

Powering the European Marine Data Ecosystem

For a digital and green future

EMODnet OPEN CONFERENCE 2023



Townhall: EMODnet for the Blue Economy

Co-Chairs:

Luca Marangoni (CINEA)

Séverine Renault (AND International)



Townhall: EMODnet for the Blue Economy

House-keeping rules (LM)

- **Fully Physical (No Hybrid):** Please note that this townhall meeting is fully physical, and we won't have a virtual or hybrid component. All participants are expected to be present in person.
- **Time Management:** To ensure we cover all topics, we will adhere to the schedule. Each speaker will have a limited time to present.
- **Cell Phones and Electronics:** Please silence your cell phones and electronic devices to minimize disruptions.
- **Speaking Protocol, Microphone Usage and Question Submission:** Raise your hand for plenary if you wish to speak, and we will provide a microphone for you. Please wait your turn and be mindful of the time.
- **Slido Usage:** While we encourage in-person discussions, we may utilize digital platforms like Slido or Mural for interactive activities. We'll provide instructions once the Slido questions come up.

Townhall: EMODnet for the Blue Economy

Key facts and expected outputs (LM)



- **Date and Timing:** 29 November 2023, 16:45-18:00

- **Key Objectives:**

The primary objective of each Townhall is to gather valuable stakeholder feedback and recommendations regarding the future evolution of EMODnet content and services for the period up to 2030 and beyond.

- **Reporting to Plenary:**

The insights and key messages obtained from each Townhall will be collated and presented to the Plenary Session 5, Panel 2 “EMODnet and the Blue Economy” on November 30th by Alessandro Pititto (COGEA – Bip group; Coordinator, EMODnet Human Activities)

Townhall: EMODnet for the Blue Economy

Agenda (SR)

16:45-17:00 Townhall Introduction and ice-breakers

17:00 – 17:08: EMODnet for the Blue Economy

Presentations on how EMODnet contributes to the blue economy sector and the blue economy sector can share data with EMODnet:

- Blue Economy data sharing with EMODnet, Sissy Iona HCMR (examples of private sector data sharing with EMODnet Data Ingestion)
- QUIETMED projects linking with EMODnet, Noelia Ortega Ortega (CEO, Directora General, Centro Tecnológico Naval y del Mar; CTN-Marine Technology Centre)

17:08-17:50: Plenary Discussions

During the plenary discussion, participants from the private sector (or those closely connected to it) will be invited to share their insightful stories, followed by a Q&A session from fellow participants. The session will be structured in three rounds of key topics:

- How does the existing EMODnet data portfolio and service serve the Blue Economy?
- EMODnet service evolution for the Blue Economy
- Data sharing by the blue economy sector

