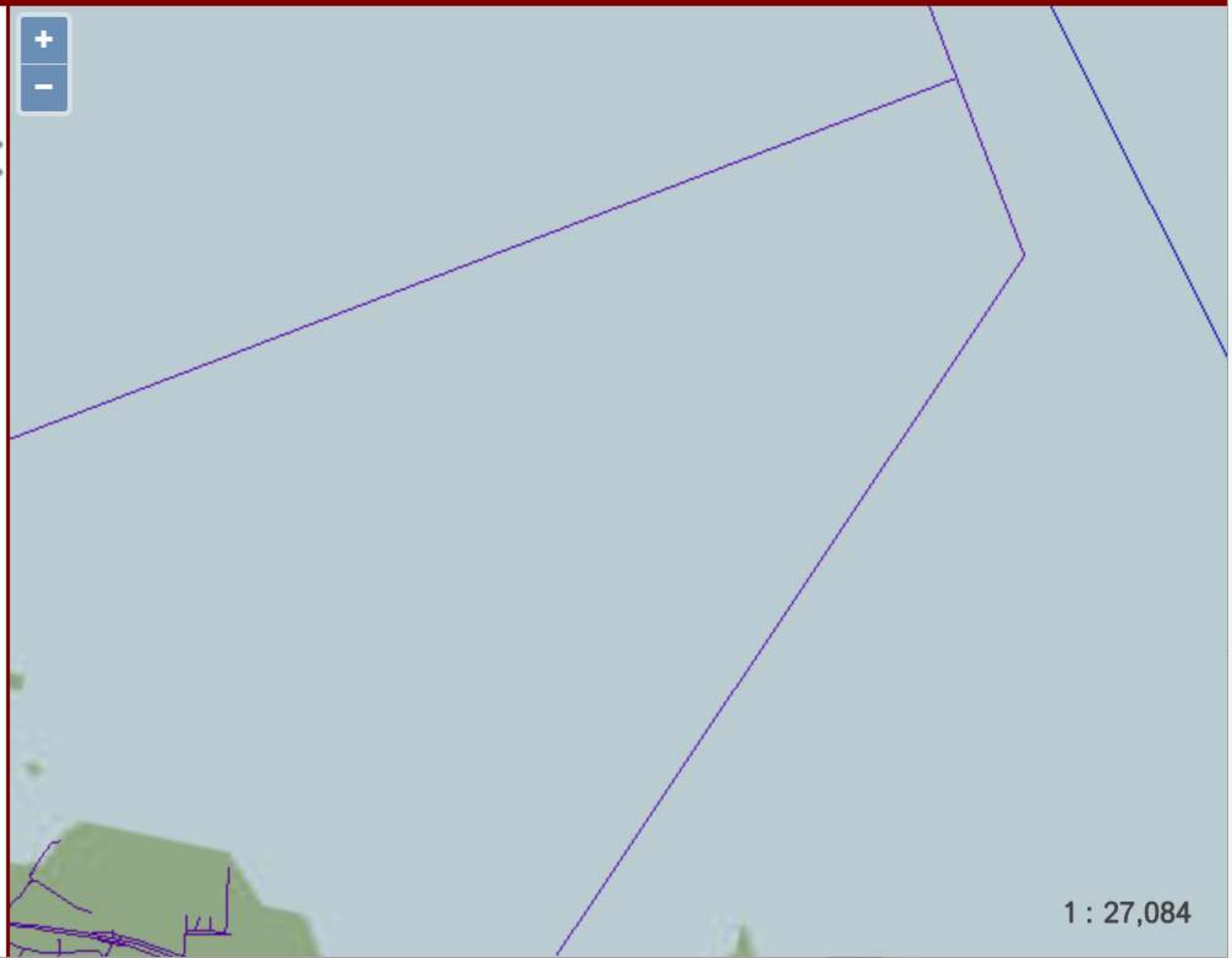
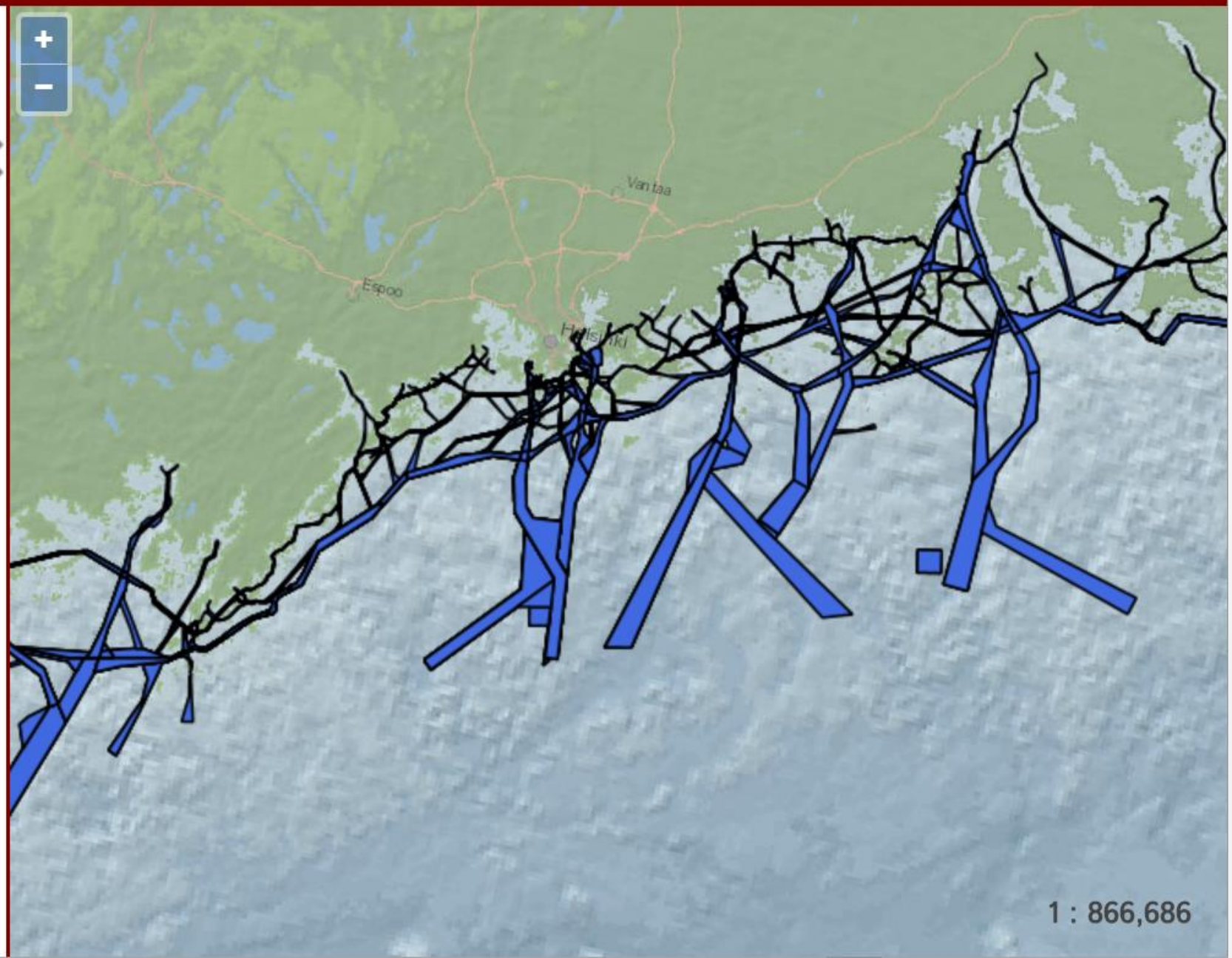
      - tnaStandardInstrumentDeparture
      - tncCablewayLink
      - tnraRailwayLink
      - tnroRoadLink
      - tnwWaterwayLink
  - Finland



