EMODnet Central Portal data services

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The European Marine Observation and Data Network (EMODnet) is a network of more than 160 organisations supported by the EU's integrated maritime policy. These organisations work together to assemble marine data and data products to make these resources freely available across seven different thematic portals: Bathymetry, Geology, Seabed habitats, Chemistry, Biology, Physics and Human Activities.

The EMODnet Central Portal centralises information about the EMODnet project and offers a single entry point for metadata, data and data products that are being made available by the individual thematic portals. The data services offered by EMODnet Central Portal comprise a geoviewer, a metadata catalogue, a query tool and documentation on how to access data using web services.

The map viewer of the Central Portal allows to display the data products developed by the thematic lots. It currently gives access to over 40 different data products, together with additional data layers and administrative units, all of them based in OGC web services. Each of the layers in the geoviewer is accompanied by detailed descriptions of the products, with links to the associated metadata records. Depending on the nature of the data product, the viewer allows to animate or apply filters on the layers. The EMODnet Central portal geoviewer is periodically updated as new data products are developed by the thematic lots.

The Central Portal query tool provides users with the possibility to query the data products elaborated by the different thematic projects and to obtain combined output (a table), with values for selected parameters and for a specific window in time and space. The query tool will be re-designed in the coming months to fully exploit the capabilities of the EMODnet thematic web

services. The concept and user requirements will be fine-tuned in collaboration with potential data users from the Marine Knowledge Expert Group.

The Central Portal hosts a Geonetwork-based metadata catalogue where the data products created by each thematic portal are described. In preparation for the Open Sea Lab competition (November 2017), the Central Portal compiled documentation and examples on how to access the different EMODnet web services.

The experience of the Open Sea Lab competition enabled the EMODnet network to fully realise the potential of the data services that are currently available, but it also revealed shortcomings that need to be tackled. In close cooperation with each of the thematic lots and the EMODnet Secretariat, the major goal of Central Portal will be to implement best practices to improve the data services inter-operabilty and improve user experience and uptake. This will be achieved by working in four main subjects: a) ensuring the INSPIRE compliance of data products metadata; b) making the EMODnet web services fully OGC compliant; c) providing data services documentation in a standardised approach, using community accepted repositories and making it accessible via metadata; and, d) building the above-mentioned re-design of the query tool.
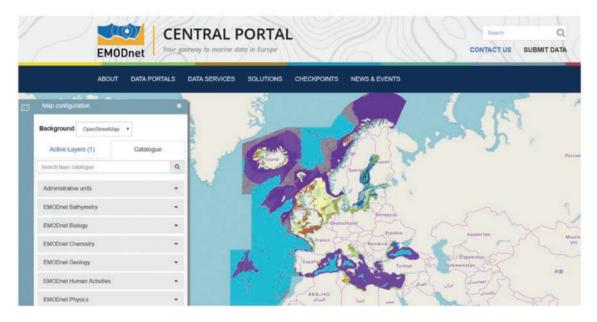

Fig. 1 - EMODnet Central Portal geoviewer displaying a data product from EMODnet Seabed Habitats.