17:50-18:00 Reporting back to plenary and future outlooks

18:00: Closing of the townhall

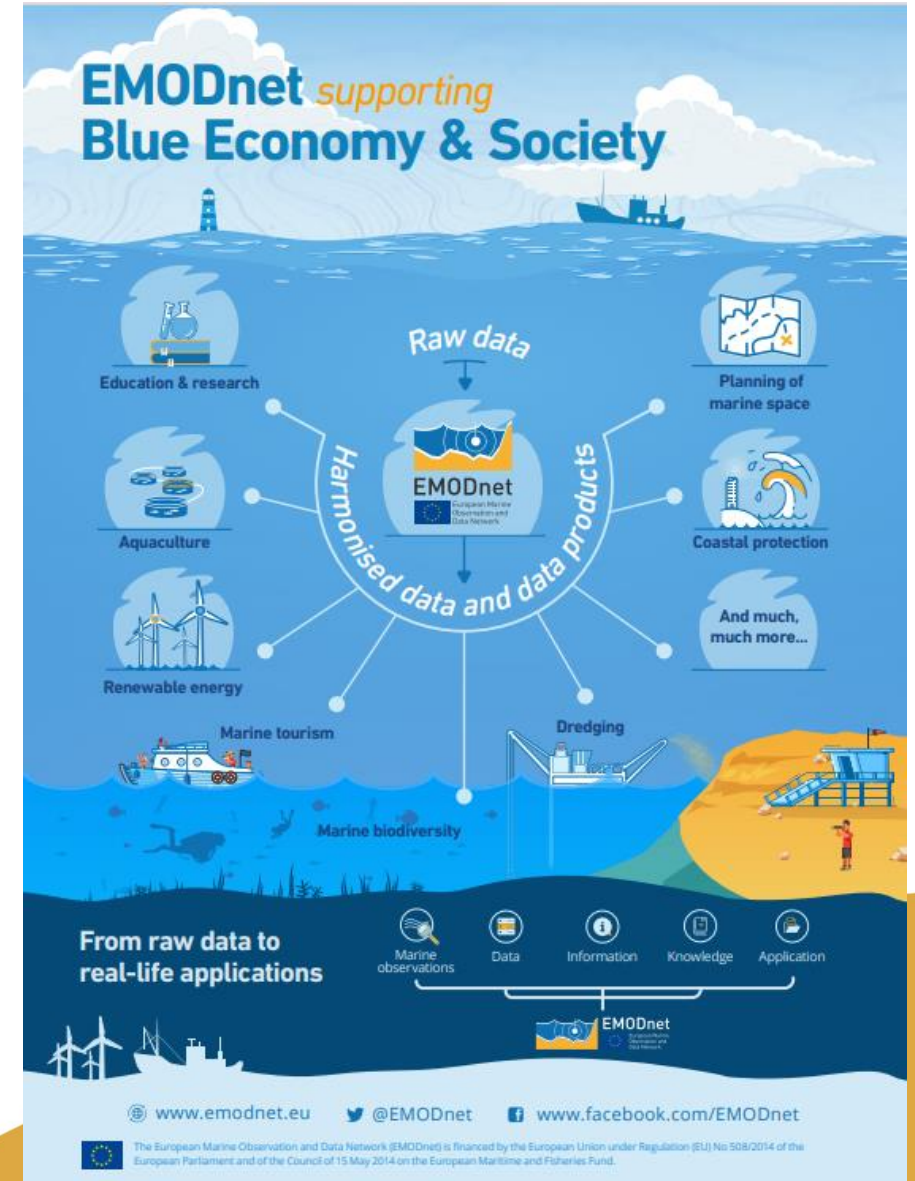
Townhall: EMODnet for the Blue Economy

Townhall introduction

Luca Marangoni

(Deputy Head of Unit for Sustainable Blue Economy - CINEA)

- The network
- Main user groups
- Other projects closely related to EMODnet and the blue economy



Townhall: EMODnet for the Blue Economy

EMODnet - Human Activities

Objectives

- **Facilitate access** to existing marine data on activities carried out in EU waters
- **One single-entry point**
- **Harmonized data** from various sources across EU
- **Free downloadable** access
- Show **temporal variation** of human activities