MSP input data | MSP output data

Collapse layer list | Hide all layers

- Fairways
  - Estonia
    - Transport Link WMS
  - Finland
    - Fairway Area WMS
- Ferry lines / routes / Motorways of the seas
- Roadsteds / port raid protection zones
- Anchorages
- Dredging
- Dumping
- Nature protection
- Military training
- Raw material extraction
- Scientific research



The future

Board member at OGC

WFS 3.0 — Get Excited? Yes!

Chris Holmes Following

Dec 8, 2017 · 6 min read

Well, get excited if you're deep in to geospatial and open standards—I'm pretty sure a majority of the world would find this booooring.

But that's ok. In this post I want to bring attention to the great work being done on WFS 3.0 specification from the Open Geospatial Consortium (OGC). The first awesome thing you'll notice is that link goes to a GitHub repo, where the specification is being actively worked on, and anyone can join in and contribute. In general the core standard so far gets a whole lot right, and I believe has potential to bring much more interoperability to the geospatial

GitHub

BASEMAPS

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EUROPEAN UNION

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- Nature protection
- Military training
- Raw material extraction
- Scientific research
- Cables and pipelines
- Tourism and recreation
- Underwater cultural heritage

DEMO

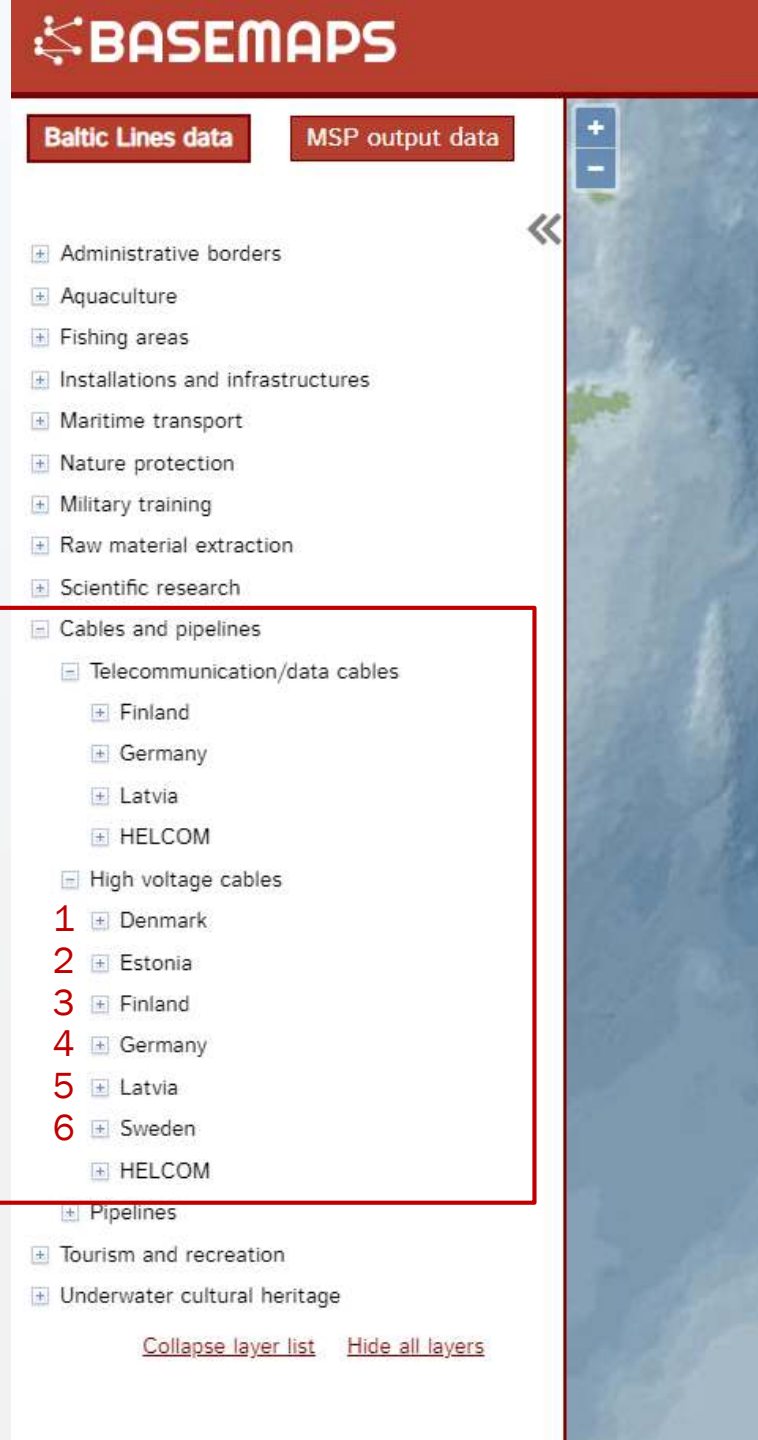
Exercise 1

1. How many countries have cables datasets of any kind available in BASEMAPS?
2. Show Swedish and Danish Natura2000 data and zoom in around Copenhagen; notice the differences in symbology and language
3. Is there any aquaculture data available in BASEMAPS in the Gulf of Finland area?
4. Is there any data set available in BASEMAPS in Germany about sediment extraction?
5. What's the OBJECTID of Natura2000 east of Copenhagen?
6. Download the Estonian Territorial Waters dataset from the WFS (Web Feature Service)
7. Is there a link to metadata in the wrecks dataset under Underwater culture heritage in Latvia?
8. What's the data host organization of the Lithuanian national border dataset?
9. What's your general impression of BASEMAPS?

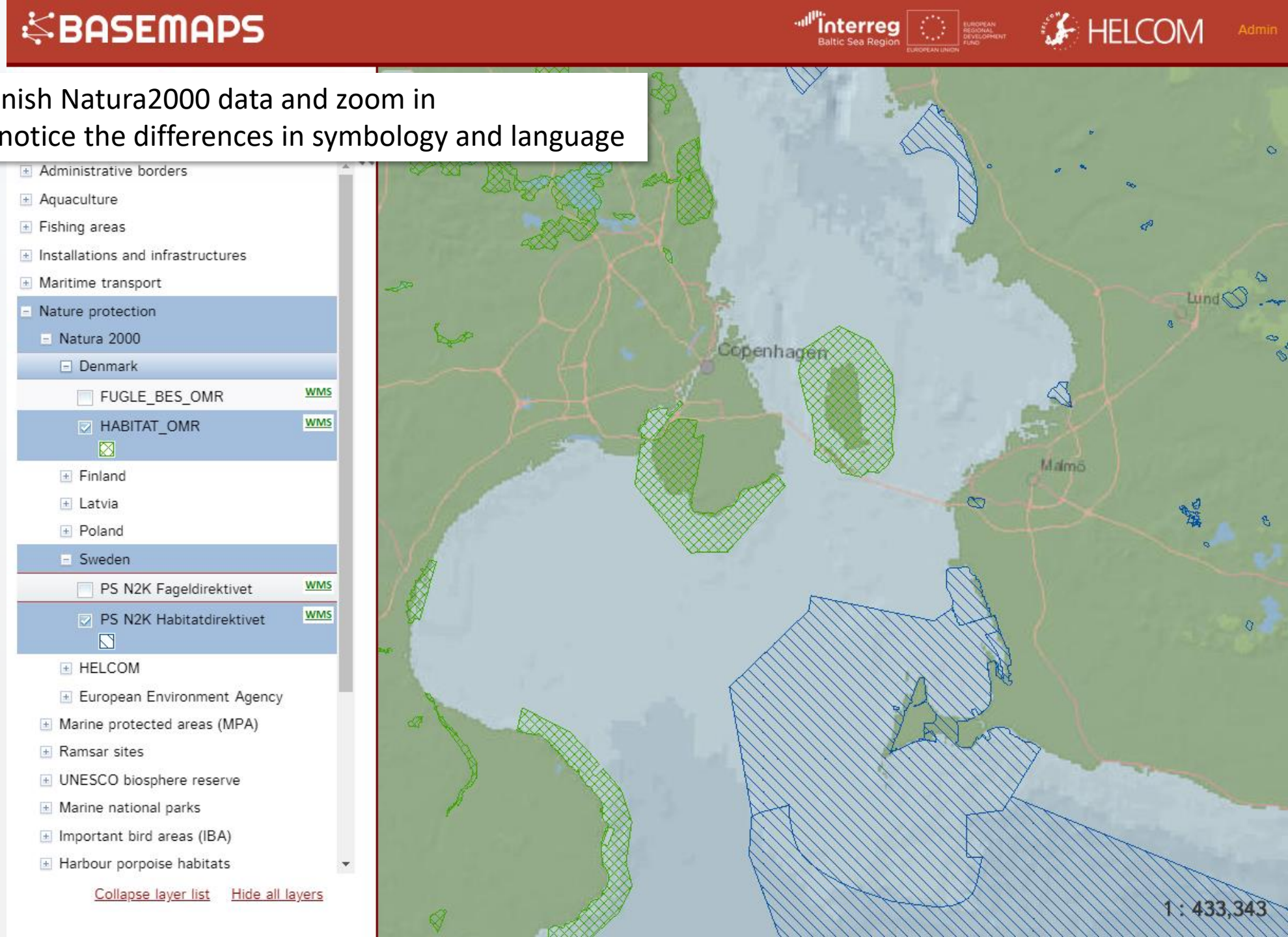
Answers

1 How many countries have cables datasets available in BASEMAPS?

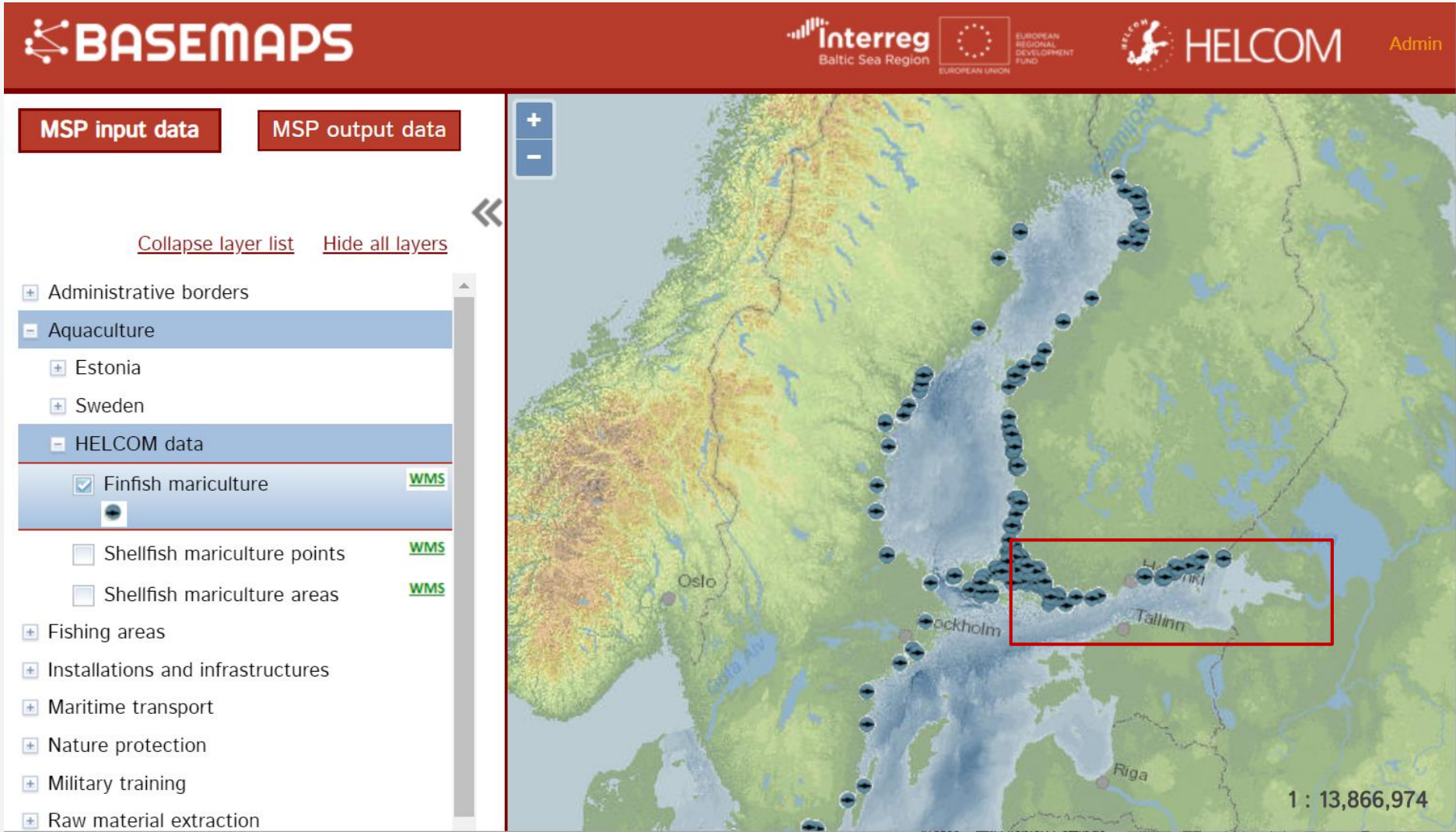
Answer: 6



2 Show Swedish and Danish Natura2000 data and zoom in around Copenhagen; notice the differences in symbology and language

