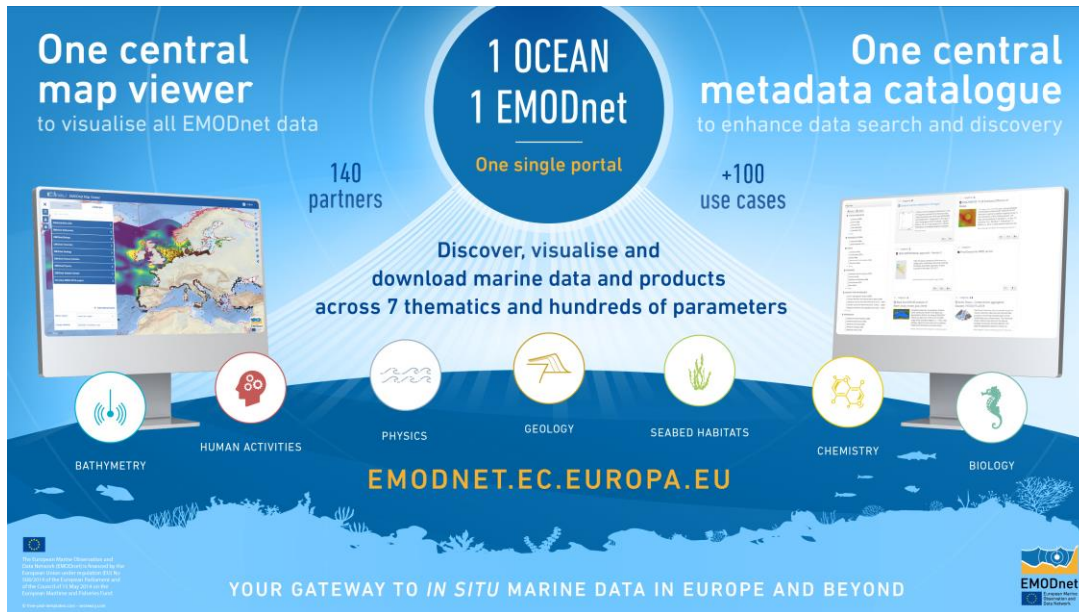


2023: One Ocean, One EMODnet



Dear EMODnet partners, colleagues and friends,

It has become a tradition: at the beginning of every new year, we take a moment to reflect with you on the previous year, to take stock of EMODnet's achievements and look forward to what the coming year will bring for our growing network of data providing partners, service implementers and users.

And What A Year 2022 Was! An extraordinary year in which EMODnet transformed itself with the unification of all EMODnet data services and resources into **one single shared portal**. With this integration of services, EMODnet has reached a new stage and will be in a much stronger position to provide the marine data, information and knowledge needed to deliver on the objectives of the EU Mission 'Restore our Ocean and Waters by 2030' and the wider goals of the EU Green Deal. The increased interoperability of EMODnet's data services is also crucial to underpin new developments such as the European Digital Twin of the Ocean and to continue expanding EMODnet's contribution to international efforts, including the Sustainable Development Goals of the UN Agenda 2030, and as a key partner to the UN Decade of Ocean Science for Sustainable Development.

At this pivotal moment in time, we invite you to reflect with us on the progress made in 2022 and take a look forward to see what is on the horizon, for 2023 and beyond!

A closer look back

One Ocean, One EMODnet

Beyond any doubt, the most significant development in 2022 was the **integration of all EMODnet *in situ* marine data resources and services** into the [EMODnet Central Portal](https://emodnet.eu). The entire EMODnet family, including the EMODnet Secretariat and EMODnet Thematic assembly groups, worked non-stop behind the scenes to make this happen. The new Central Portal which was formally launched on 25 January 2023, marks another major and critical milestone for EMODnet, after its move to the Europa.eu domain in 2021 and the achievement of its EC Marine Knowledge Vision Objectives in 2020. From now onwards, the **EMODnet Central Portal** will be the **single point of access for searching, visualising and downloading**

EMODnet data and data products. This thematic unification is a major upgrade to greatly simplify and enhance the EMODnet user experience. The move to one EMODnet Portal marks an end to the existing seven individual thematic portals which were switched off earlier this month, redirecting all traffic to the Central Portal from now onwards.

