Data Ingestion

EMODnet
European Marine
Observation and
Data Network

Updates, Current offer and Future Outlook

EMODnet Ingestion

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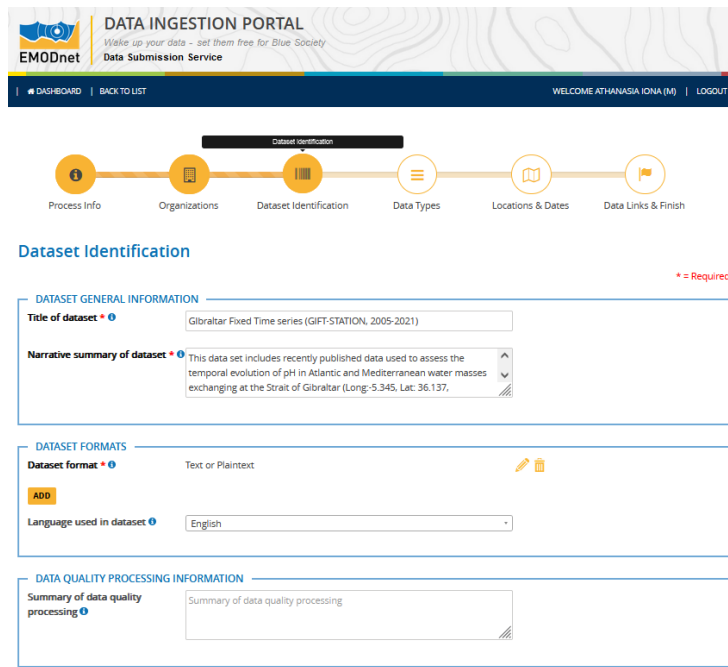**29-30 April 2024**

EMODnet Data Ingestion current offer
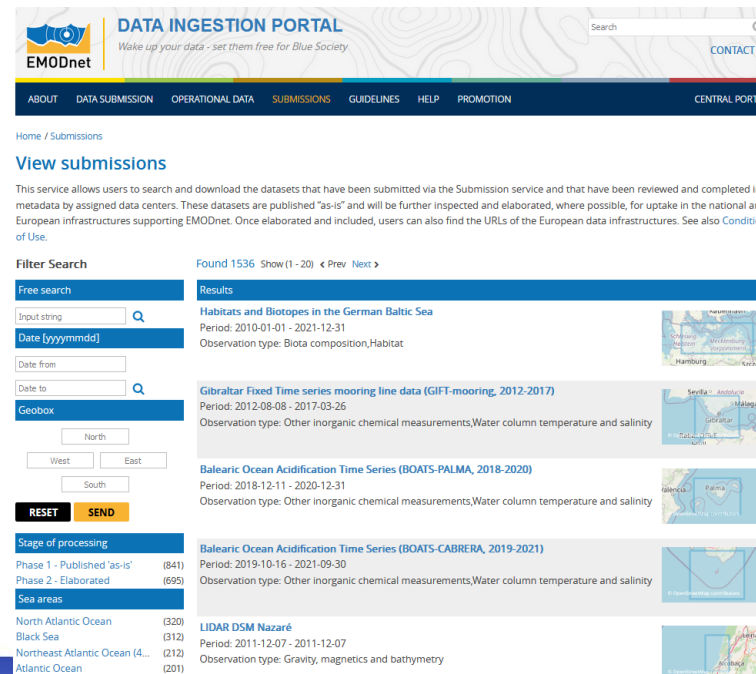## Overview of services

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 thematics
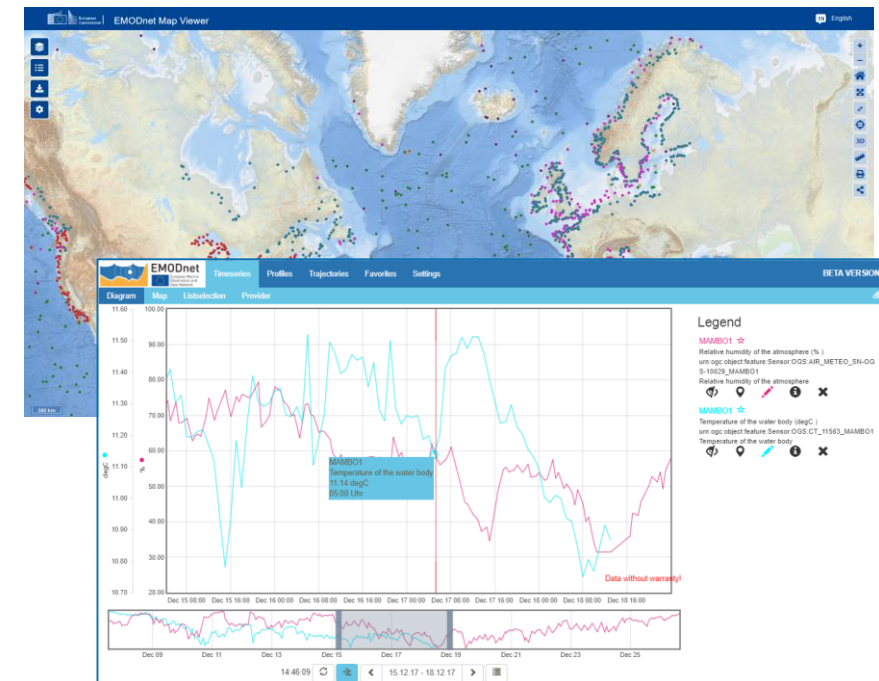
Submission service