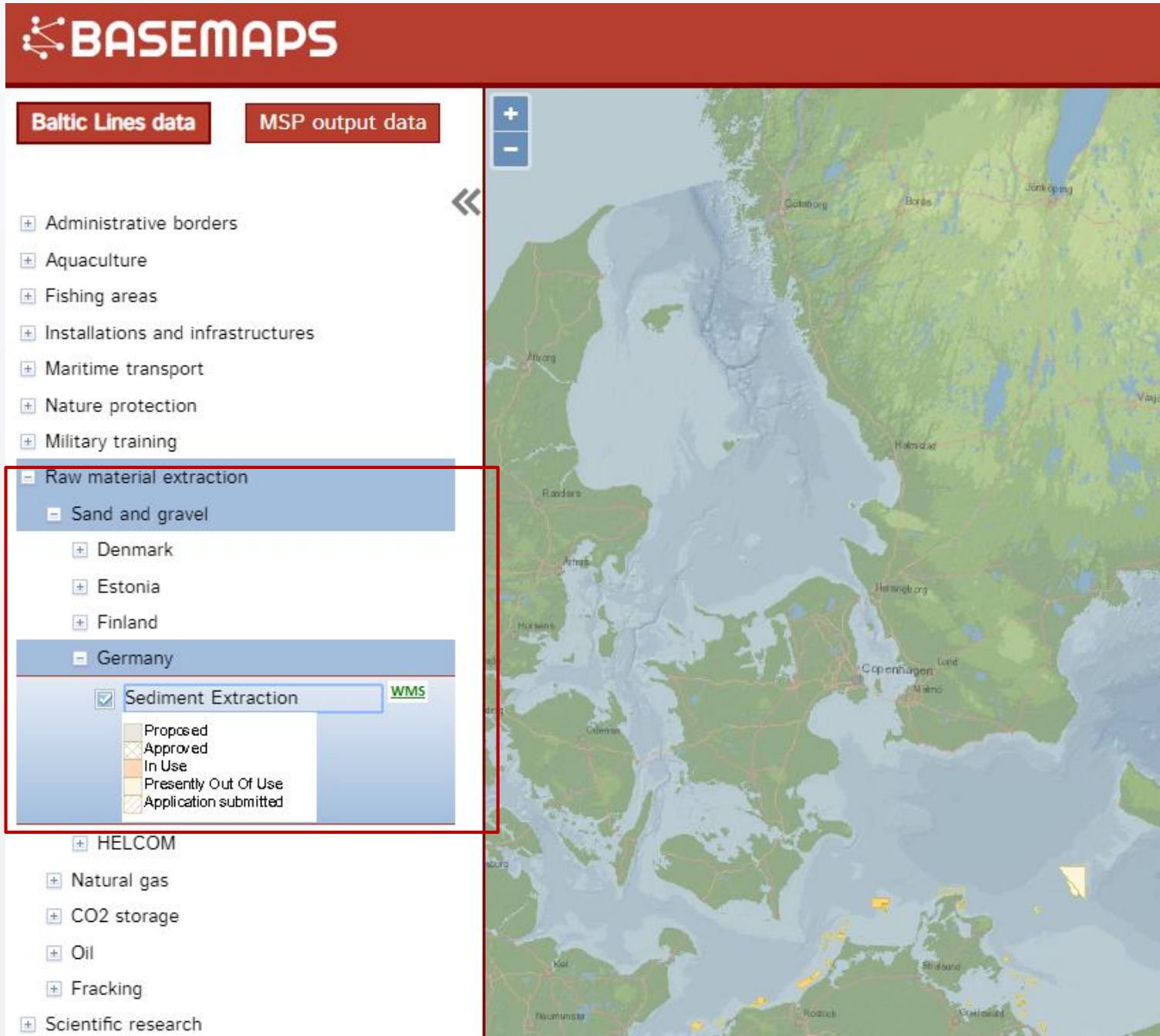


3 Is there any aquaculture data available in BASEMAPS in the Gulf of Finland area?

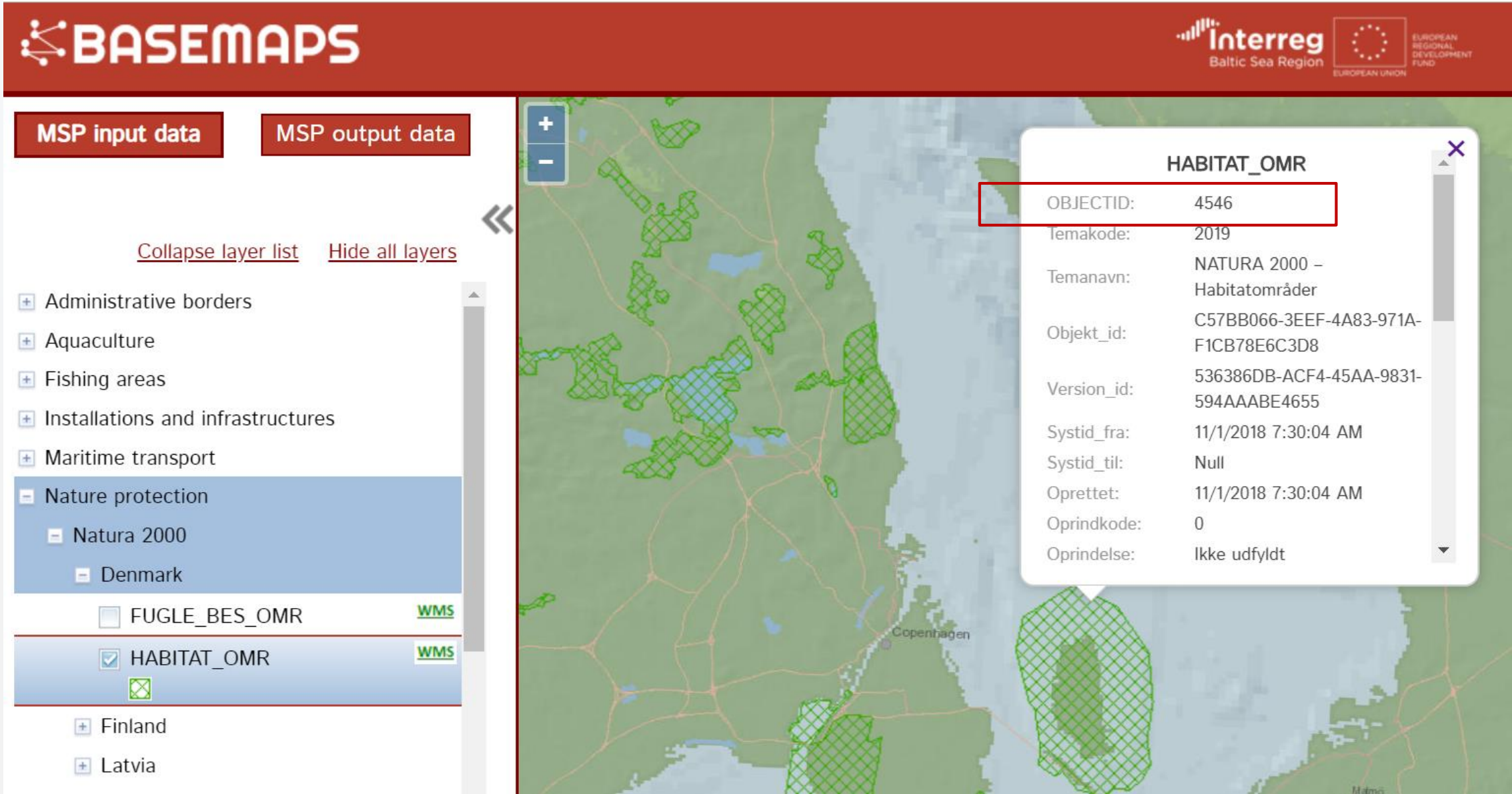


4 Is there any data set available in BASEMAPS in Germany about sediment extraction?

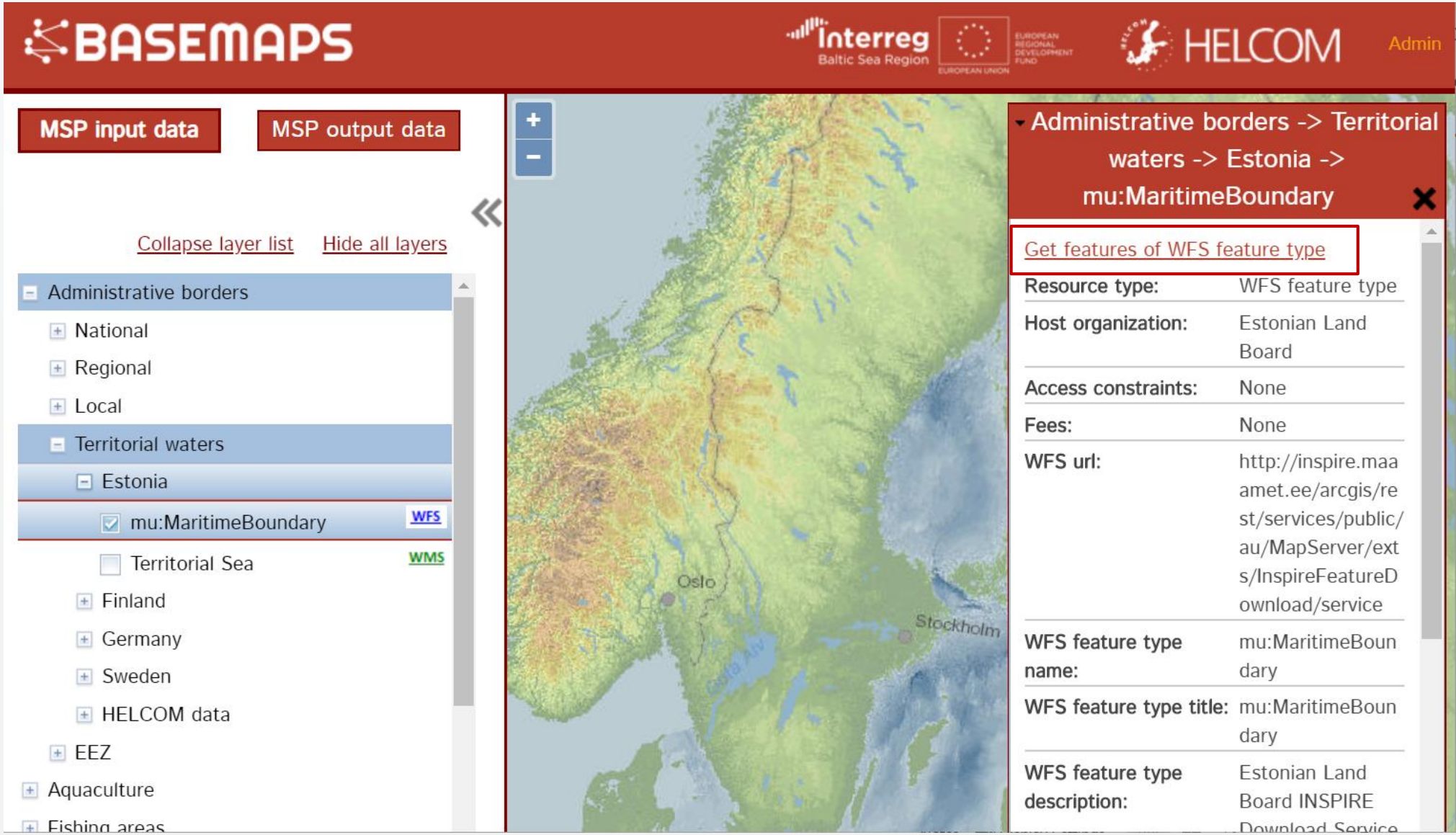