To accommodate the unification, 2022 saw the launch of a new central map viewer and data catalogue service common to all thematics, enhancing the data and product visualisation capacity and the search and download experience for the user. All these developments make EMODnet more user-friendly and fit-for-purpose, adapting to the needs and requirements of tomorrow's data and information consumers, be they from science, public services, policy, civil society or another background.

*We warmly invite you to join our **public webinar demonstrating the upgraded EMODnet services** that will take place online on the afternoon of 16 February 2023; [registration](#) is open and free for all.*

New products and services

2022 also saw the start of the fourth phase of development for all of the EMODnet Thematic projects. Even though the focus in 2022 was on the integration of data, information and content from the thematic data portals into the Central Portal, the seven Thematic assembly groups continued making available new and updated datasets and data products.

Let me share some key examples. **EMODnet Biology** developed [two R packages](#) for Web Feature Services and Web Coverage Service to assist users in extracting information across the various Thematic lots' services. **EMODnet Physics** added [new data on river flow](#) originating from the +ATLANTIC project, and **EMODnet Seabed Habitats** made available the latest [OSPAR Threatened and/or Declining Habitats dataset \(version 2020\)](#), comprising point and polygon data showing the distribution of habitats on the OSPAR list of threatened and/or declining species and habitats within the northeast Atlantic. The [Marine Spatial Planning \(MSP\) plan for Latvia](#) was included in the MSP dataset by **EMODnet Human Activities**, which already includes the plans for Belgium, Denmark, Finland and the Åland Islands. **EMODnet Geology** continued gathering additional data from partner countries for inclusion in existing data products and produced a new product "[Geomorphology line features](#)". **EMODnet Bathymetry** increased the number of survey datasets to over 41.000 Common Data Index (CDI) entries and upped the number of Composite Digital Terrain Model (DTM) entries to more than 265. Many more data and data product updates and new releases have been prepared in 2022 and are expected to be published in the second year of the Thematics' current work plans in the course of 2023!

Besides making available interoperable data and data products, EMODnet contributed to and supported the marine data science community and European policy in other ways. For example, in 2022, **EMODnet Chemistry** provided an [up-to-date, harmonised and validated dataset for beach litter](#) – containing data from 4.312 surveys (2015-2020) from 22 Member States - to the Technical Group on Marine Litter (TGML) for the implementation of the Marine Strategy Framework Directive (MSFD). TGML has been using this dataset to define the new EU quantitative baselines for beach litter, to allow monitoring of environmental trends and the effectiveness of the pollutant reduction measures. To assist EU Member States with reporting under MSFD, **EMODnet Seabed Habitats** produced a [summary of the extent of each MSFD Benthic Broad Habitat Type per country and sub-region](#).

Early in 2022, **EMODnet Data Ingestion** was granted new funding for rolling out EMODnet Ingestion phase 3, which is now well underway. Data submissions increased to over 1.200 at the end of 2022, ranging from

single datasets to large integrated **data from publicly funded research, the private sector, civil society and citizen science.**

EMODnet's expanding number of datasets continued to power the EC DG MARE [European Atlas of the Seas](#). EMODnet remains the main data provider of this important data visualisation, web-mapping and **ocean literacy tool** which now contains almost 300 maps, with content available in the 24 official EU languages. Atlas version 7.2 was released allowing for more customization. This included the development of new functionalities such as the interactive help functionality, a "boat race diploma" in the "European Maritime Day (EMD) in my country" map 2022, default activation of advanced features (e.g., print tool), and the "My Maps" functionality allowing users to authenticate using EU login and save specific map combinations and configurations in their account.

A growing network, connecting new communities in Europe and globally

EMODnet continues to provide a user-driven service employed by a wide range of stakeholders. The **ten new use cases** published on the Central Portal are testament to this. In 2022 we were also delighted to welcome **three new EMODnet Associated Partners**, i.e. [BIOPOLIS-CIBIO](#), [Cyprus Marine and Maritime Institute](#) and [Fugro](#).

We call upon you all to continue informing us of potential organisations, associations or companies that might be interested to join us as an EMODnet Associated Partner.