Key services

- 18 Themes
- > 40 Datasets

Aggregate Extraction

Algae Production

Aquaculture

Cables

Cultural Heritage

Desalination

Dredging

Energy

Environment

Fisheries

Oil and Gas

Main Ports

Maritima Spatial Planning

Military Areas

Other Forms of Area Management/Designation

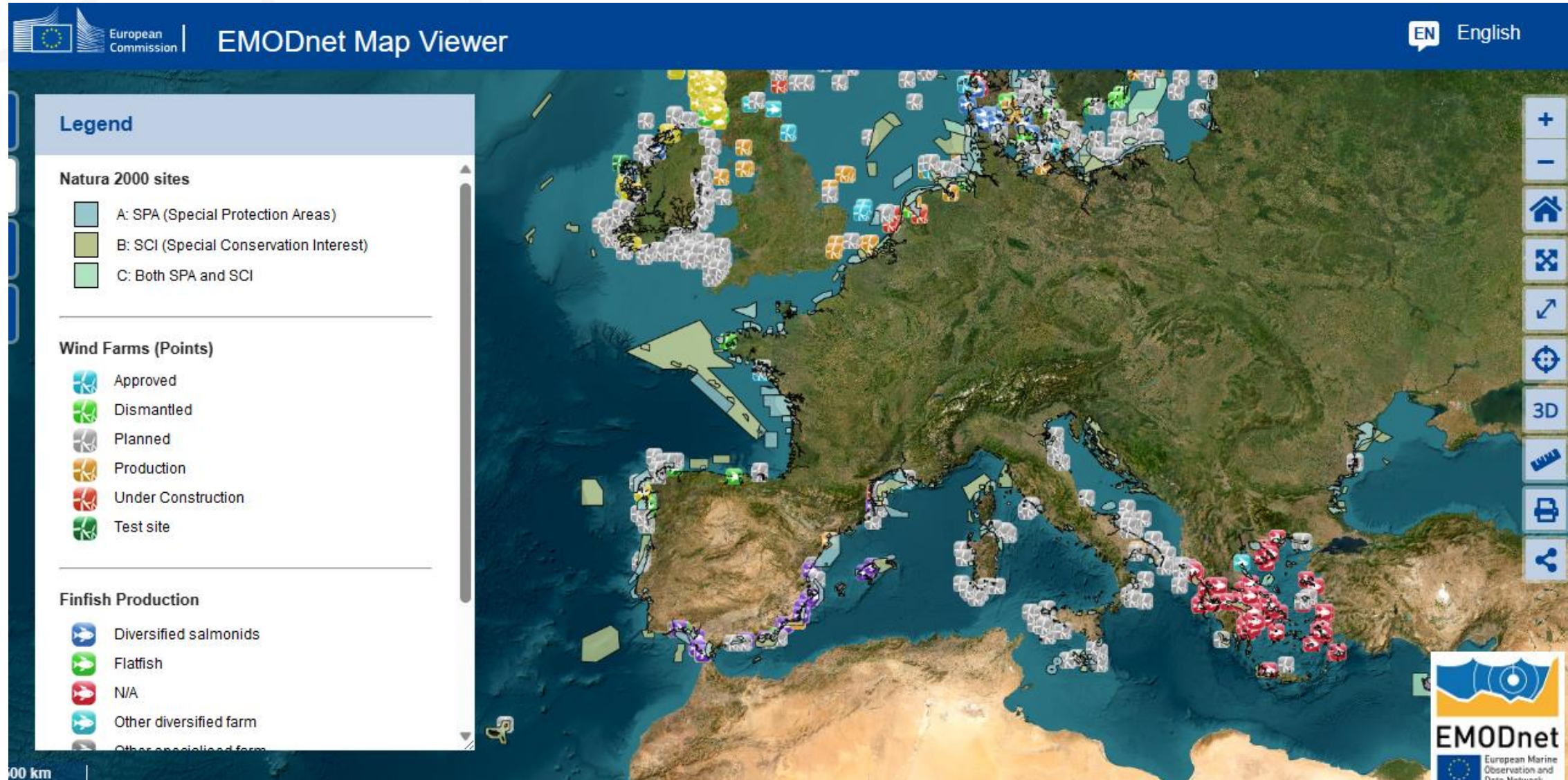
Pipelines

Shipping Density

Waste Disposal

Townhall: EMODnet for the Blue Economy

EMODnet - Human Activities



Townhall: EMODnet for the Blue Economy

Ice breaker questions

What sector do you represent?



<https://app.sli.do/event/qmh4KdM1cRpJocGCvq23d9/embed/polls/313db507-95d2-4349-ba4c-50bb3bfb8e7a>

slido



What sector do you represent?

ⓘ Start presenting to display the poll results on this slide.

Townhall: EMODnet for the Blue Economy

Ice breaker questions

Which Blue Economy sectors are you most interested in hearing about to advise the discussion?



<https://app.sli.do/event/qmh4KdM1cRpJocGCvq23d9/embed/polls/3aeaf2fd-7b12-495a-b7d5-9aa09ed7f78b>

slido



Which Blue Economy sectors/ activities are you most interested in hearing about?

ⓘ Start presenting to display the poll results on this slide.

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EMODnet Data Ingestion:
EU public service
towards FAIR marine
data sharing

Sissy Iona, HCMR, Greece

EMODnet Ingestion service

A free and open service to everyone for sharing and ingestion of marine data into EMODnet

- **The Network:** 50 Data Centres, specialized marine centres, and all EMODnet thematic coordinators ensuring provision of trustable data and products