Answer: Yes



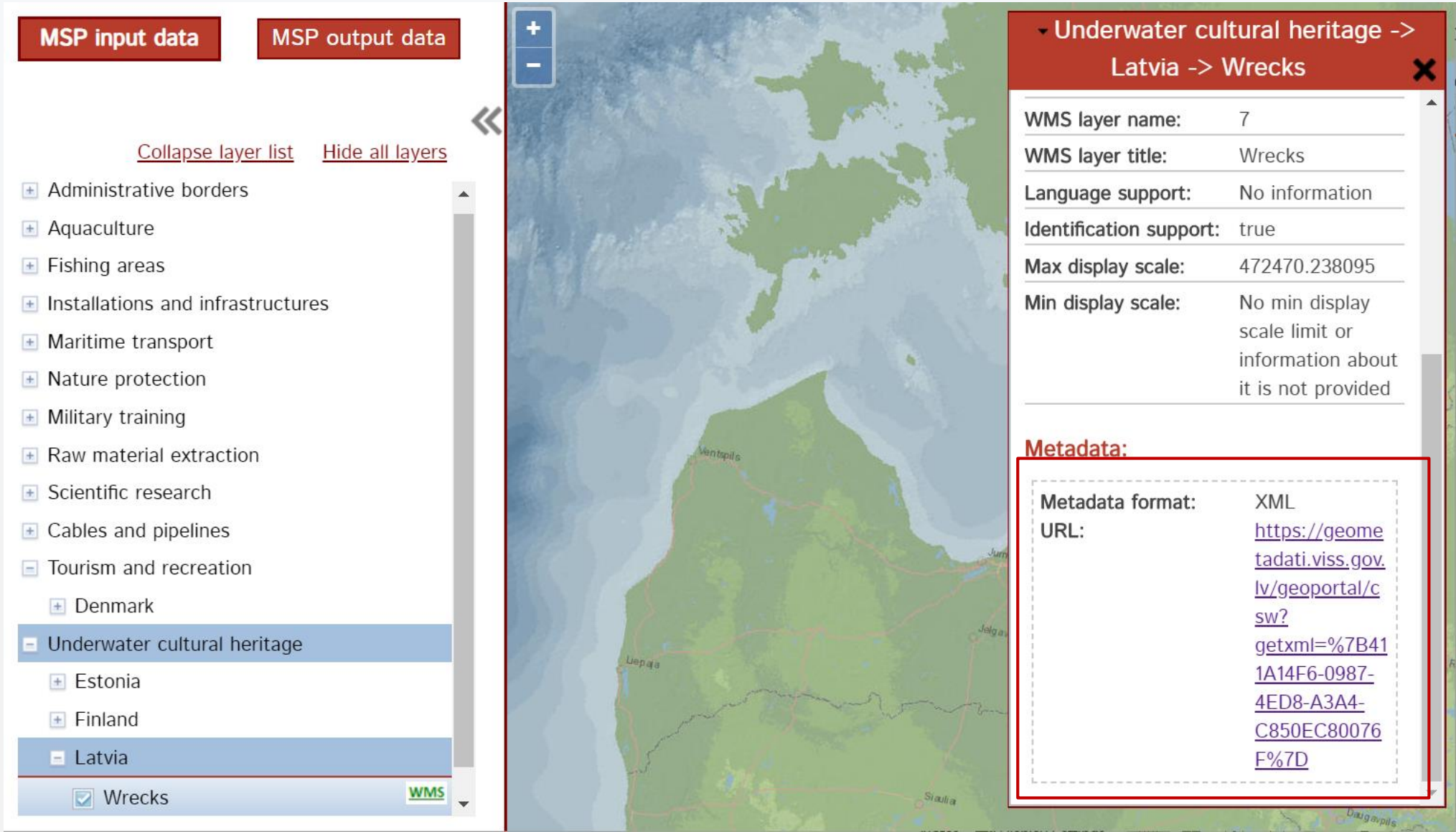
5 What's the OBJECTID of Natura2000 - Habitat east of Copenhagen?