Special attention was dedicated to the **needs of businesses and the Blue Economy** as a key user community with multiple sectors, many of which are still less familiar with the wealth of marine data and resources provided free of charge by EMODnet. For this reason, EMODnet organised two '**EMODnet for business**' workshops focusing on the **offshore renewable energy sector** in the [Northeast Atlantic, North Sea and Baltic Sea](#), and in the [Mediterranean Sea and Black Sea](#). The workshops were attended by over 65 and 80 participants respectively. 2023 will see a new EMODnet for Business activity, focusing on the coastal tourism sector. Furthermore, at [European Maritime Day 2022](#), EMODnet presented its use cases for the EU Green Deal.

On 22 September 2022, the two EU marine data services **EMODnet and Copernicus Marine** came together with DG MARE and DG DEFIS for a [workshop](#) in Brussels (Belgium) to discuss the availability and needs for marine data and information on **coastal issues** and to assess emerging areas for collaboration. This was the second workshop of its kind on coastal issues, in addition to the regular six-monthly coordination meetings between the two data services. EMODnet was also in active dialogue with ICES, EuroGOOS, SeaDataNet, Marine Research Infrastructures and many other actors across the European ocean observation and marine data landscape, with more to come in 2023.

At the **global level** EMODnet has continued at a high pace to contribute to **international initiatives**, among others in support of the [UN Decade of Ocean Science for Sustainable Development](#), the [International Oceanographic Data and Information Exchange \(IODE\) programme of IOC-UNESCO](#) and more. Highlights included [two approved satellite events \(webinars\) of the UN Ocean Decade Laboratory "An Accessible Ocean"](#) co-organised and co-executed by EMODnet with great success: (i) 'EU-China marine data interoperability' (EMOD-PACE – CEMDNET) and (ii) 'EU marine data services EMODnet and Copernicus Marine Service for the All Atlantic and global Ocean data spaces'. EMODnet also co-organised a [UN Ocean Conference hybrid side-event 'Interoperable, transparent, and accessible marine data for the implementation of the UN 2030 Agenda Sustainable Development Goal 14, the UN Decade of Ocean Science, and for all'](#), in collaboration with Fugro, UNESCO-IOC IODE/IOC, IOC's UN Ocean Decade Data

Coordination Group, Mercator Ocean International (MOI)/Copernicus Marine Service and Flanders Marine Institute (VLIZ), attracting 128 in-person and 158 remote registrations. Finally, EMODnet applied to become an implementing partner to the [UN Decade of Ocean Science for Sustainable Development](#), established an informal working group 'EMODnet for the Ocean Decade Coordination and Implementation Group' (E4D-CIG), participated in meetings from a range of highly relevant Ocean Decade Programmes (e.g. COASTPREDICT, DITTO) and Actions (TURTLE, JIRECO-CORE), and the Head of the Secretariat co-chairs the UN Ocean Decade Data Coordination Group.

After 34 months of intense collaboration, the EU-China collaborative ocean-data pilot projects **EMOD-PACE (EMODnet Partnership for China and Europe)** and CEMDnet (China-EU Marine Data Network Partnership) came to an end in 2022. The projects connected EMODnet with the [Chinese National Marine Data and Information Service \(NMDIS\)](#) to provide interoperable access to shared data resources and generate new products and insights through various technical and scientific assessments, among others in relation to ocean circulation modeling, ecosystem resilience, habitat mapping and coastal adaptation. Colleagues from both projects gathered online for an [open final workshop and meeting](#) to celebrate the achievements of this very productive collaboration and to showcase and promote the impressive results to other interested experts, users and stakeholders. Notable outputs include, among others, the deployment of technical data interoperability solutions, the extensive assessment of different approaches for validation and modelling, and the development of over 100 informative data products available as map layers.

Watch the [final EMOD-PACE project video](#) to gain insights and reflections on the achievement of the EMOD-PACE project; and visit the [Central Portal](#) to read more about both projects and their outcomes, and take a look at the [EMODnet map viewer](#) to visualize their many data products.

EMODnet 2023 and a vision for the future

One Ocean, One EMODnet in practice

At the onset of 2023, users were introduced to the new and unified EMODnet Central Portal as the one-stop-shop for all their *in situ* marine data needs. During 2023, the information, resources and services of the [EMODnet Data Ingestion](#) facility will also be integrated in the EMODnet Central Portal, and its current website will be discontinued.

