

WAKE UP YOUR DATA

Set them free for
the Blue Society



One Ocean, One EMODnet

The European Marine Observation and Data Network (EMODnet) is Europe's in situ marine data service, open and free for all. It is a long-term marine data initiative of the European Commission's Directorate-General for Maritime Affairs and Fisheries (DG MARE) which started in 2009. 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 lessen the risks associated with investments in the blue economy and facilitate more effective protection of the marine environment.

EMODnet provides a single gateway to marine data in Europe spanning seven broad disciplinary themes: bathymetry, biology, chemistry, geology, human activities, physics, and seabed habitats. Each of these themes give access to a range of data archives managed by a partnership of local, national, regional and international organisations. Through EMODnet, users have free access to standardised observations, data quality indicators, and processed data products, across these seven themes and hundreds of parameters.



EMODnet's continuous development is a dynamic process that relies on the help of both users and stakeholders. New data, products, and functionalities are added regularly to the central map viewer and the central metadata catalogue as the seven EMODnet themes are continuously improved to make the service more user friendly and fit for purpose.

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

EMODNET.EC.EUROPA.EU

EMODnet Data Ingestion

EMODnet Data Ingestion facilitates the submission of dormant marine datasets for further processing, for publication as Open Data and for contribution to societal applications. It aims at streamlining the data ingestion process so that data holders from public and private sectors who are not yet connected to the existing marine data management infrastructures can easily release their data for safekeeping and subsequent distribution through EMODnet with the support of its data ambassadors.

Organisations, making their data available as an additional input, contribute to improved EMODnet products. They will benefit from these for their own applications and their contributions will be acknowledged. This is a clear win-win scenario in the spirit of a circular economy! The EMODnet Data Ingestion portal helps to wake up your data so it can be reused and serve the Blue Society, based on the principle of **'collect once and use many times'**. This idea benefits all marine data users, including policy makers, scientists, private industries, and the public. It opens up new opportunities for innovation and growth.

The EMODnet Data Ingestion activities are undertaken by a large network that is geographically anchored in the countries bordering all European marine basins, and covers the seven EMODnet data themes. The Data Ingestion ambassadors are national and regional marine and oceanographic data repositories and data management experts. The coordinators of the seven EMODnet themes are also part of the initiative. The data centres involved 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 with organisations such as IODE, ICES, EuroGeoSurveys, EuroGOOS, and IHO, and for pan-European marine data management infrastructures such as SeaDataNet and EurOBIS. The latter are feeding into several EMODnet thematic portals.

EMODnet Ingestion and its services can be found as a section of the EMODnet central portal



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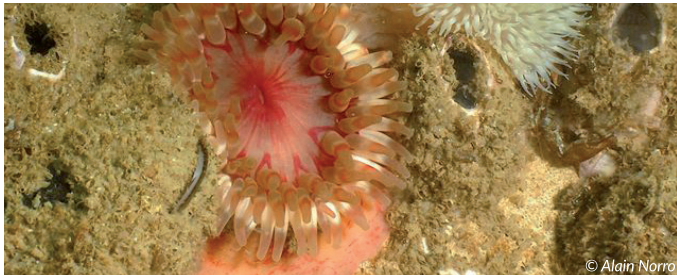


2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development

Success stories



Monitoring data from offshore licensing activities in the Dutch North Sea sector



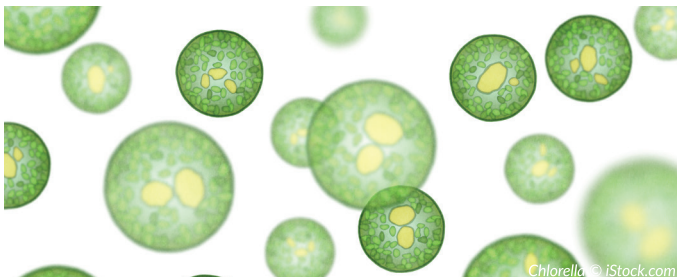
© Alain Norro

There are already several offshore wind farms operating in the Netherlands EEZ and more are 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 requires that these data are to be shared with public authorities for possible re-use and analyses.

These monitoring datasets were falling outside the recognised 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'. The data collected 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.

EMODnet Data Ingestion provides an effective way to share the datasets and make them available for the overarching European marine data infrastructures such as SeaDataNet and EurOBIS, and from there to the EMODnet thematics.

Map of the algae production business in Europe



Chlorella © iStock.com

Spirulina and algae are farmed throughout Europe. This green gold provides us with food, fuel, and health and beauty products. The EC Joint Research Centre maps this booming business to fit it in a sustainable blue bio-economy.

You can now visualise where macro- and micro-algae are produced in Europe, and which species and volumes are produced by each company, by accessing the dataset on the various algae and spirulina production facilities under EMODnet Human Activities.

Marine litter data from NGO's and monitoring and research centers



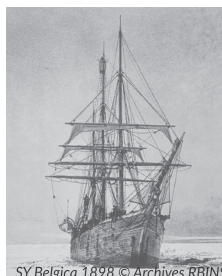
© Joint List of Litter Categories for marine macro-litter monitoring

Since October 2019, EMODnet Chemistry has been collecting, harmonizing and validating the official marine litter data in cooperation with the EC Joint Research Center and the MSFD Technical Group on Marine Litter. At the time of publishing, seven European monitoring and research centres and five NGOs have already submitted their datasets through EMODnet Data Ingestion.

The datasets come from eight countries bordering the Baltic Sea, the Black Sea, and the Mediterranean Sea: Estonia (TalTech), Latvia (LHEI), Bulgaria (BGODC), Romania (Mare Nostrum), Slovenia (NIB), Croatia (IZOR), Turkey (TUDAV), and Cyprus (ORION). The time range of the different datasets stretches from one to five years and covers the period 2013-2021. Marine litter composition and abundance are defined in sediments, mostly coastal deposits (well known as beach litter), by means of visual census methodologies. Two datasets from Croatia and Romania come from seafloor samples collected by trawling.

Besides MSFD monitoring data, EMODnet Chemistry also manages, stores, and gives access to marine litter data from both research surveys and monitoring or cleaning initiatives of citizen science.

Digitization of historical data



SY Belgica 1898 © Archives RBINS



RV Belgica © RBINS

EMODnet Data Ingestion also seeks to identify and safeguard historical datasets that can become part of the large European archives and from there be of use for many applications and forecasting activities!

Your data, work it!

Your local data ambassador:

