



**EMODnet**

European Marine  
Observation and  
Data Network

Data Ingestion



# Updates, Current offer and Future Outlook

## EMODnet Ingestion

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**20th EMODnet Steering Committee meeting**  
**29-30 April 2024**



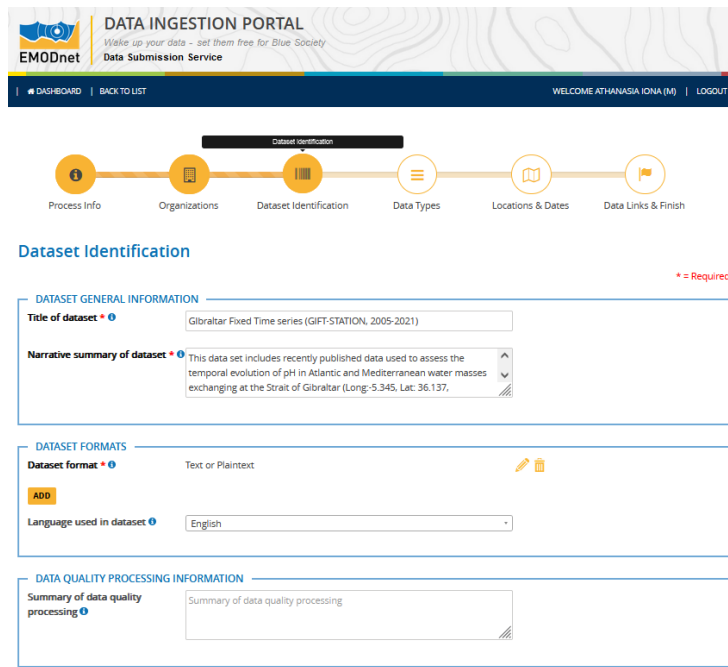
The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund.

# EMODnet Data Ingestion current offer

## Overview of services

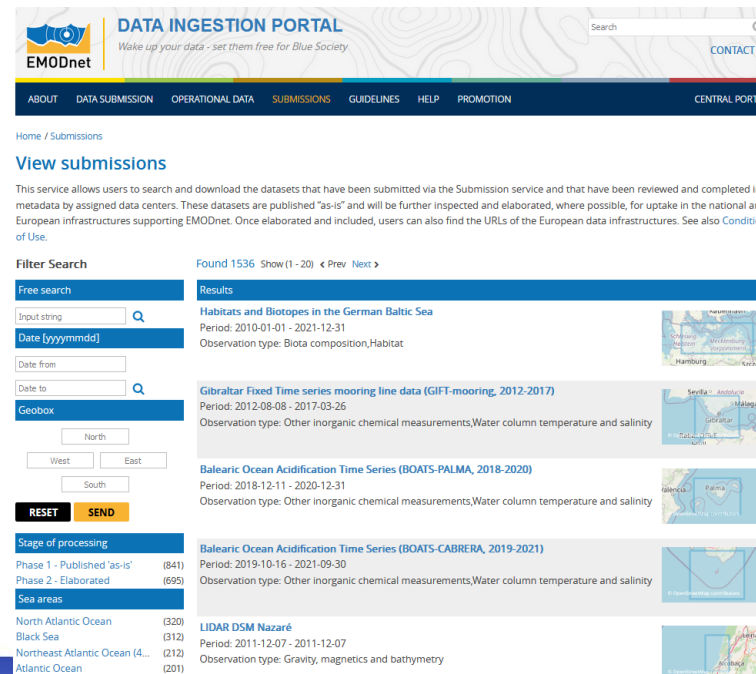
To identify, encourage and support data holders (from public and private sectors) to share their data with EMODnet by teaming up with EU data management infrastructures, that feed EMODnet thematic

