

EMODnet marine data for the offshore renewable energy sector in the Northeast Atlantic, North Sea and Baltic Sea

20-21 September 2022 Virtual event

Introduction and Overview

In September and October 2022 the European Commission Directorate General for Maritime Affairs and Fisheries (DG MARE) and the [European Marine Observation and Data network](#) (EMODnet) are co-organising two online workshops titled “**EMODnet Marine Data for the offshore renewable energy sector**” focused on different regional sea-basins across European seas:

- **20-21 September 2022** (09:30-13:00 CEST each day): **Workshop #1 “Marine Data for the Offshore Renewable Energy Sector in the Northeast Atlantic, North Sea & Baltic Sea”** <https://webgate.ec.europa.eu/maritimeforum/en/node/7382>
- **20-21 October 2022** (09:30-13:00 CEST each day): **Workshop #2 “Marine Data for the Offshore Renewable Energy Sector in the Mediterranean Sea & Black Sea”** <https://webgate.ec.europa.eu/maritimeforum/en/node/7383>

EMODnet for Business workshop key objectives:

The main objective of both workshops is to facilitate cross-sectoral dialogue and share experiences from key offshore energy stakeholders regarding their *in-situ* data needs, the potential for developing targeted data products, tools and methodological approaches that can support the sector based on existing data and to deliberate on the appropriate workflow to ingest data from industry. To achieve this, the workshop will explore the following:

- Increase the awareness and use of EMODnet services by Blue Economy sectors (in this instance offshore renewable energy), communicating EMODnet’s diverse, open source marine data offer and services, particularly considering the recent centralisation and new Map Viewer;
- Explore opportunities and applications for EMODnet’s diverse open source *in-situ* marine environmental data and human activities data and data products to support and innovate the offshore energy sector in Europe, taking into consideration the potential differences in the development of the sector in the geographical areas identified. Gather feedback from experts from private and public sectors on marine environmental and human activities data/data products needs and requirements across the offshore renewable energy value chain (licensing & siting, operations at sea, environmental impact assessments etc) and across different European regional seas;
- Discuss opportunities for data sharing/ ingestion of marine environmental and human activities data produced by blue economy sectors into EMODnet;
- Provide information on data collection, data coordination and data needs to support the EC Ocean Observation Initiative.

The workshops will investigate questions including (not exhaustive list):

- What marine environmental and human activities data / data products are required by private sector operators, marine managers, etc to support the development of the offshore renewable energy sector and to underpin an ecosystem approach in the management of the sector and overall offshore areas?
- How can the services provided by EMODnet support these needs to reduce uncertainty, save costs and drive innovation across the existing offshore renewable

energy value chain including the planning, constructing, managing, monitoring and assessment of environmental impact?

- What are the additional data/data product needs/gaps now and in emerging offshore renewable energy platforms? How do these needs differ across different regional sea-basins?
- How can the offshore renewable energy sector contribute to EMODnet databases through data ingestion of its in situ marine environmental measurements?
- Participants will include both private and public sector, including (but not limited to) offshore renewable energy operators, national authorities and wider policy makers at national, regional and EU levels, research & academia, marine consultancies and marine data services. Recommendations from the workshops will also be communicated to and taken up by EC in relation to the [EC Ocean Observation initiative](#).

The dialogue is in line with the policy objective of the current European Maritime, Fisheries and Aquaculture Fund (EMFAF) for a greener, low-carbon, transitioning towards a net zero carbon, economy and resilient Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate change mitigation and adaptation and risk prevention and management. In this context, the European Marine Observation and Data Network (EMODnet) initiated the EMODnet for business framework, to underline the importance of open marine data and how it supports blue growth and industry.

A public report of the key outcomes of the workshops will be available on the EC Maritime Forum after the completion of both workshops.

Agenda overview/key aims

Day 1:

- Demonstrate and communicate the existing EMODnet in situ marine data 'offer';
- Present existing and future Use Cases of EMODnet marine data being used to support, optimise and innovate the offshore renewable energy sector;
- Gather feedback on existing and emerging marine data needs and requirements to support the offshore renewable energy sector;
- Take stock of key recommendations on data needs and requirements across different offshore renewable energy sectors and for different regional seas

Day 2:

- Take stock of Day 1 key take-aways on the EMODnet 'offer' and recommendations on data needs and requirements;
- Communicate and present the benefits of data sharing and the EMODnet Data Ingestion Service;
- Discuss challenges and barriers for data sharing by the offshore renewable energy sector and how EMODnet Data Ingestion can support this process.

Workshop #1 Agenda, 20-21 September 2022

Day 1 (20 September 2022, 09:30-13:00 CEST)

09:30 Welcome & Plan for the 2 days: Anne Mette (lead moderator)

09:40-09:45 Opening remarks: EC, DG MARE

09:45 – 10:15 Demonstrating the EMODnet *in situ* marine data ‘offer’ for the offshore marine renewable sector

- **EMODnet: Overview** (Kate Larkin, Deputy Head, EMODnet Secretariat) – 5’
- **EMODnet: A centralised data service** (Conor Delaney, Technical Coordinator, EMODnet Secretariat) - 5’
- **The EMODnet *in situ* marine data ‘offer’: Demonstrations from a selection of EMODnet thematic Coordinators – 20’ (4 x 5’) :**
 - EMODnet Physics: Antonio Novellino (ETT, Italy) and Patrick Gorringe (SMHI, Sweden),
 - EMODnet Biology: Joana Beja (VLIZ Belgium)
 - EMODnet Human Activities: Alessandro Pititto (COGEA, Italy)

