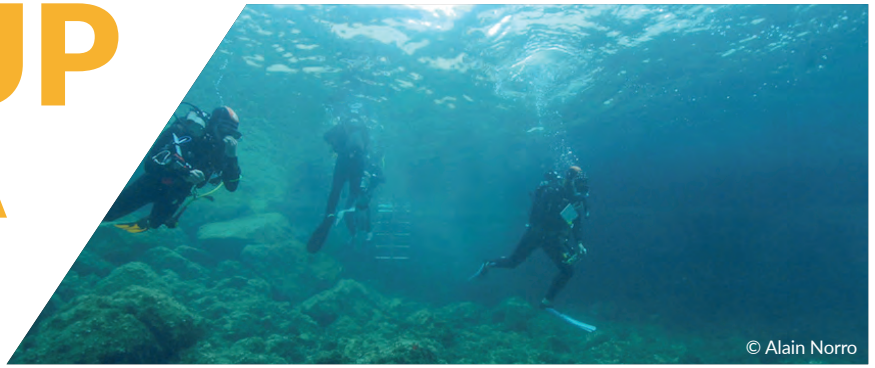# WAKE UP
YOUR DATA

Set them free for
Blue Society

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About EMODnet

The European Marine Observation and Data Network (EMODnet) is a long-term marine data initiative of the European Commission's Directorate-General for Maritime Affairs and Fisheries (DG MARE) underpinning its Marine Knowledge 2020 strategy. EMODnet is a consortium of organisations assembling and harmonising European marine data, metadata and data products from diverse sources. The main purpose is to unlock fragmented and hidden marine data, and to make these available to individuals and organisations (public and private). Improved access to quality-assured, standardised and harmonised marine data, that are interoperable and free of user restrictions, will facilitate investment in sustainable coastal and offshore activities.

EMODnet provides a gateway to marine data in Europe across eight discipline-based themes: high resolution seabed mapping, geology, physics, chemistry, biology, seabed habitats, human activities and coastal mapping. For each of these themes, EMODnet has created a portal to a range of data archives managed by local, national, regional and international organisations. Through these thematic portals, users have free access to standardised observations, data quality indicators and processed data products, such as basin-scale maps.

The EMODnet data infrastructure is developed through a stepwise approach in three major phases. Currently EMODnet is in the third phase of development that will offer higher resolution seabed maps and new parameters such as river inputs and marine plastic distribution.

EMODnet development is a dynamic process that relies on the help of both users and stakeholders. New data, products and functionalities are added regularly, while the EMODnet thematic portals are continuously improved to make the service more fit for purpose and user friendly.

More background and information about EMODnet can be found on the website:

EMODNET.EU

About EMODnet Ingestion

The EMODnet Data Ingestion portal activities are undertaken by a large European network that is geographically anchored in the countries bordering all European marine basins, and covers all EMODnet data themes. The EMODnet Data Ingestion members are national and regional marine and oceanographic data repositories and data management experts. The coordinators of the EMODnet thematic portals are also part of this new initiative.

The EMODnet Data Ingestion portal facilitates submission of sleeping marine datasets for further processing, Open Data publishing and contributing to applications for society. It aims at streamlining the data ingestion process so that data holders from public and private sectors that are not yet connected to the existing marine data management infrastructures can easily release their data for safekeeping and subsequent distribution through EMODnet.

The EMODnet Data Ingestion portal helps to wake up your data so it can serve Blue Society, based on the principle of 'collect once and use many times'. This idea — a guiding principle of the Marine Knowledge 2020 strategy — benefits all marine data users, including policy makers, scientists, private industries and the public, and opens up new opportunities for innovation and growth.

The involved data centres have been actively engaged in data management for many decades. They have the essential capacities and facilities for data quality control, long-term stewardship, retrieval and distribution. They are involved in national research and monitoring activities and have established arrangements for managing the resulting data on a national and thematic basis. Moreover the data centres work together on pan-European and international scales in organisations such as IODE, ICES, EuroGeoSurveys, EuroGOOS, and IHO, and for pan-European marine data management infrastructures such as SeaDataCloud and EurOBIS. The latter are feeding into several EMODnet thematic portals.

More background and information about the EMODnet Data Ingestion portal can be found on the website:

EMODNET-INGESTION.EU

Usecases

EMODnet

Monitoring data from windfarms in the Dutch North Sea sector

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In the Netherlands a number of offshore wind farms is already operational and new developments are well underway. As establishing and operating an offshore windfarm requires licenses from the Dutch government, windfarm operators are expected to undertake long-term monitoring activities in the fields of physical oceanography and marine biology. This ecological data collection is conditional for the license and serves studies of possible effects of the construction and exploitation of windfarms on their environment. The license also includes that these data are to be shared with public authorities for possible re-use and analyses.

These monitoring datasets were falling outside the calibrated paths and did not reach the national marine data management infrastructure. Therefore Rijkswaterstaat (Public Works Department) and Deltares made an arrangement for safeguarding the datasets, organised under the 'Wind at Sea Ecological Monitoring Program' (Wozep).

In practice, Deltares undertakes activities for processing and documenting the monitoring data from the offshore windfarms using its OpenEarth tools and prepares the datasets for long term stewardship and availability. The collected data concern species distributions (mammals, birds, fish and benthos) and datasets resulting from *e.g.* flight-pattern studies of birds and bats, noise effects, and collision models.

These processes are now underway. The EMODnet Data Ingestion portal will then provide an attractive way to share the datasets and make them available for the overarching European marine data infrastructures such as SeaDataNet and EurOBIS, and from there for EMODnet thematic data portals.

Renewable energy development data in the United Kingdom

© The Crown Estate

The Crown Estate in the United Kingdom is an independent commercial business, created by Act of Parliament. Its role is to ensure that the land and property are sustainably worked, developed and enjoyed to deliver the best value over the long-term. It governs the seabed out to the 12Nm limit, which represents 850,000 km2 – 3 times the size of the terrestrial surface of the United Kingdom. Since 2004 it also licenses operators with rights to generate renewable energy within the EEZ (200nm).

The Crown Estate plays a crucial role in enabling the advancement of the UK offshore renewable energy industry by managing the leasing process for renewable energy projects. A data clause within this lease agreement stipulates that all marine environmental data collected by the offshore wind industry in UK waters is provided to the Crown Estate. Commercial confidentiality of some datasets restricts these data sets from being publicly available for a set period of time.

Data collected concerns bathymetry, sidescan, seismic/chirp (sub-bottom), water levels, flows, waves, sediment, water/sediment quality, weather, benthic, birds, fish, mammals habitat characterisations and maritime archaeology data.

Offshore renewable energy developers provide data to the Crown Estate through the Marine Data Exchange project. Making this data easily accessible provides crucial support for those looking to develop in the marine environment as well as enhancing the sustainability of marine businesses and furthering our understanding of Europe's coastal areas.

A selection of datasets is being submitted to the EMODnet Data Ingestion portal for further processing and inclusion in the national UK data centres (BODC and BGS), partners in EMODnet Ingestion.

Your local data centre: