



EMODnet

 European Marine
Observation and
Data Network

Technical Update EMODnet Human Activities

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**16th EMODnet Technical Working Group
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The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund.

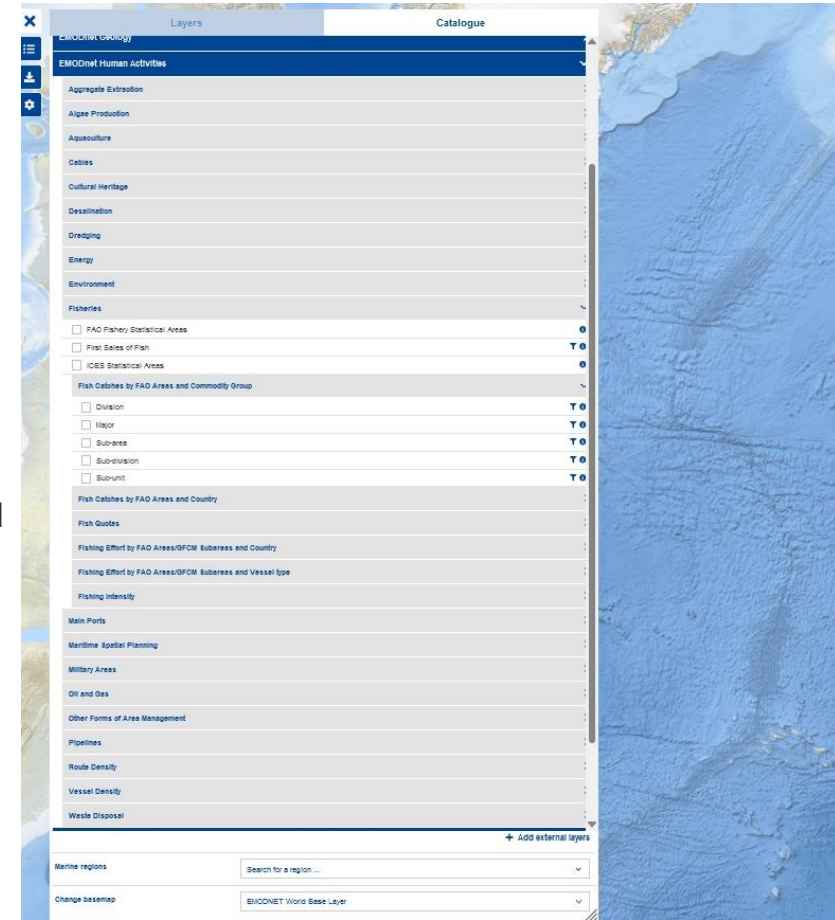
Datasets and Products Useability

Layer Presentation

- Current map viewer layer structure clear
- The addition of sub-theme was a necessary improvement.
(Don't foresee need for further sub themes for HA datasets)

- Alpha sorting the layers is sensible

Would be an improvement if there was flexibility to define layer order for custom situations. E.g. Fish Catches/Effort FAO areas should be ordered from largest to smallest area