10:15-10:25 Q&A on EMODnet services (moderated by Anne Mette)

10:25 – 10:50 Use Cases of open source EMODnet and wider data and data products to support, optimise and innovate the offshore renewable energy sector (4 use cases x 5’)

- **Use of EMODnet Bathymetry and Physics by the offshore contracting industry to optimise micro siting** (Gerben de Boer, Van Oord)
- **Finding the best deployment site for a combined floating wind and wave energy system using open source data from Copernicus Marine Service and EMODnet** (Caitlin McCarthy, Marine Power Systems)
- **EMODNET Data use within Ørsted for Wind Farm Site Selection and Design** (Kieran Bell, Ørsted)
- **Using open source data in desalination and wave energy farms: An example from Copernicus Marine Service** (Michael Henrikson, Wave Piston)
- **Use of EMODnet Geology for offshore renewable energy siting** (Janine Guinan, GSI)

10:50-11:00 Q&A and open floor plenary discussion: the use of open source marine environmental and human activities data from EMODnet and other data services to support the offshore renewable energy sector (moderated by Anne Mette)

11:00-11:10 Comfort break

11:10-12:10 Break-out session #1: Gathering feedback on existing and emerging marine data needs and requirements to support the offshore renewable energy sector.

Key discussion points:

- What marine environmental and human activities data / data products are required by private sector operators, marine managers, etc to support the development of the offshore renewable energy sector and to underpin an ecosystem approach in the management of the sector and overall offshore areas?
- How can the services provided by EMODnet support these needs to reduce uncertainty, save costs and drive innovation across the existing offshore renewable

energy value chain including the planning, constructing, managing, monitoring and assessment of environmental impact?

- What are the additional data/data product needs/gaps now and in emerging offshore renewable energy platforms? How do these needs differ across different regional sea-basins?

12:10 – 12.20 Comfort break

12:20 – 12:25 Renewable Grid Initiative (RGI) commissioned study “A Review of Biodiversity Data Needs and Monitoring Protocols for the Offshore Wind Energy Sector in the Baltic and North Sea (Roland Lleshi, RGI) – 5’

12:25-12:30 data and data gaps for the offshore renewable energy sector: a case study from the national seabed mapping programme, Ireland (Janine Guinan, GSI) – 5’

12.30–12:50 Plenary reports on break-out sessions: [Taking stock of key recommendations on data needs and requirements across different offshore renewable energy sectors and for different regional seas](#)

Rapporteurs/Facilitators deliver key messages from each group (3 x 5’ minutes for reports & 10’ for comments/discussions from all participants in plenary

12:50-13:00 Open floor on break-out #1 and forward look to Day 2 (moderated by Anne Mette) – 5’

13:00 Close Day 1

Day 2 (21 September 2022, 09:30-13:00)

09:30-09:35 Welcome: Anne Mette (lead moderator)

09:35 – 09:45 [Taking stock of key outcomes of day 1 and plan for day 2](#): Anne Mette (lead moderator)

09:45 – 10:25 [Win-win data sharing with EMODnet: Communicating the benefits of data sharing and the EMODnet Data Ingestion Service](#)

- **EMODnet: A best practice in Findable, Accessible, Interoperable and Reusable (FAIR) marine data sharing for the EU Green Deal and UN Ocean Decade** (Kate Larkin, Deputy Head, EMODnet Secretariat / Conor Delaney, Technical Coordinator, EMODnet Secretariat) – 5’
- **EMODnet Data Ingestion: EU public service supporting the Blue Economy towards FAIR marine data sharing** (Sissy Iona HCMR, Greece) – 10’
- **Reflections from EMODnet Coordinators on data sharing by the offshore renewable energy sector and wider Blue Economy** – 10’
- **Q&A and Open floor** – 10’

10:25-10:30 Comfort break

10:30-11:30 [Breakout #2: Discussing challenges and barriers for data sharing by the offshore renewable energy sector and how EMODnet Data Ingestion can support this process.](#)

Key discussion points:

- Do you/your organisation already share marine data with EMODnet or other public data repositories and services e.g., at national, regional, EU level?
- What types of data can be shared e.g., marine environmental data (baseline data or also operational data), human activities data e.g., offshore platforms, socio-economic data, other?
- What are the challenges and barriers for data sharing? How does this vary across the value chain e.g., from location siting/licensing to operations/monitoring, environmental impact assessments etc?
- Are there specific challenges for each regional sea basin?
- With EMODnet Data Ingestion offering a free, public service for ingesting data, how likely are you to share marine environmental or human activities data in the future?
- How can the offshore renewable energy sector contribute more to EMODnet databases through data ingestion of its *in situ* marine environmental measurements? What incentives / actions are needed?

11:30-11:50 Comfort break

11:50-12:00 EMODnet for Business, Associated Partnership and stakeholder engagement (Kate Larkin, Deputy Head, EMODnet Secretariat)

12:00-12:25 Plenary reports on break-out sessions & Open floor [Taking stock of key challenges, barriers and opportunities for data sharing with EMODnet](#)

Rapporteurs/Facilitators deliver key messages from each group (3 x 5' minutes for reports & 10' for comments/discussions from the groups in plenary)

12:25 – 12:45 Open floor discussion on any topics from the 2 days to refine key messages, recommendations and next steps

12:45 – 12:55 Closing words from EMODnet and DG MARE

13:00 Workshop closes