The centralisation will further **consolidate EMODnet as the EU operational service for open and FAIR access to *in situ* observations, data and products**, and as the key contributor to the marine data space in Europe and beyond. By providing a single-entry point to all EMODnet data resources, the new portal offers services more suited to today's data driven world and supports next generation ocean data and information management. The centralisation entails a major upgrade in the interoperability of EMODnet marine data, and will facilitate EMODnet's role as a cornerstone to the **backbone infrastructure for the European Digital Twin of the Ocean**. In this regard, EMODnet and Copernicus Marine technical experts will be working closely together in 2023 to advance the EU Public Infrastructure for the European Digital Twin Ocean via the EDITO-Infra project and support other related initiatives and projects such as the EU-Horizon projects [Iliad](#) and [DTO-Bioflow](#) to name just a few.

The Central Portal will not only provide access to all thematic data services, but will also continue to be animated with relevant news, blogs, use cases, communication material from all EMODnet projects and activities and much more. In 2023, we will dedicate a lot of attention to **promoting and exposing the unified portal and all its new features** to a wide range of potential users, providing training and

onboarding to enlarge the userbase and ensure the services are used to their full potential. One such example will be when users are invited to explore and stress-test EMODnet's unified services and resources in the **third edition of the [EMODnet Open Sea Lab Hackathon \(OSL 3.0\)](#)** taking place in March 2023 online, making it a more inclusive event and extending its reach. On the agenda are new and exciting challenges, new collaborations and attractive prizes.

So, if you are not afraid of a challenge then [register now!](#) Hackathon winners will be featured at [the European Maritime Day 2023](#) (24-25 May; Brest, France).

A new phase and shared vision for EMODnet

The launch of the unified EMODnet portal fully integrated into the Europa.eu domain marks a new phase for EMODnet. It is therefore timely to reflect on the longer-term future of EMODnet with a view to revisit and consolidate the strategy and vision objectives for the coming decade. To this end, in 2023, the EC DG MARE, CINEA and the Secretariat will facilitate dialogues with the network and with the wider marine knowledge community to collect input and work towards a **shared vision and strategy for EMODnet to 2030** and beyond.

The results of this process will be presented at the **third EMODnet Open Conference and Jamboree** taking place from 27 November to 1 December 2023 in Brussels (Belgium). The Conference and Jamboree will provide an excellent opportunity to **reflect on the progress and achievements** of the EMODnet family, **further strengthen the partnership** ties and **co-design the next phase** based on a **Shared Vision for EMODnet 2030**. It will also offer a moment for EMODnet to present its future activities to strengthen marine business, research, education and policy, and to listen to the user community on the value of EMODnet data, data products and services and how to further optimize the user experience. More information on the venue, date and agenda will follow soon.

Before that, EMODnet will take part and contribute to **key external events** including the [International Ocean Data Conference 2023](#), [European Maritime Day 2023](#) and many more.

Keep an eye on our [EMODnet News Page](#) on the Central Portal and [subscribe to our monthly Newsletter](#) to stay informed about the latest news and events.

In 2023, the EMODnet Secretariat will also continue to provide support to EC DG MARE's activities related to Ocean observation, and in particular the [EC Ocean Observation – sharing responsibility initiative](#) launched in 2020, to explore the options, viability and usefulness of using the instruments at the disposal of the European Commission to strengthen coordination at national level across marine and coastal data collection efforts. The year kicked off with an **online workshop** in January 2023 bringing together representatives from the former **Sea-basin Checkpoints**, EMOD-network and wider experts to discuss the added value of the user-oriented stress-test methodology and its relevance to Europe and beyond. Further activities will include targeted assessments on the marine data pipeline at national level.

Exciting developments are planned in 2023 to further improve and promote the **European Atlas of the Seas** as a key DG MARE digital information tool **powered by EMODnet**. For one, the 'My Maps' tool will be further developed to provide more advanced options to allow users to customize the Atlas to their own use case and make it their own Atlas. The Atlas team will also shift more efforts towards updating and consolidating the existing map layers and look at ways to optimise and automate the process of updating maps. Considerable attention will be dedicated to grow the Atlas audiences, combining online communication, social media activity, promotion of the Atlas at events and cooperation with other actors, e.g. via the co-development of educational material for the Teachers Corner.

Extending EMODnet's European and global partnerships

Going forward, the EMODnet Secretariat will continue working closely with the network to **maintain and further develop collaborations with key partners in Europe**. In 2023 we aim to strengthen the dialogue and collaboration with **National Oceanographic Data Centres and other national marine data organisations and experts**, and continue to engage with **Marine Research Infrastructures** to optimise the connection with EMODnet. We also plan to strengthen the ties with the **Regional Sea Conventions (RSCs)** and **MSFD actors** (EEA, JRC, ...) with a joint workshop later this year. This will help raise awareness about the newly unified EMODnet services and promote a cross-thematic, cross-sea-basin exchange, providing coordination to the links with the RSCs and increase the application of EMODnet resources in regional sea basin assessments and quality status reports.

In a similar way, communication with the **European Environment Agency (EEA)** and the newly formed European Topic Centres e.g., for Biodiversity and Ecosystems will be more proactive, to assess data flows and increase the connection and use of EMODnet data/data products for Member States environmental assessments.

In relation to the **Coastal – land-sea interface**, we will continue contributing to the JPI Oceans **Knowledge Hub on Sea Level Rise**, highlighting the wealth of existing EMODnet data/data products useful for Sea Level Rise (SLR) assessments and to increase the submission of related data to EMODnet, increasing the offer (resolution, geographical coverage, parameters) of data/data products related to SLR. This will also entail further discussions complementarity and **joint efforts between EMODnet and Copernicus Marine Service** to develop relevant services to address coastal issues, in addition to the ongoing collaborations related to marine data infrastructures to underpin the future EU Digital Twin Ocean. Our work to support the **Maritime Spatial Planning** communities in Europe will also continue, including by providing technical advice for harmonisation of MSP data and facilities to share and host digital MSP plans via the efforts of EMODnet Human Activities.

At the **global level** EMODnet will continue and where possible even step up its contributions to **international developments and initiatives**, among others in support of the **UN Decade of Ocean Science for Sustainable Development** and the **IODE programme of IOC-UNESCO**. Central to the coordination and strengthening of the network's contributions to the Ocean Decade as a Decade Implementing Partner, an informal working group '**EMODnet for the Ocean Decade Coordination and Implementation Group**' (E4D-CIG) will pick-up its activities in 2023, with a mapping of ongoing and planned activities of the network and aligning the work plans with the Data and Information Strategy of the Ocean Decade, amongst other activities. A section of the EMODnet newsletter will be dedicated to spreading relevant news on EMODnet in relation to the Ocean Decade and vice-versa from March onwards.

And while the EU-China pilot projects EMOD-PACE and CEMDnet have ended, the excellent **collaboration between EMODnet and the Chinese National Marine Data and Information Service** will be maintained and even strengthened as agreed via a Memorandum of Understanding. All of the outputs produced by the projects, including hundreds of data layers, will remain available via the EMODnet central portal. We look forward to expanding the connection to other regional data services to promote international ocean data exchange and interoperability in 2023 and beyond.

New Year, New Phase, New Head of the Secretariat

Finally, dear EMODnet partners, colleagues and friends, 2023 will also be a year of change for the Secretariat. This will be the last New Year's letter which I am writing as Head of the EMODnet Secretariat. After more than 10 years at the helm, I have decided to handover the management of the Secretariat team to Kate Larkin. Kate has been closely involved in the Secretariat as Deputy for several years now and has kindly agreed to take over as Head of the Secretariat from April 2023 onwards. I am very proud of what was achieved collectively over the last 10 years as EMODnet developed from a concept into a well-established integrated operational service and witnessing this process closely has been very rewarding. As we enter a new phase for EMODnet, it is a good time for a change and I am confident that Kate will do an excellent job carrying the flag forward and leading the network and its services to new heights. I will remain involved as Chair of the EMODnet Steering Committee and of the European Atlas of the Seas. I will also continue to guide EMODnet's global partnerships and contributions to the Ocean Decade as much as possible. I look forward to working with all of you, one way or the other, towards our common objectives.

I take this opportunity to **thank all the EMODnet Project Coordinators and technical experts, the Secretariat staff and the EMODnet Central Portal tech team** for their dedication and hard work over the past years as we have first reached the Marine Knowledge vision targets in 2020 and now the important milestone of a unified and repatriated EMODnet data service, building on the wealth of thematic resources assembled by all.

On behalf of the entire team, I wish you all a fruitful, happy and healthy 2023 and look forward to see EMODnet further grow and evolve, together with you, in the year(s) to come.

Jan-Bart Calewaert, Head of the EMODnet Secretariat



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