BATHYMETRY



BIOLOGY



CHEMISTRY



GEOLOGY



HUMAN ACTIVITIES



PHYSICS



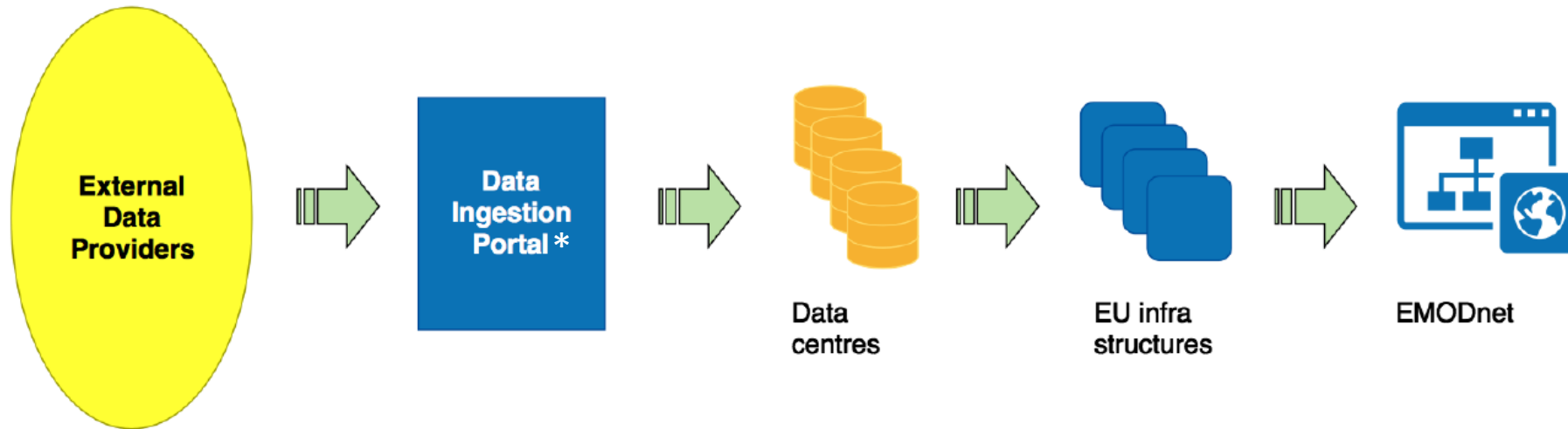
SEABED HABITATS



Data Ingestion process

Streamlining the integration of data sources into EU data infrastructures and EMODnet

- Use of **standards & best practices** for making marine data Findable, Accessible, Interoperable and Re-usable (FAIR)



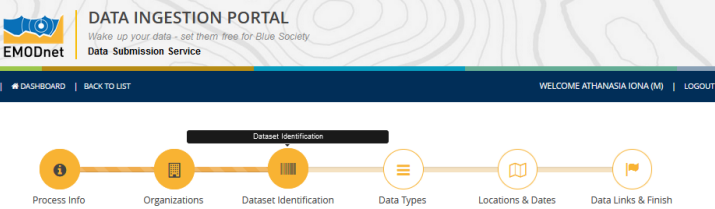
- Automatic exchanges established with the “**SeaDataNet/SEANOE data citing service**” (*scientific data*)
- Automatic exchanges are almost finalized with the “**The Crown Estate (TCE) Marine Data Exchange (MDE)**” (*MDE stores, manage, share data of offshore renewable energy projects in UK North Sea sector*)

* Migration to Central Portal, 2024

Ingestion process

A step by step approach to make your data available, visible and acknowledged

On-line submission form
with support by the Data Centres



Dataset Identification

DATASET GENERAL INFORMATION

Title of dataset 2012, Partrac Ltd, Islay Offshore Wind Farm, Meteocean Survey

Narrative summary of dataset Partrac Ltd. were contracted by SSE Renewables to deploy three Waverider wave buoys and two ADCP frames at the proposed Islay Offshore Wind Farm site. The objective of the study was to provide wave data that will inform the physical processes modelling and engineering design. The Waverider buoys were deployed on 12th February 2012 until the 14th August 2012, with the ADCP frames being deployed in July 2012. Deliverables were in the format of reports and excel spreadsheets containing raw data. This dataset package contains the wave rider buoy reports, including raw data, QC'd data, failed data, flagged data and statistics.

DATASET FORMATS

Dataset format Delimited

Language used in dataset English

DATA QUALITY PROCESSING INFORMATION

Summary of data quality processing Included in accompanying data report

DOCUMENTATION

Documentation Included in accompanying data report

Publication of data 'as-is'

Dataset Identification

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Summary of processing methodology Included in accompanying data report.

Supporting documentation Included in accompanying data report

Start date 2012-02-12

End date 2012-08-14

Frequency of observations minute to sub-hour

Responsible organisations

Country	United Kingdom
Organisation name	The Crown Estate
Role of organisation	Dataset Holding Organisation
Country	United Kingdom
Organisation name	SSE Renewables
Role of organisation	Originator of Dataset
Country	United Kingdom
Organisation name	Partrac, Head office
Role of organisation	Originator of Dataset

Integration into EU infrastructures

Filter search

You searched for: **Date search:** 2012-02-12 to 2012-08-14

Data originator: The Crown Estate

EXPORT RESULT **SAVE QUERY**

INPUT FIELDS

Free search

Geographic search

SEA REGIONS

DISCIPLINE (P09)

Integration into EMODnet Central Portal

EMODnet Map Viewer

Filter layers

Filtered layer items

parameters

data owner

NET OFFICE (EXETER)

NET OFFICE (OCEAN WEATHER SERVICES)