Viewing service

Real-Time viewer service

Soon fully integrated into Central Portal

EMODnet Data Ingestion current offer
Ingested data, types, stakeholder sectors

Types of organisations

Submissions in time from the start
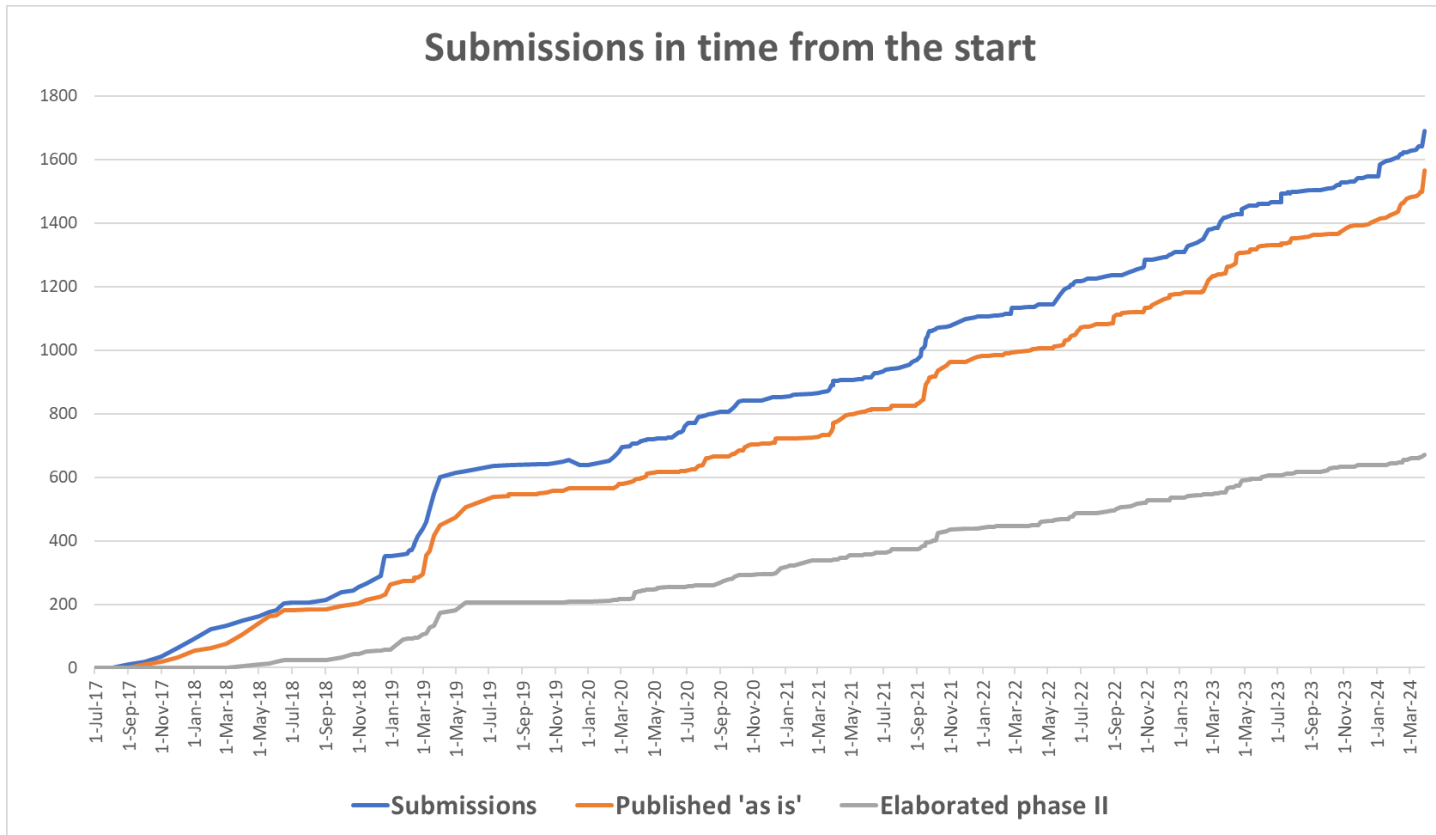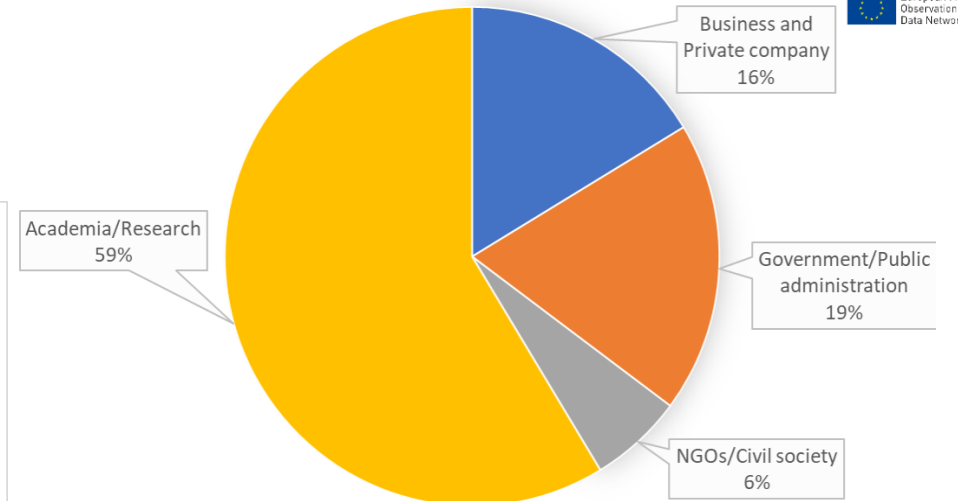
Data disciplines
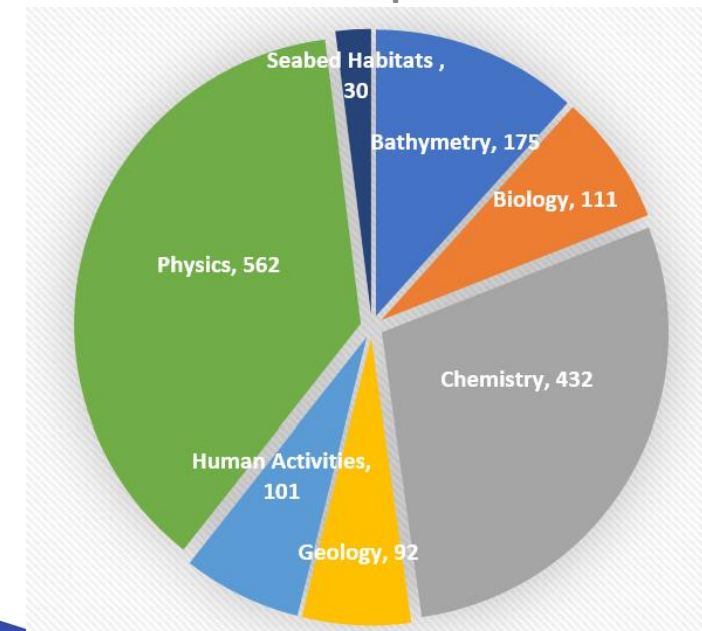
EMODnet Data Ingestion current offer
Data/Data Products for EU Policy

