


EMODnet
European Marine Observation and Data Network
Your gateway to marine data in Europe

The European Atlas of the Seas
http://ec.europa.eu/maritimeaffairs/atlas/maritime_atlas/

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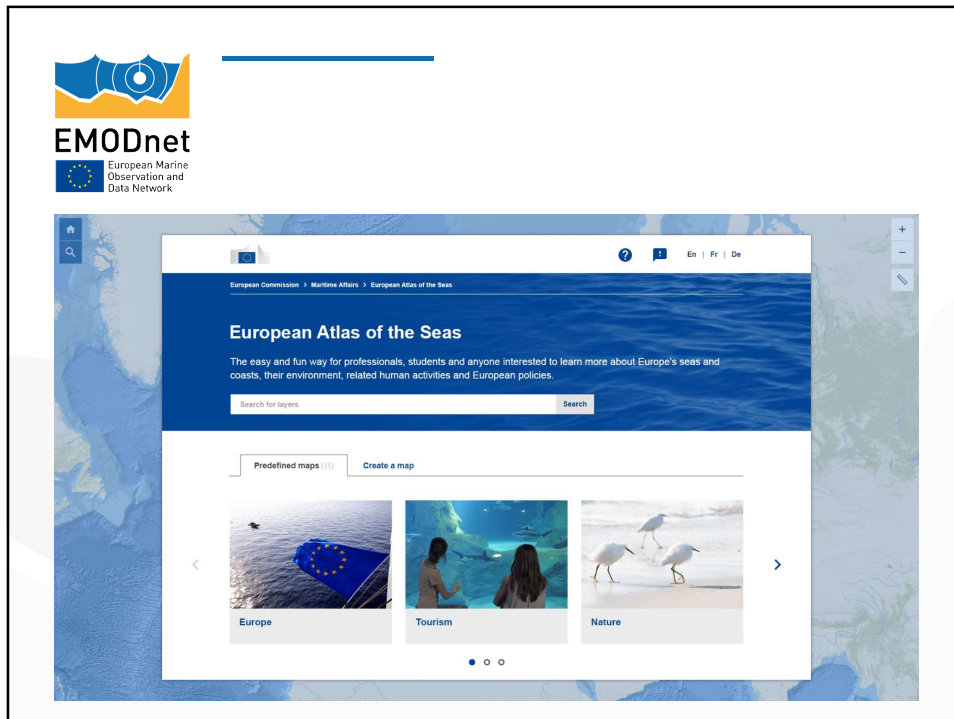
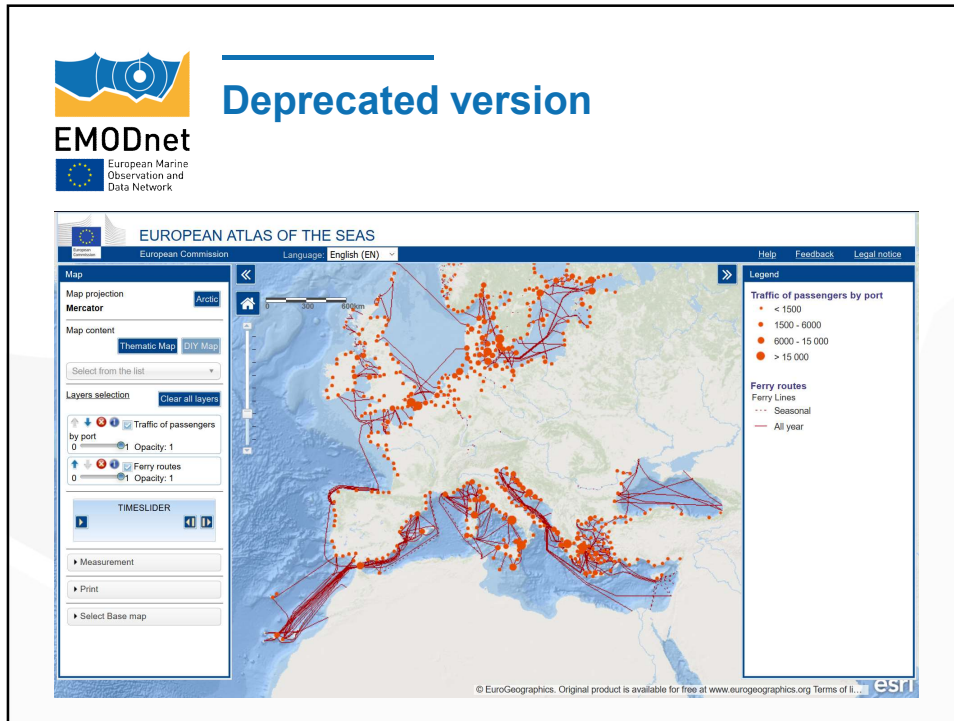
Target Users