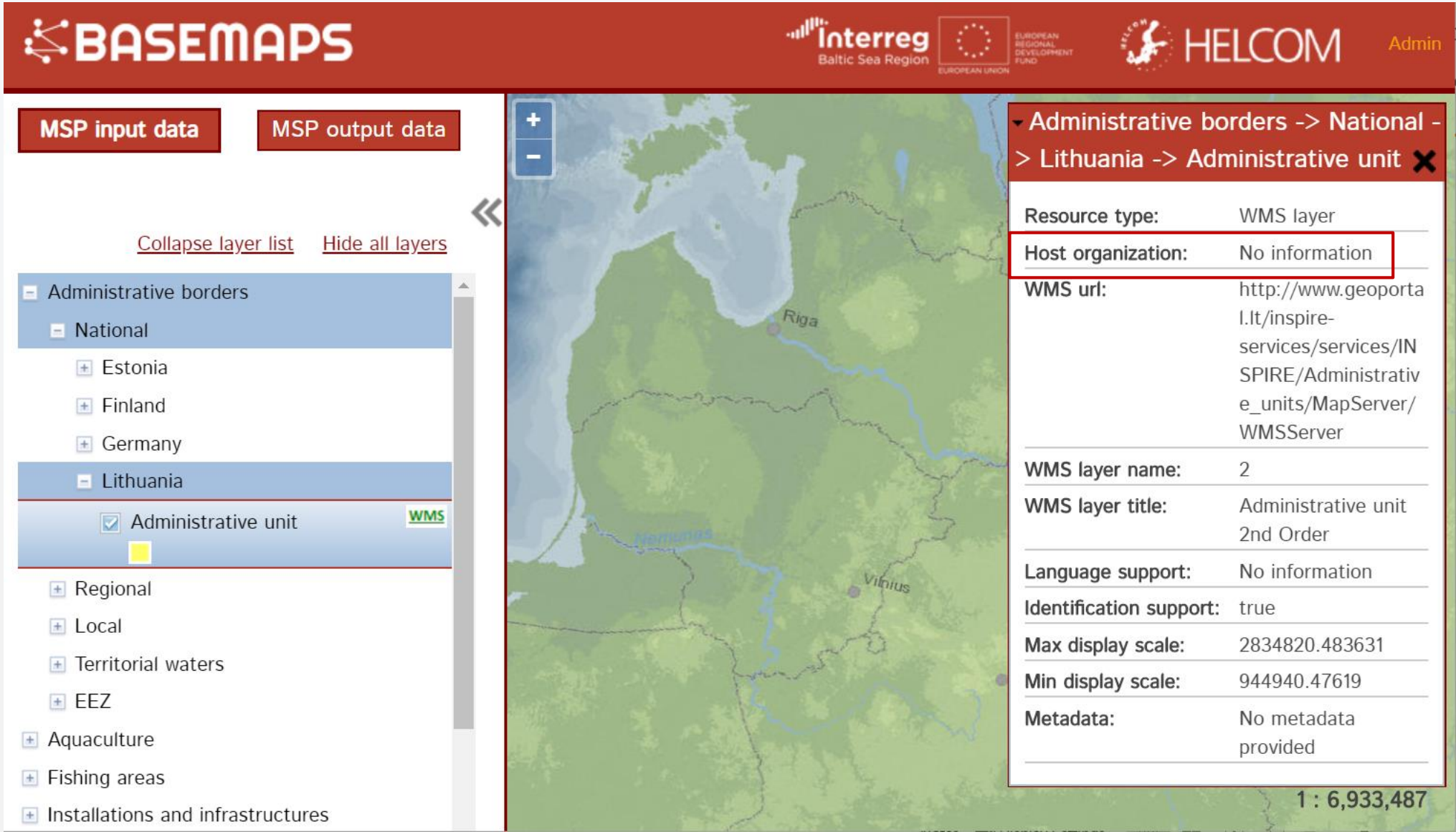
6 Download the Estonian Territorial Waters dataset from the WFS (Web Feature Service)



7 Is there a link to metadata in the wrecks dataset under Underwater culture heritage in Latvia?



8 What's the data host organization of the Lithuanian national border dataset?



9 What’s your general impression of BASEMAPS?

Exercise 2

https://bit.ly/2SMU68Q