### Submission service



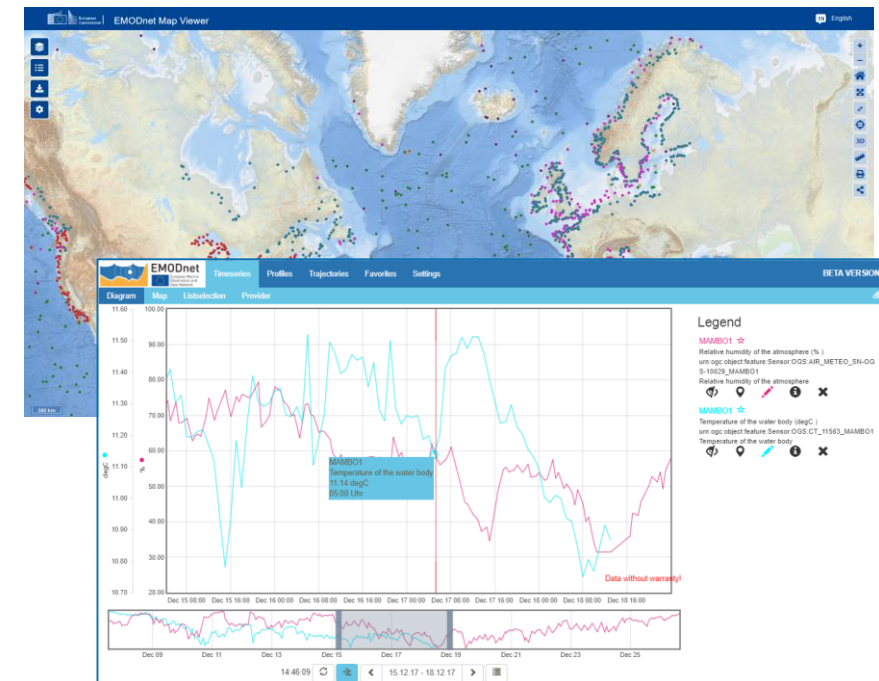
The screenshot shows the 'DATA INGESTION PORTAL' submission service interface. It features a navigation bar with 'DASHBOARD', 'BACK TO LIST', and a user welcome message. Below the navigation is a process flow diagram with steps: Process Info, Organizations, Dataset Identification, Data Types, Locations & Dates, and Data Links & Finish. The 'Dataset Identification' step is highlighted. The main content area is titled 'DATASET IDENTIFICATION' and includes a form with sections for 'DATASET GENERAL INFORMATION', 'DATASET FORMATS', and 'DATA QUALITY PROCESSING INFORMATION'. The 'DATASET GENERAL INFORMATION' section has fields for 'Title of dataset' (Gibraltar Fixed Time series (GIFT-STATION, 2005-2021)) and 'Narrative summary of dataset'. The 'DATASET FORMATS' section has a 'Dataset format' dropdown (Text or Plaintext) and a 'Language used in dataset' dropdown (English). The 'DATA QUALITY PROCESSING INFORMATION' section has a 'Summary of data quality processing' text area. A red asterisk indicates required fields.

### Viewing service



The screenshot shows the 'DATA INGESTION PORTAL' viewing service interface. It features a navigation bar with 'ABOUT', 'DATA SUBMISSION', 'OPERATIONAL DATA', 'SUBMISSIONS', 'GUIDELINES', 'HELP', 'PROMOTION', and 'CENTRAL PORTAL'. Below the navigation is a search bar and a 'View submissions' section. The 'View submissions' section includes a 'Filter Search' section with 'Free search', 'Date', and 'Geobox' filters. The 'Results' section displays a list of submissions with details such as title, period, and observation type. The submissions listed are: 'Habitats and Biotopes in the German Baltic Sea', 'Gibraltar Fixed Time series mooring line data (GIFT-mooring, 2012-2017)', 'Balearic Ocean Acidification Time Series (BOATS-PALMA, 2018-2020)', 'Balearic Ocean Acidification Time Series (BOATS-CABRERA, 2019-2021)', and 'LIDAR DSM Nazaré'.