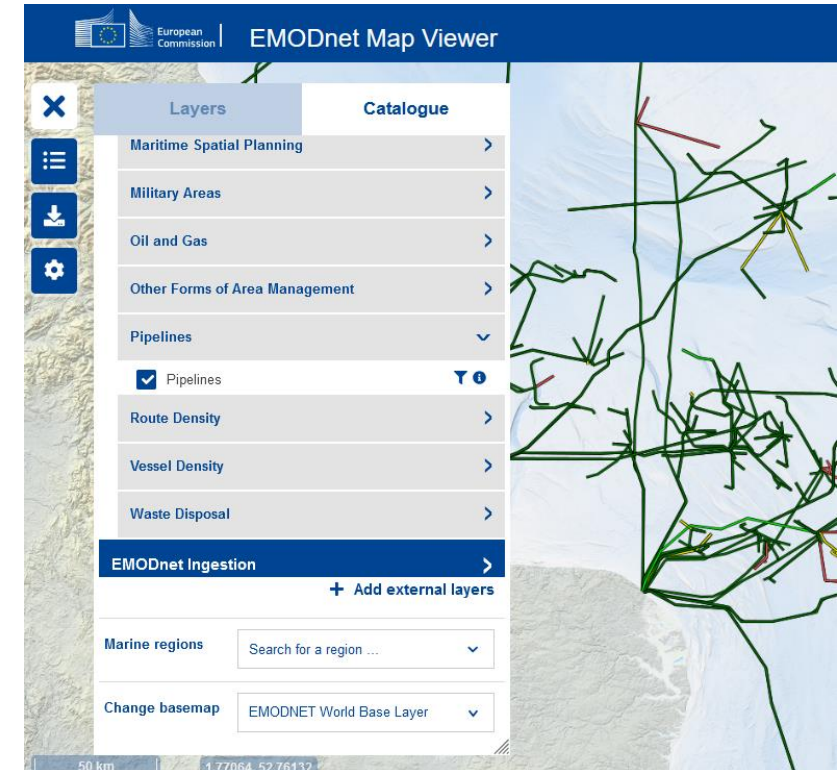
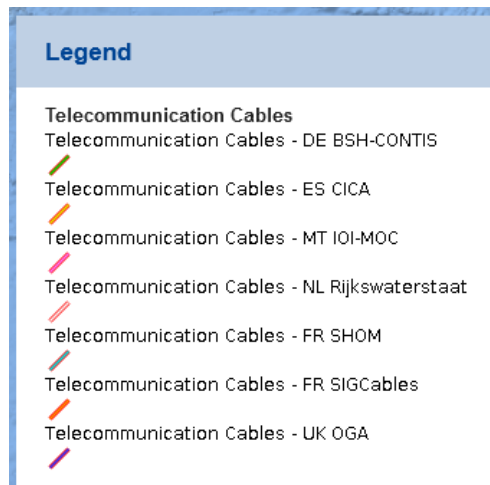


- Info button clear, and easy to access the data download. Human Activities responsible for this information to be clear and up to date.

Datasets and Products Useability

Feature styling

- Human Activities to review styling of polygon/line dataset to aid user in distinguishing separate features.
Try to make styles unique across layers to aid clarity when viewing multiple layers. This was the initial aim, but needs review
E.g. Pipeline classification not easily discernible by the user
- Legend presentation uses a static image for more control and provide a clearer legend
This allows us to add footnotes to give more info about a legend where necessary.
E.g. Bathing water
- GeoServer group layers show auto generated image
E.g. Telecommunication Cables



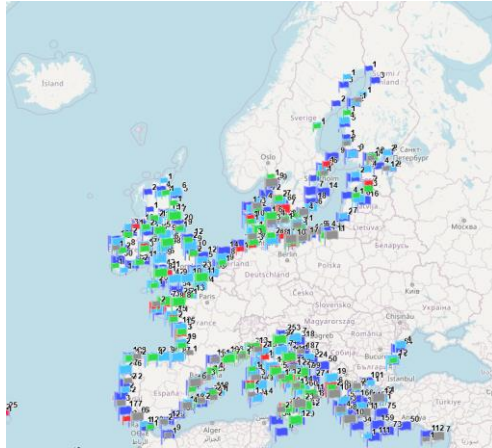
Datasets and Products Useability

Feature styling

- Point features at small scales unclear.

Could the viewer use aggregation to give a clearer picture of the data at smaller scales?

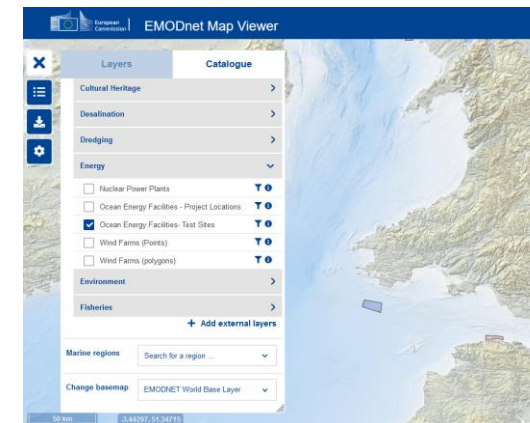
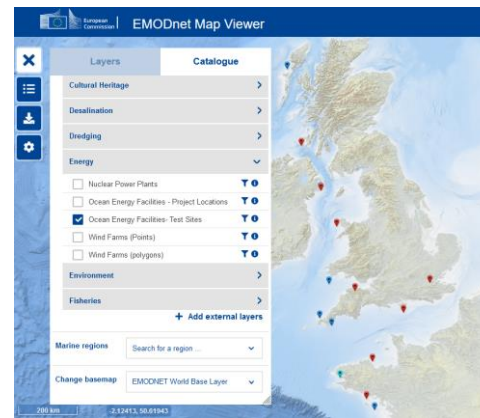
E.g. State of bathing Waters (This was implemented in similar way on the old Human Activities portal map)