General public
Easy to use & Accessible

NGOs, industries & non-expert professionals
Credible, Precise & Customisable

Schools & Institutions
Fun, Informative & User-friendly

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Map creation

European Atlas of the Seas

The easy and fun way for professionals, students and anyone interested to learn more about Europe's seas and coasts, their environment, related human activities and European policies.

Search for layers

Predefined maps (11) | Create a map


- Socio-economics**
 - Active population
 - Employment in the primary sector
 - Employment in the secondary sector
 - Employment in the tertiary sector
 - Gross domestic product
 - Maritime impact
 - Population aged 65 years and more
 - Population change
 - Population
 - Historical population
- Coastal Tourism**
 - State of bathing waters
 - Coastal geology
 - Number of beds per square kilometre
 - Maritime museums
 - Public aquariums
 - UNESCO world heritage
- Ocean energy**
 - Offshore wind farms
 - Marine energy production facilities
 - Tidal amplitude
 - Wave height and direction
 - Average wind speed and direction

Add layers

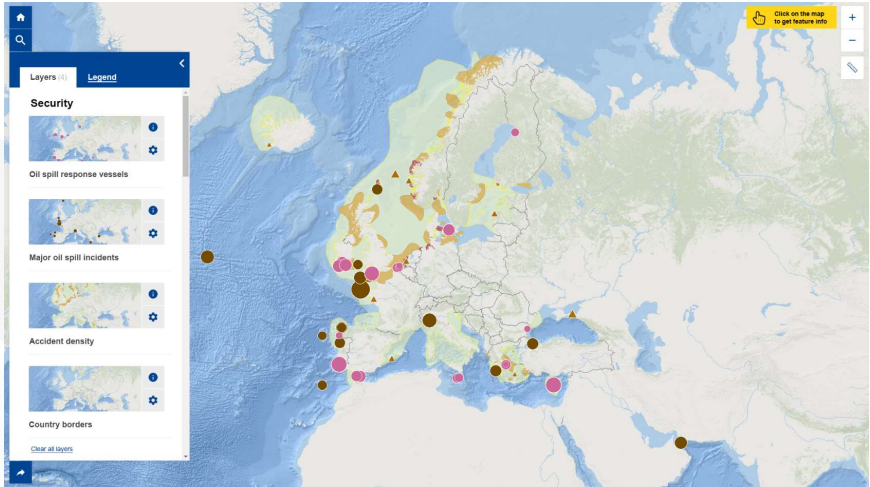
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Simple map viewer

Click on the map to get feature info

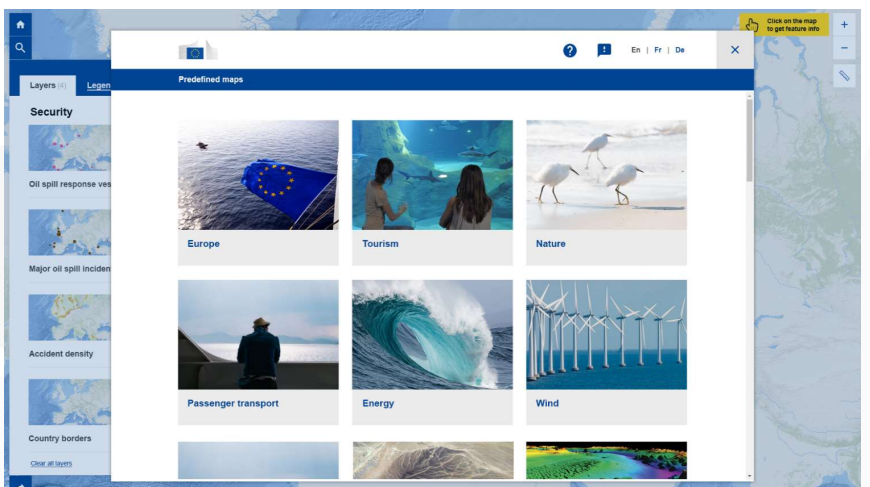
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User friendly map viewer