- 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 30th 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

- <u>Plans of next phase with most impact to the project into the future</u>:
- **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

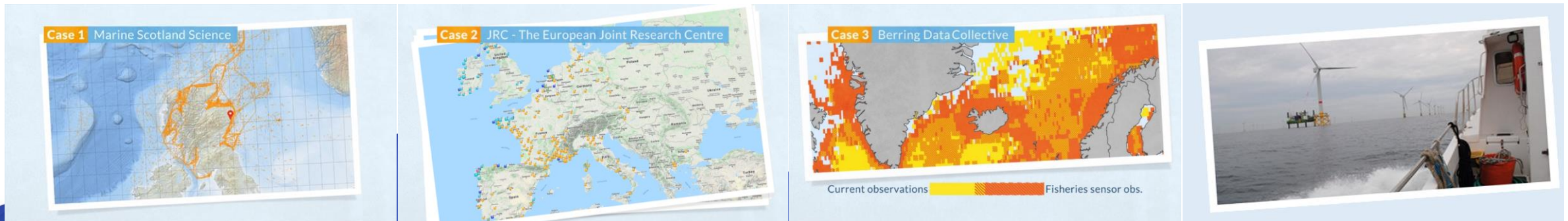## Continuous growth

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

Case 1 Marine Scotland Science

Case 2 JRC - The European Joint Research Centre

Case 3 Berring Data Collective

Current observations ──── Fisheries sensor obs.

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