- Small polygons show as points at smaller scales

E.g. Ocean Energy Test Sites.

HA to implement where necessary on other data layers



Datasets and Products Useability

Returning attribute information

- All layers use HTML template (Apache FreeMarker) to present data in clear harmonised way
 - Showing a descriptive label for attribute field headings
 - Data “not available” shown in consistent way
 - Areas, distances etc should show unit
- Need standardised date format E.g. Maritime Spa Plan Areas show American format + time (Human Activities to look at)

MSP Spatial Plan Area	
Local ID	FI03001
Version ID	1
Official source	https://meriskenaariot.info/merialuesuunnitelma/en/merialuesuunnitelma-english/
Member state	Finland
Official title	Archipelago Sea and Southern Bothnian Sea / Saaristomeri ja Selkämeren eteläosa
Level of spatial plan	http://inspire.ec.europa.eu/codelist/LevelOfSpatialPlanValue/supraRegional
Plan type name	Marine spatial planning
Valid from	12/18/20, 12:00 AM
Valid to	12/18/30, 12:00 AM
Area (sq. km)	29705.76

- Footnotes added for more info E.g Main Ports traffic.

Offshore Installations	
Country	United Kingdom
ID	f36a9b11-b0c1-44b0-9ec5-aba59c04
Current status	Operational
Name	SULLOM VOE OIL TERMINAL
Category	TERMINAL
Function	SULLOM VOE OIL TERMINAL
Operator	n/a
Location blocks	n/a
Primary production	n/a
Weight sub-structure (tonnes)	n/a
Weight topside (tonnes)	n/a
Production start	n/a
Valid to	n/a
Water depth (m)	n/a
Distance from coast (m)	576.30
Remarks	n/a

Main Ports (Vessels Traffic by Tonnage 1987-2023)		
Port name	Boston	
Port ID	GBBOS	
Port code	UK_1GBBOS	
Country code	UK	
Year	2019	
Gross tonnage	Number	Tonnage
From 10 000 to 19 999 gross tonnage	n/a	n/a
From 4 000 to 4 999 gross tonnage	1	4
From 3 000 to 3 999 gross tonnage	2	7
From 2 000 to 2 999 gross tonnage	120	293
From 1 000 to 1 999 gross tonnage	297	468
From 500 to 999 gross tonnage	n/a	n/a
From 100 to 499 gross tonnage	1	0
Total	421	772

(Tonnage = tonnes x 1000)

Datasets and Products Useability

Returning attribute information

- All data attributes collected are generally shown, although for clarity some less useful/incomplete ones are hidden
Full datasets are available via file download from CP Viewer and WFS
- Dataset with richer attributes have been aggregated for ease of use (E.g. Fish Sales,)
Full datasets are available via file download from CP Viewer and WFS
- Some datasets return a lot of data that the user can't easily make sense of (and map viewer can't return all data attributes as well)
Map layers have been created with aggregated data E.g. Fishing Effort
(Old Human Activities portal map returned all data and used collapsible elements)

Area Code	27.4			
Level	SUBAREA			
Year	2018			
	Fishing Days	Days at Sea	GT Fishing Days	KW Fishing Days
Belgium				
Beam trawlers	5918.2	4795.3	914621	2975707
Demersal trawlers and/or demersal seiners	1826.21	2061.06	287238	934541
Vessels using active and passive gears	311.54	314.99	14838	68670
Germany				
Ireland				
Netherlands				
Sweden				