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Extended catalogue with predefined maps





Extended catalogue with a search engine

The screenshot shows the 'Create a map' interface in the EMODnet application. It features a search bar at the top with the text 'Search for layers' and a 'Search' button. Below the search bar, there are several categories of layers, each with a list of checkboxes and a search icon:

- Socio-economics:** Active population, Employment in the primary sector, Employment in the secondary sector, Employment in the tertiary sector, Gross domestic product, Maritime impact, Population aged 65 years and more, Population change, Population, Unemployment, Urban-rural typology.
- Coastal Tourism:** State of bathing waters, Coastal geology, Number of beds per square kilometre, Maritime museums, Public aquariums, UNESCO world heritage.
- Ocean energy:** Offshore wind farms, Marine energy production facilities, Tidal amplitude, Wave height and direction, Average wind speed and direction.
- Seabed mining:** Deep-sea mineral resources, Seabed sediments, Undersea relief names.
- International Ocean Governance:** Conference of Peripheral Maritime Regions, European Maritime Day, Macro-Regional Strategies and the Atlantic Strategy.
- Marine Knowledge:** Bathymetry, EMODnet patterns, Coast line, Countries, Country borders, Limits of oceans and seas.

At the bottom of the layer selection area, there is an 'Add layers' button. The background shows a map of Europe with various layers overlaid.



Share this map options

The screenshot shows the 'Share this map' interface in the EMODnet application. It features a 'Share this map' header with several options: Print, Share, Export, Embed, and Save. Below these options, there is a map of Europe with various layers overlaid. At the bottom of the map, there is a 'European Atlas of the Seas' logo and a 'Print this map' button.

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The Atlas conceived as an aggregator of Web services

« the machines speak to the machines »



INSPIRE (OGC)
Web Map Services (WMS)
Or ArcGIS REST services


* Application Programming Interface

Atlas Catalogue

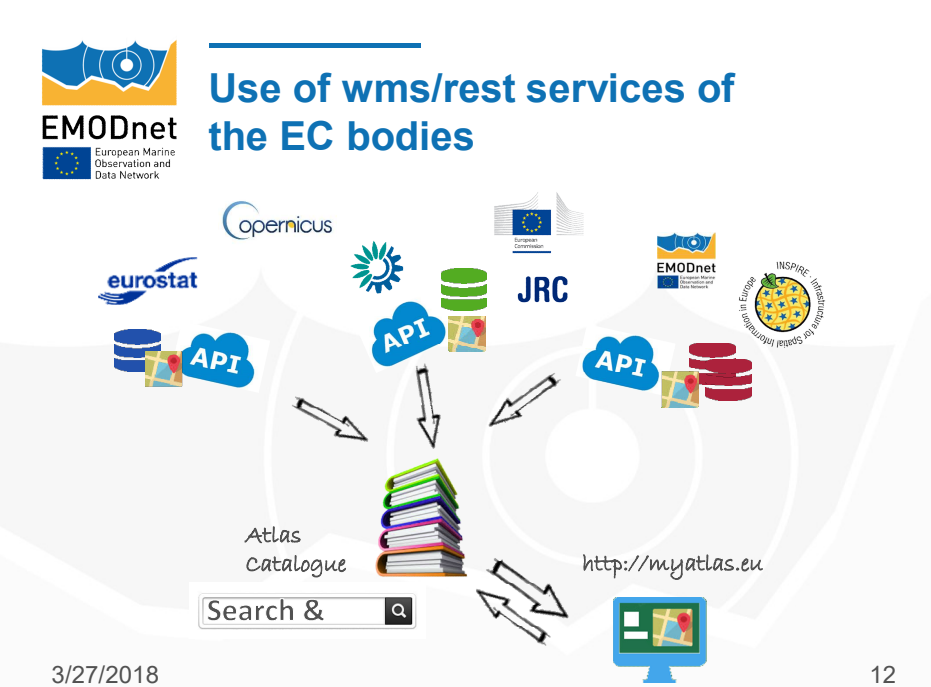
Search &

<http://myatlas.eu>

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Use of wms/rest services of the EC bodies



eurostat

Copernicus

JRC

EMODnet


INSPIRE (OGC)
Web Map Services (WMS)
Or ArcGIS REST services

Atlas Catalogue

Search &


<http://myatlas.eu>

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EMODnet portals expose marine maps through WMServices




<p>EMODnet Biology</p> <p>Temporal and geographical variability of occurrences and abundances</p> <p>Phytoplankton</p> <p>Zooplankton</p> <p>Macro-algae</p> <p>Sea mammal</p> <p>Angiosperm</p> <p>Fish</p> <p>Reptile</p> <p>Benthos</p> <p>Bird</p>	<p>EMODnet Geology</p> <p>Seabed substrate</p> <p>Sediment accumulation rates</p> <p>Seafloor lithology</p> <p>Seafloor stratigraphy</p> <p>Coastal behaviour</p> <p>Geological events and probabilities</p> <p>Mineral occurrences</p>	<p>EMODnet bathymetry</p> <p>Water depth and depth profiles</p> <p>High resolution bathymetry in coastal areas</p> <p>EMODnet Seabed habitats</p> <p>Seabed habitat maps (broad-scale and specific per basin)</p> <p>Individual seabed habitat maps from surveys</p> <p>Environmental variables influencing habitat type (depth, salinity, currents, light, ...)</p>	<p>EMODnet Chemistry</p> <p>Fertilisers</p> <p>Dissolved gases</p> <p>Chlorophyll, silicates, pH</p> <p>Organic matter</p> <p>Pesticides and biocides</p> <p>Nutrient load to regional seas from major rivers</p> <p>Antifoulants</p> <p>Heavy metals</p> <p>Marine litter</p>	<p>EMODnet Physics</p> <p>Wave height and duration</p> <p>Sea temperature</p> <p>Wind speed and direction</p> <p>Salinity</p> <p>Horizontal speed of the water column</p> <p>Water clarity</p> <p>Changes in sea level</p> <p>Inflow from rivers</p> <p>Ice cover</p> <p>Underwater sound</p>	<p>EMODnet Human activities</p> <p>Aquaculture</p> <p>Cultural heritage</p> <p>Dredging</p> <p>Fisheries</p> <p>Hydrocarbon extraction</p> <p>Traffic in main ports</p> <p>Ocean energy facilities</p> <p>Pipelines and cables</p> <p>Protected areas</p> <p>Status of bathing sites</p> <p>Vessel density</p> <p>Waste disposal (solids)</p> <p>Wind farms</p>
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eTranslation Service

« statistical & neural real-time translation service »

eTranslation is an online machine translation service provided by the European Commission

Data provider & marine maps

API

metadata

Atlas Catalogue

<http://myatlas.eu/el>

<http://myatlas.eu/fr>

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Conclusion: benefits of web services for the Atlas

- Numerous servers and clients support web services (WMS/REST) as a standard interface for requesting a geospatial map.
It is a smart and powerful solution to extend and maintain the catalogue; keeping it UpToDate.
- The EC eTranslation API service offers the opportunity to open the access to the Atlas to a wider public (all EU citizen, education purpose, ...)

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Implications

- Implementation of an integrated catalogue management system
- Monitoring availability, performance, reliability of the map services and identify broken links
- Monitoring user activity on content

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Communication plan Objectives 2018

- Increase **visibility & use**.
- Position as **the preferred access point** to obtain general information & maps about Europe's seas and coasts.

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First wave : Summer 2018

GENERAL PUBLIC & NON-EXPERT PROFESSIONALS

<p>« Map of the Week »</p> 	<p>Targeted Campaigns</p> 	<p>Presentations</p> 
<p>Press releases & Articles</p> 	<p>Search Engine Optimisation</p> 	<p>Share Maps</p>  <p style="font-size: small;">WIKIPEDIA The Free Encyclopedia</p>

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