### Real-Time viewer service



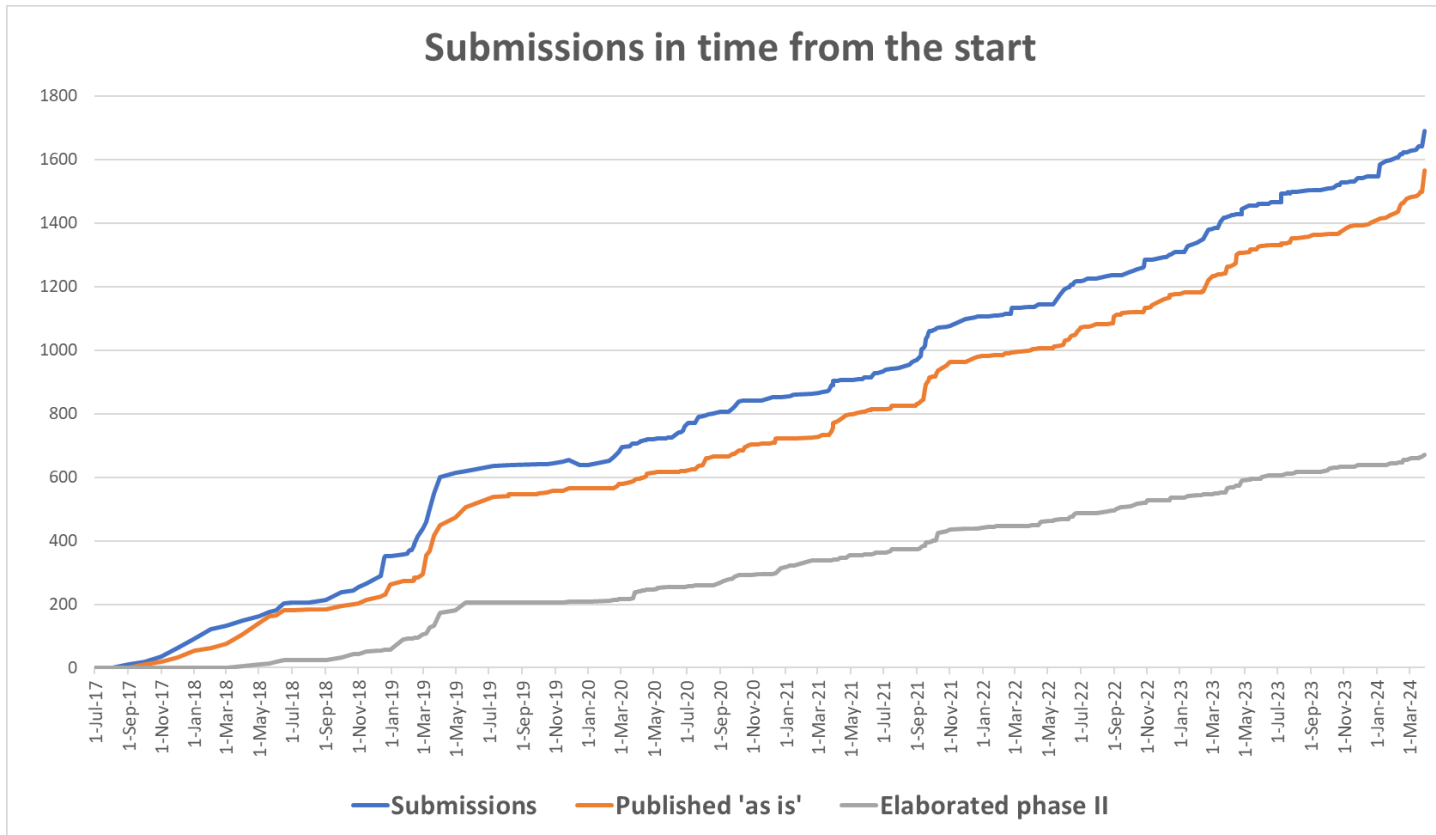
The screenshot shows the 'EMODnet Map Viewer' interface. It features a map of the Mediterranean region with various data points. Below the map is a 'Time Series' plot showing 'Temperature of the water body (degC)' over time. The plot includes a legend with 'MAMBO1' and 'MAMBO2' series. The 'MAMBO1' series is highlighted with a blue box, showing a sharp increase in temperature around December 17th. The plot also includes a 'Data without warranty!' warning.

Soon fully integrated into Central Portal

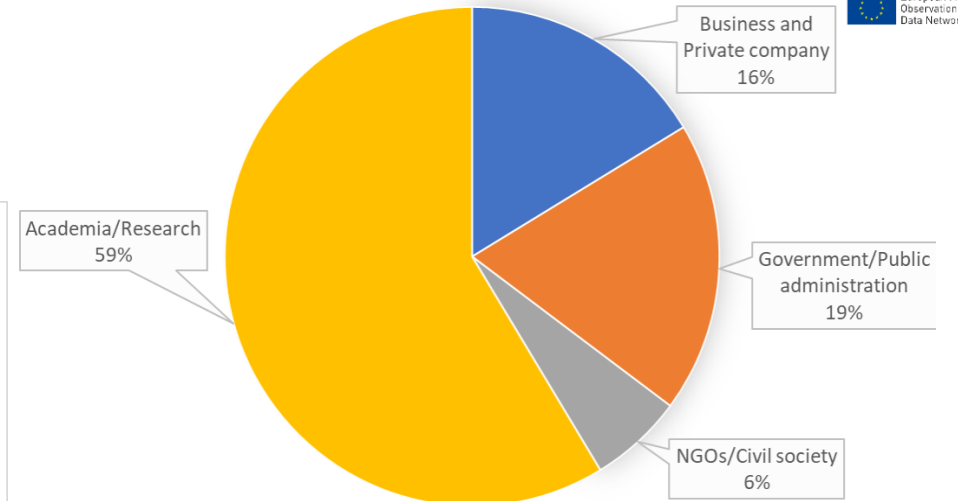
# EMODnet Data Ingestion current offer

## Ingested data, types, stakeholder sectors

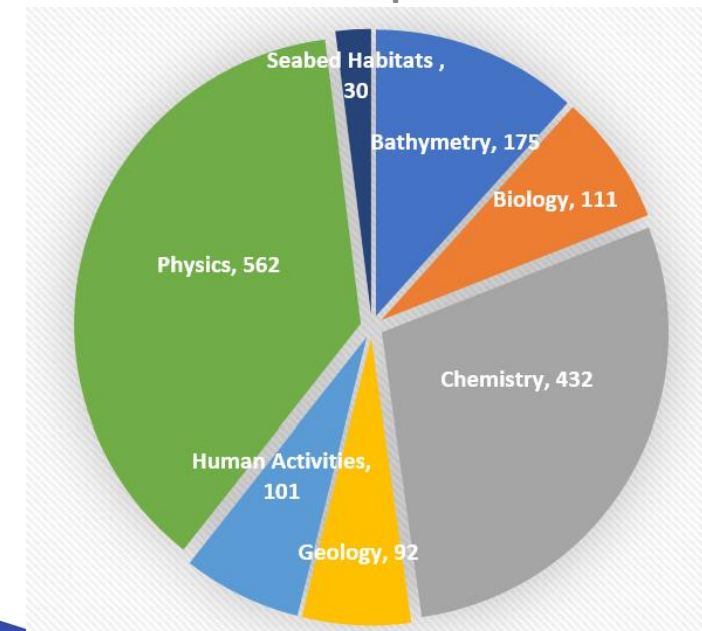
### Submissions in time from the start



### Types of organisations



### Data disciplines



# EMODnet Data Ingestion current offer

## Data/Data Products for EU Policy



- EMODnet Human Activities has promoted EMODnet Ingestion as the preferred data submission service for Member States' Marine Spatial Planning (MSP) data. The EU MSP (Marine Spatial Planning) committee adopted this approach.
- In a comparable way, EMODnet Chemistry has successfully promoted such an approach for Marine Litter (ML) reporting by Member States, supported by EU JRC and TG ML, and today Ingestion is used as a structured instrument for Member States for MSFD ML data reporting.
- Jointly with EMODnet Secretariat, Ingestion is working towards setting up similar arrangements with Citizen Science groups and initiatives about the exchange of marine litter data, which will then be processed and elaborated by EMODnet Chemistry for inclusion and publishing as EMODnet data products.

# EMODnet Data Ingestion Future look

## Service evolution



- Current contract just ended (phase 3: March 2022 – March 2024 => extension to March 2026)
- Current (phase 3) workplan:
  - maintenance, smooth operation of portal and its services, M2M exchanges with other data infrastructures (in delayed and NRT mode)
  - Migration to Central Portal
    - Test release on 30<sup>th</sup> April 2024 including
      - Front-end developed from scratch to be run on EU Central Portal
      - API developed to be run along with backend operations on Ingestion cloud infrastructure
    - Production Release Summer 2024, including ECAS migration
- Plans of next phase with most impact to the project into the future:
  - **Expanding scope to supporting EU RTD projects, that are collecting new data as follow-up to Workshop of 28th February 2024:**
    - guidance note gives information about standards and pathways to follow
    - **support will be offered to EU RTD projects** for reviewing their Data Management Plans (DMP), including exploring effective ways and cooperation for deploying their DMPs. In principle, EU RTD projects are and continue to be responsible themselves for their DMP performance. Also, to succeed they are required to adopt common standards as used for EMODnet pathways.
    - use will be made of the full Ingestion network of data centres, and taking into account priorities of EU

# EMODnet Data Ingestion Future look

## Service evolution



- Plans of next phase with most impact to the project into the future:
  - **Following up activities of the Workshop of 28th February 2024 for improving the understanding of data management in offshore licensing procedures** (offshore renewable energy and offshore aquaculture) of various countries:
    - deepening the dialogue with identified stakeholders in selected countries and for selected use cases by means of interviews and webinars to provide stakeholders with guidance and background information for possibly harmonizing data management procedures.
    - developing a roadmap, which will serve as a tool, offering guidance and practical examples to stakeholders seeking to implement harmonized data management practices effectively.
- Additional plans (up to 2025 and beyond) to be taken into account to the EMD Vision 2035:
  - **Integrate EMODnet Ingestion more in the data exchange processes for implementing EU policies (as done now for ML data for MSFD)**
  - **Expand the role of EMODnet Ingestion as an expert in technologies for connecting data streams** (as done so far for delayed mode exchanges with SeaNoe and the TCE-MDE repositories, and connections with NRT monitoring stations)
  - Note: Scaling up the activities of EMODnet Ingestion will require a scaling up of the funding basis

# Engagement, Partnerships and Use Cases

## Continuous growth

### Key Partnerships:

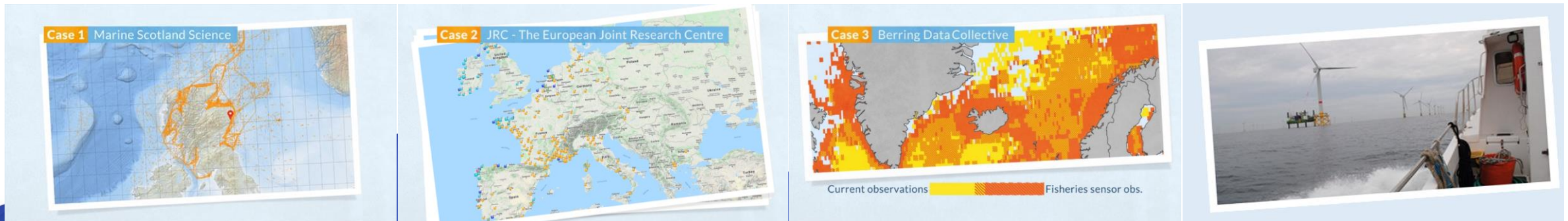
- Cooperation with Operational Oceanography (CMEMS INSTAC, EuroGOOS) for making operational data available in EMODnet Map Viewing service (in synergy with EMODnet Physics and SeaDataNet)

### Key Engagements for Data Sharing:

- Automatic exchange with **SeaDataNet/SeaNOE data citing service** for marine data from scientific cruises
- Automatic exchange with **The Crown Estate Marine Data Exchange (TCE-MDE)** for marine industry data

### Several successful use cases:

- **Marine Scotland Science data:** provision of numerous eutrophication, contaminants data
- **Spirulina farms from JRC:** in synergy with EMODnet Human Activities
- **Berring Data Collective:** Data from sensors in fishing nets, in synergy with EMODnet Physics
- **Monitoring data from windfarms** in the Dutch North Sea sector





# EMODnet



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[emodnet.ec.europa.eu](https://emodnet.ec.europa.eu)

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