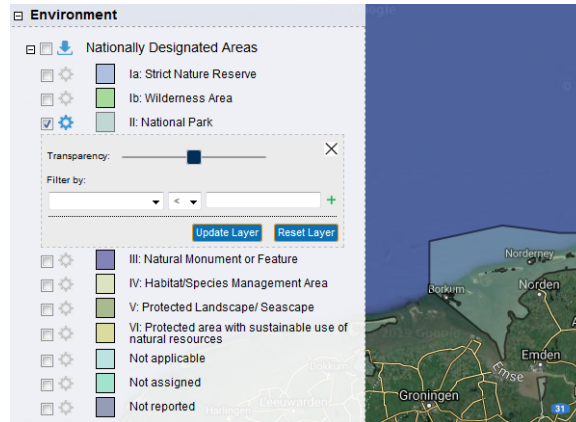
Area code	27.4			
Level	SUBAREA			
Vessel type	Fishing days (2018)	Days at sea (2018)	GT Fishing days (2018)	KW Fishing days (2018)
Beam trawlers	74,354.42	78,175.09	11,358,408.20	35,371,310.78
Demersal trawlers and/or demersal seiners	60,566.00	70,631.37	142,035,155.64	30,862,180.64
Dredgers	8,687.54	9,752.13	731,044.64	2,224,203.01
Drift and/or fixed netters	5,400.36	5,586.08	3,247,227.94	946,059.62
Passive Gears	2,637.68	2,861.49	8,283.34	289,945.31
Pelagic trawlers	4,059.67	5,708.28	58,513,308.88	12,713,459.39
Purse seiners	60.00	60.00	42,300.00	165,600.00
Vessels using active and passive gears	3,185.44	3,761.36	461,021.32	964,486.51
Vessels using hooks	7,393.96	8,426.99	34,629,203.59	1,917,703.30
Vessels using polyvalent active gears only	1,526.48	1,679.53	6,120,294.85	298,645.48
Vessels using polyvalent passive gears only	8,063.59	8,357.39	141,712.37	628,967.04
Vessels using pots and/or traps	62,288.72	70,033.36	3,838,567.68	6,660,917.93

First Sales of Fish			
Port code	NLIJM		
Port name	Ijmuiden/Velsen		
Country	Netherlands		
Date	2023 - May		
Bivalves and other molluscs and aquatic invertebrates: Molluscs and aquatic invertebrates, other	Value (€)	Volume (kg)	Price (€/kg)
<i>Whelk (Size 1 FRE Whole/Gutted)</i>	1705.52	891.00	1.91
Bivalves and other molluscs and aquatic invertebrates: Scallop	Value (€)	Volume (kg)	Price (€/kg)
<i>Great Atlantic scallop (Size 1 FRE Whole/Gutted)</i>	862.28	164.00	5.26
Cephalopods: Cuttlefish	Value (€)	Volume (kg)	Price (€/kg)
<i>Common cuttlefish (Size 1 FRE Whole/Gutted)</i>	3331.96	764.50	4.36
<i>Common cuttlefish (Size 4 FRE Whole/Gutted)</i>	3695.47	1228.00	3.01
Cephalopods: Octopus	Value (€)	Volume (kg)	Price (€/kg)
<i>Common octopus (Size 1 FRE Whole/Gutted)</i>	20.11	13.00	1.55
Cephalopods: Squid	Value (€)	Volume (kg)	Price (€/kg)
<i>European flying squid (Size 1 FRE Whole/Gutted)</i>	0.28	4.00	0.07
<i>European squid (Size 1 FRE Whole/Gutted)</i>	85706.12	5317.00	16.12
Crustaceans: Crab	Value (€)	Volume (kg)	Price (€/kg)
<i>Chinese mitten crab (Size 1 FRE Whole/Gutted)</i>	8058.83	2640.50	3.05

Datasets and Products Useability

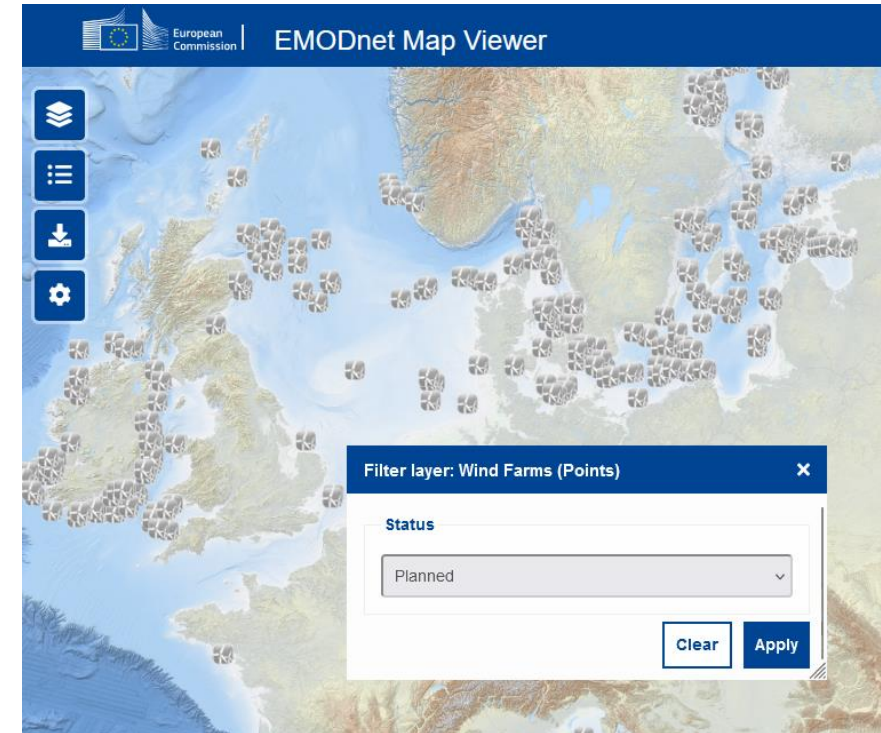
Filtering

- Currently, just one filter implemented (usually the data classification attribute)
- User may want to drill down further to get a specific picture of the data.
Should expand filtering to include more attribute fields (To review and add)
- Old Human Activities portal map configured filtering for relevant filterable attributes . Enabled filtering on multiple fields with AND/OR queries and >, < for numeric data. E.g. Wind farms > x km from coast



Not available on the CP map viewer, maybe complicated to implement

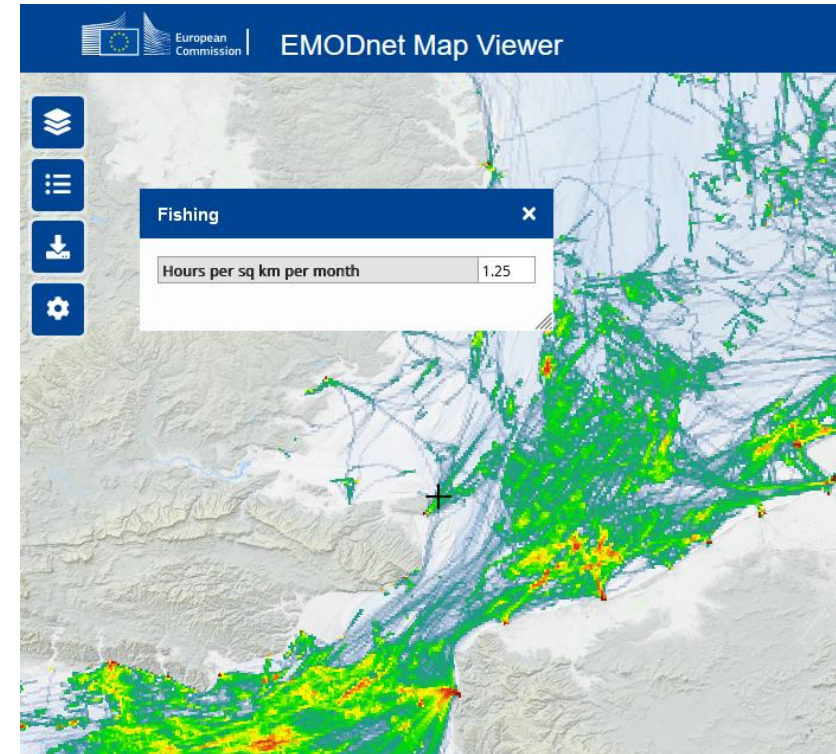
- Need to pre-filter by attributes to reduce number of data records initially returned with *GetFeatureInfo*
E.g. Fish catches, Ports traffic



Datasets and Products Useability

Vessel Density, Route Density

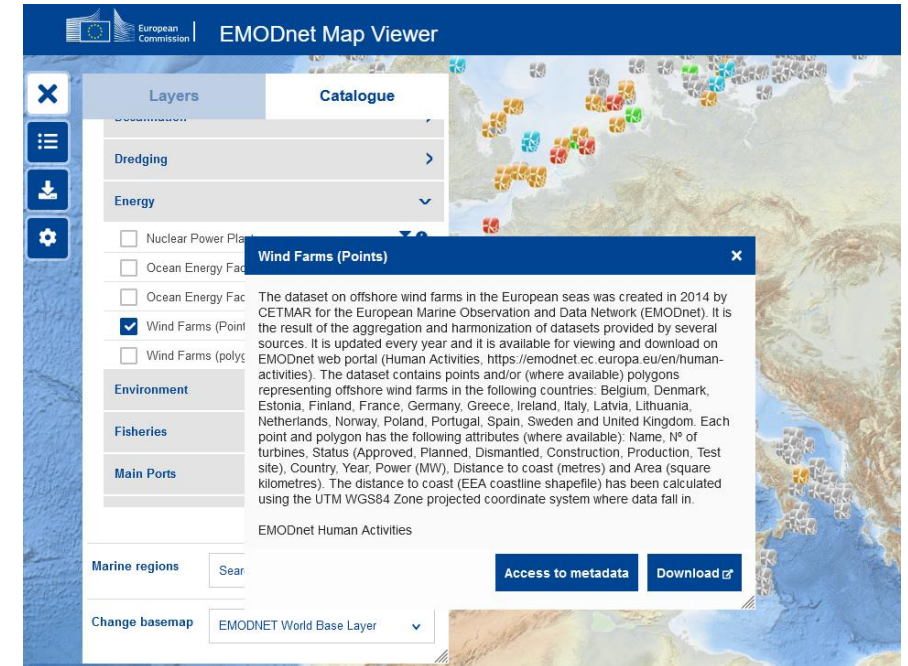
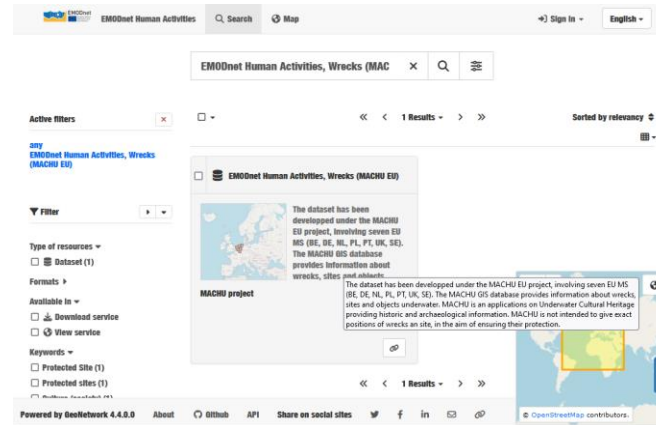
- Time series animation works well
 Would like to show the year when clicking feature to return values
- Download needs to be implemented for the user to get a subset of the data
 Human Activities to provide NetCDF files to facilitate this



Datasets and Products Useability

Data availability

- Indicating data not available
Important for Human Activities datasets to communicate that absence of data may not mean there is no data
How do we approach?
Info/metadata states regions/countries where the data has been collected
E.g. Wind Farms
- Reference data
We have datasets that are not available for download
E.g. Aquaculture site locations in Spain/Ship Wrecks (MACHU EU project)
Can we include on the Map Viewer for user reference?
Or must all data be useable i.e. downloadable





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