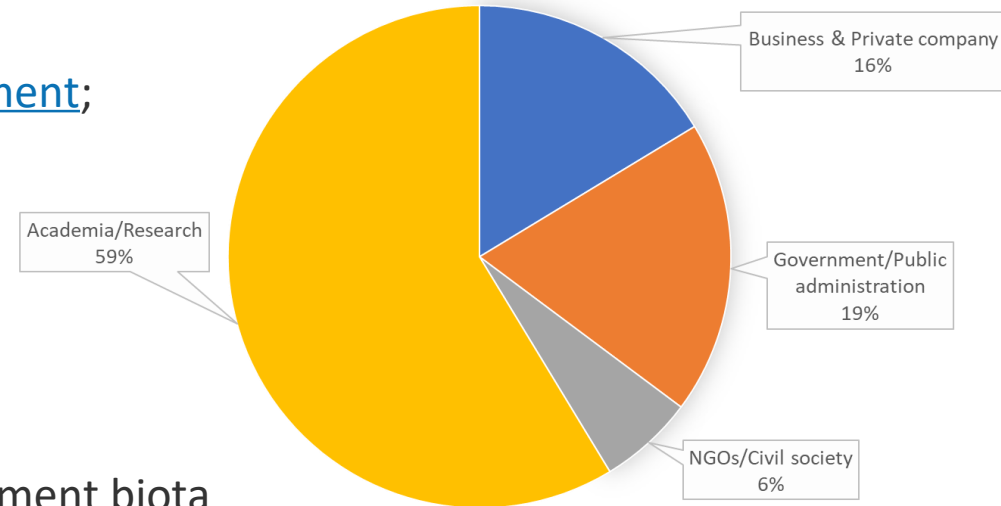
- Transparent **ownership** of the data
- **Acknowledgments** to the source

Submissions from the private sector

Examples of monitoring data from Offshore Renewable Energy sector

- **MEP-NSW Fish community:** Fish community surveys for the Monitoring and Evaluation Programme of the North Sea OWEZ wind park, Netherlands.
 - Originator: [NoordzeeWind BV](#)
 - Holding Organisations: [Rijkswaterstaat Water, Traffic and Environment](#); [Deltares](#)
- **Partrac Ltd**, Islay Offshore Wind Farm, Metocean Survey, UK.
 - Originators: [SSE Renewables](#); [Partrac, Head office](#)
 - Holding Organisation: [The Crown Estate](#)
- **Fugro GeoConsulting Limited**, Geotechnical Surveys, UK: rock & sediment biota data.
 - Originators: [Centrica Energy Renewable Investments](#); [Fugro GeoConsulting Ltd](#)
 - Holding Organisation: [The Crown Estate](#)

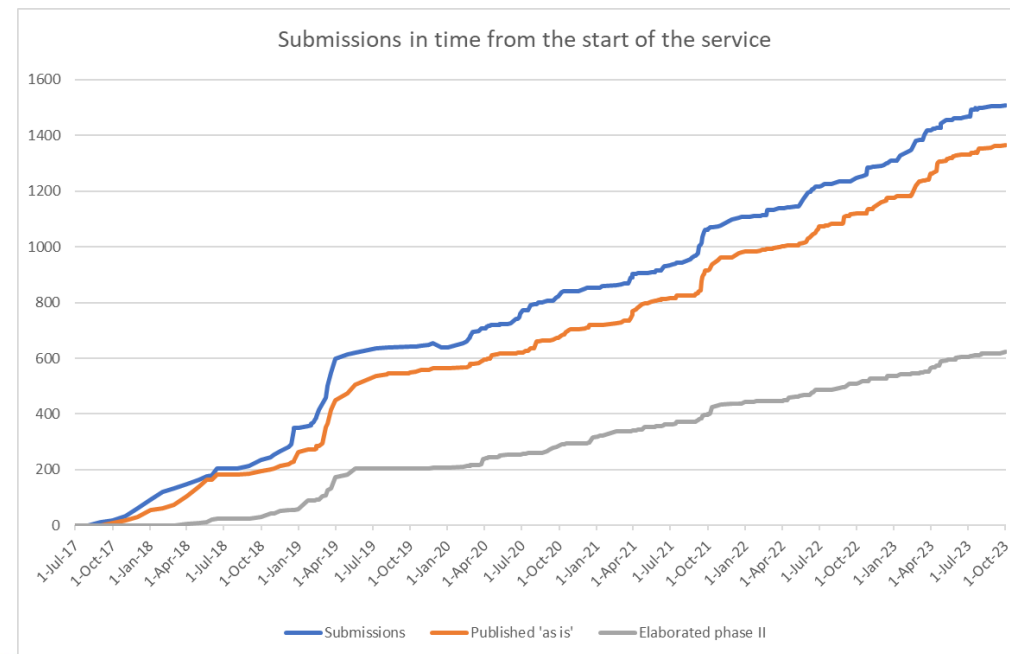
Types of organisations per sector



Perspectives for further increase of available data

On going collaborations and activities - examples

- Engagement with **Citizen Science** groups and initiatives (marine litter citizen science data from ERASUM MARIS)
- Accessing the availability of **coastal and offshore licensed data** (renewable energy, aquaculture)
 - Workshop with representatives of stakeholders and EMODnet Ingestion members in 2024
- Dialogue with **Renewables Grid Initiative (RGI)** for future collaboration
- Organizing **Workshops, webinars, training** of potential data providers from research projects



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Thank you for your attention

Sissy Iona

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<https://www.emodnet-ingestion.eu/>

emodnet.ec.europa.eu

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EMODnet for managing underwater noise
environmental impact.
Quietmed and Quietseas projects.

Noelia Ortega, CEO, CTN- Marine Technology
Center
www.ctnaval.com

EMODnet contributes to the blue economy sector

Work together to observe the sea, process the **data** according to international standards and make that information **freely available** as interoperable data layers and data products

Blue economy activities may generate underwater noise:

- Maritime traffic
- Dredging
- Pile-drivers
- Sonar
- Airguns
- Acoustic deterrents
- Explosives

- Underwater noise is the Descriptor 11 of the Good Environmental Status of our seas established by the Marine Strategy Framework Directive (MSFD).
- Anthropogenic sounds are classified as

D11C1. Loud, low and mid frequency impulsive sounds: short duration such as seismic surveys and piling for wind farms and platforms.

D11C2. Continuous low frequency sound: long lasting sounds such as dredging, shipping and energy installations

The Blue Economy sector can share data with EMODnet

EMODnet Sharing data

D11- Criteria 1 “ Distribution in time and place of loud, low and mid frequency impulsive sounds”

QUIETMED PROJECT

<https://quietmed2.eu/>

Development of the joint register for Descriptor 11C1 (underwater impulsive noise)

D11- Criteria 2 “Continuous low frequency sound”

QUIETSEAS PROJECT

<https://quietseas.eu/>

Proposal of common impact indicators for D11C1 and D11C2 and development of tools for their evaluation.

quietMED quietMED₂

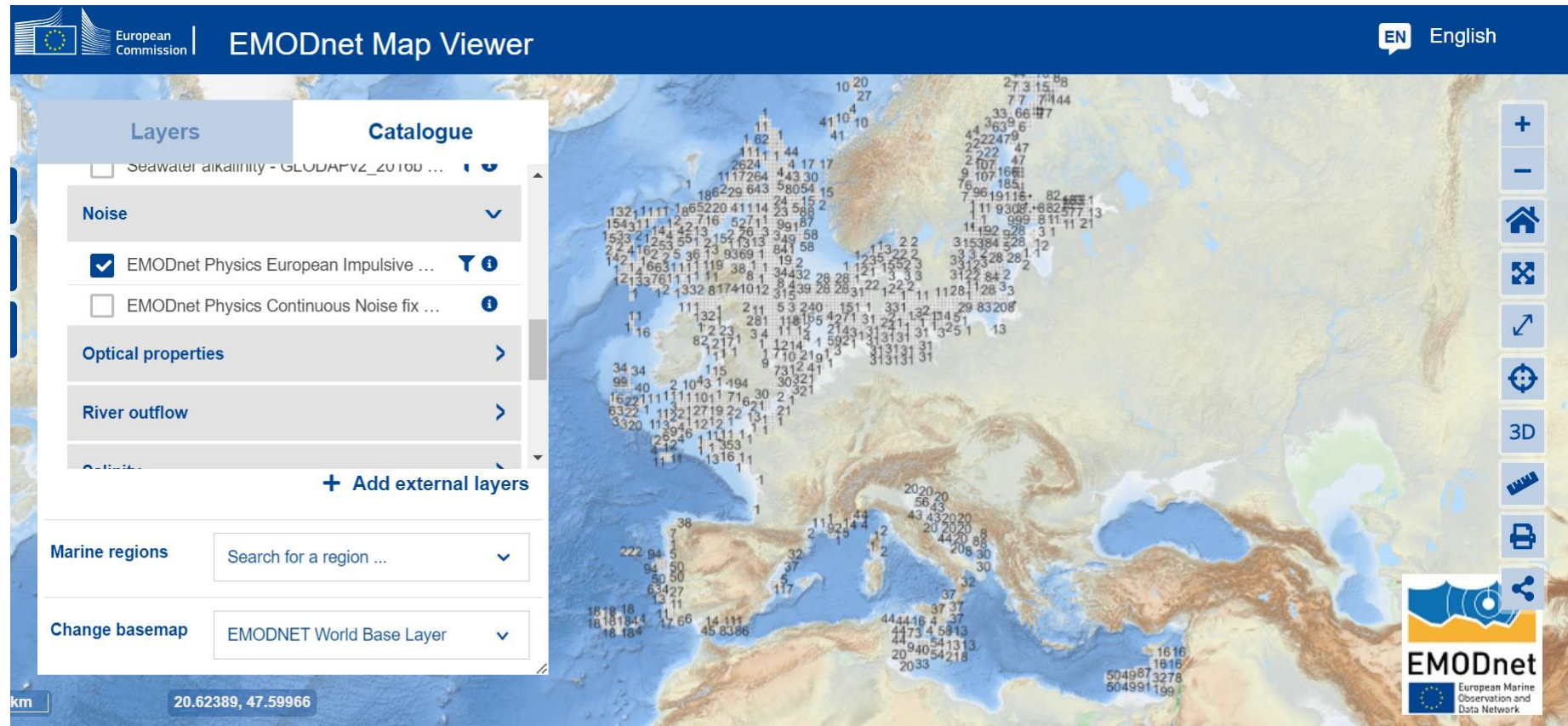
quiet
seas

EMODNET gathers noise data

EMODnet Physics

D11C1. Loud, low and mid frequency
impulsive sounds:

- Pile-drivers
- Sonar
- Airguns
- Acoustic deterrents
- Explosives

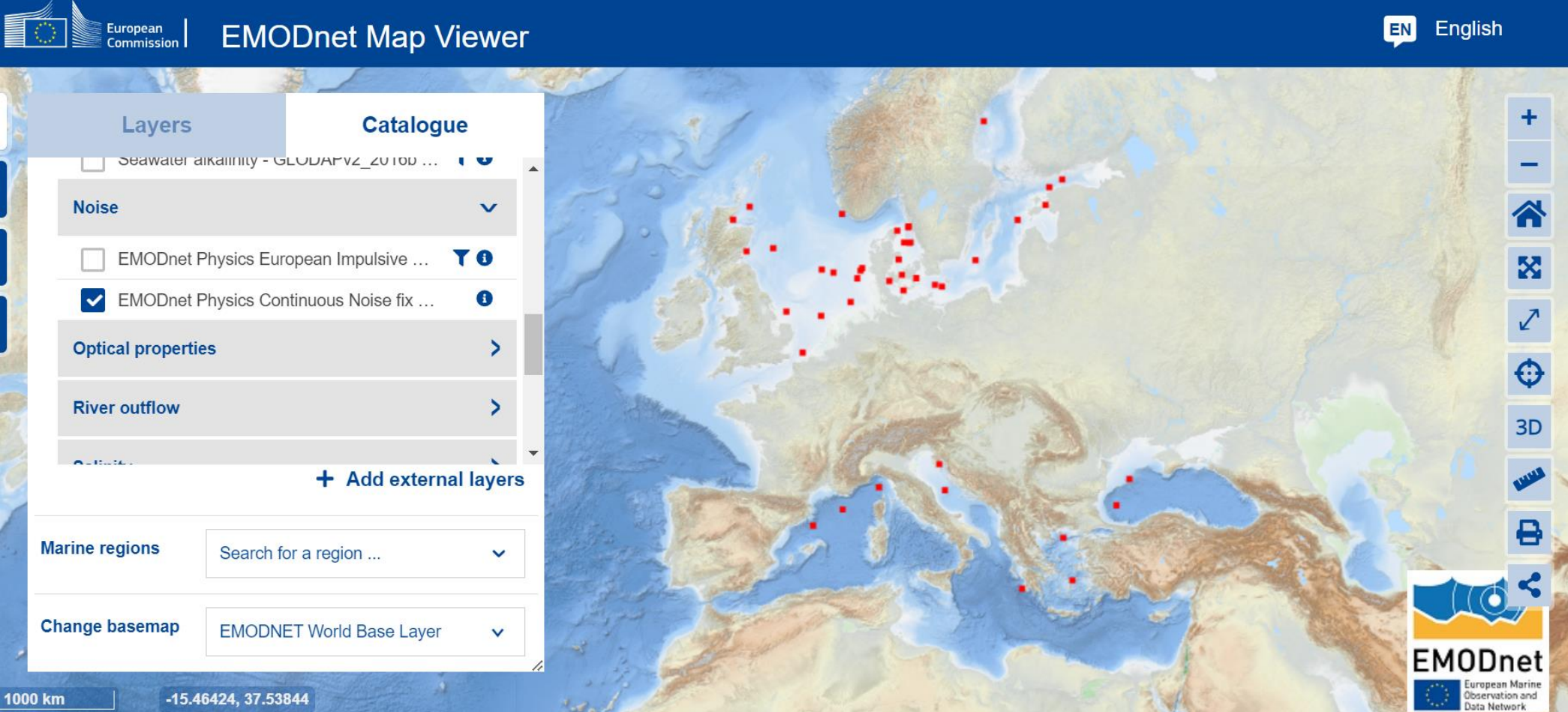


EMODNET gathers noise data

EMODnet Physics

- D11C2. Continuous low frequency sound:

Long lasting sounds such as dredging, shipping and energy installations



The screenshot displays the EMODnet Map Viewer interface. At the top left, the European Commission logo is visible. The main title is "EMODnet Map Viewer". On the right side of the header, there is a language selector set to "English".

The interface features a map of the Mediterranean region with numerous red square markers indicating noise data points. On the left side, there is a "Layers" panel with a "Catalogue" tab. Under the "Noise" category, the layer "EMODnet Physics Continuous Noise fix ..." is checked. Other categories include "Optical properties", "River outflow", and "Salinity". Below the layers panel, there are sections for "Marine regions" (with a search box) and "Change basemap" (set to "EMODNET World Base Layer").

On the right side of the map, there is a vertical toolbar with icons for zooming in (+) and out (-), home, full screen, pan, location, 3D view, scale bar, print, and share. At the bottom left, a scale bar shows "1000 km" and coordinates "-15.46424, 37.53844". The EMODnet logo and name are also present in the bottom right corner of the map area.

EMODnet Physics and Data

Data from EMODNET physics for modelling building noise maps

Products

Temperature & Salinity

Sea Surface Currents

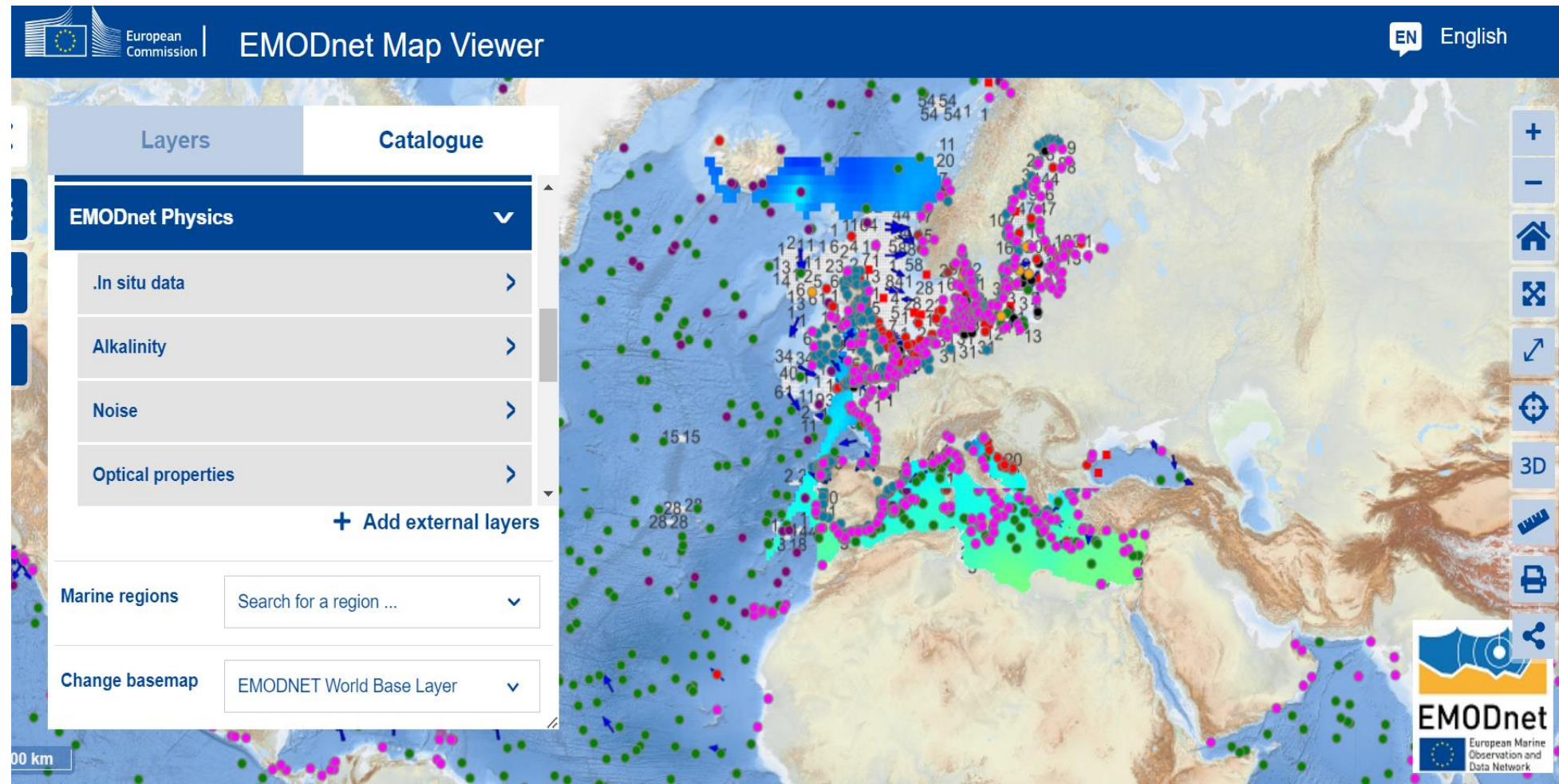
Sea Level

Wave

River Runoff

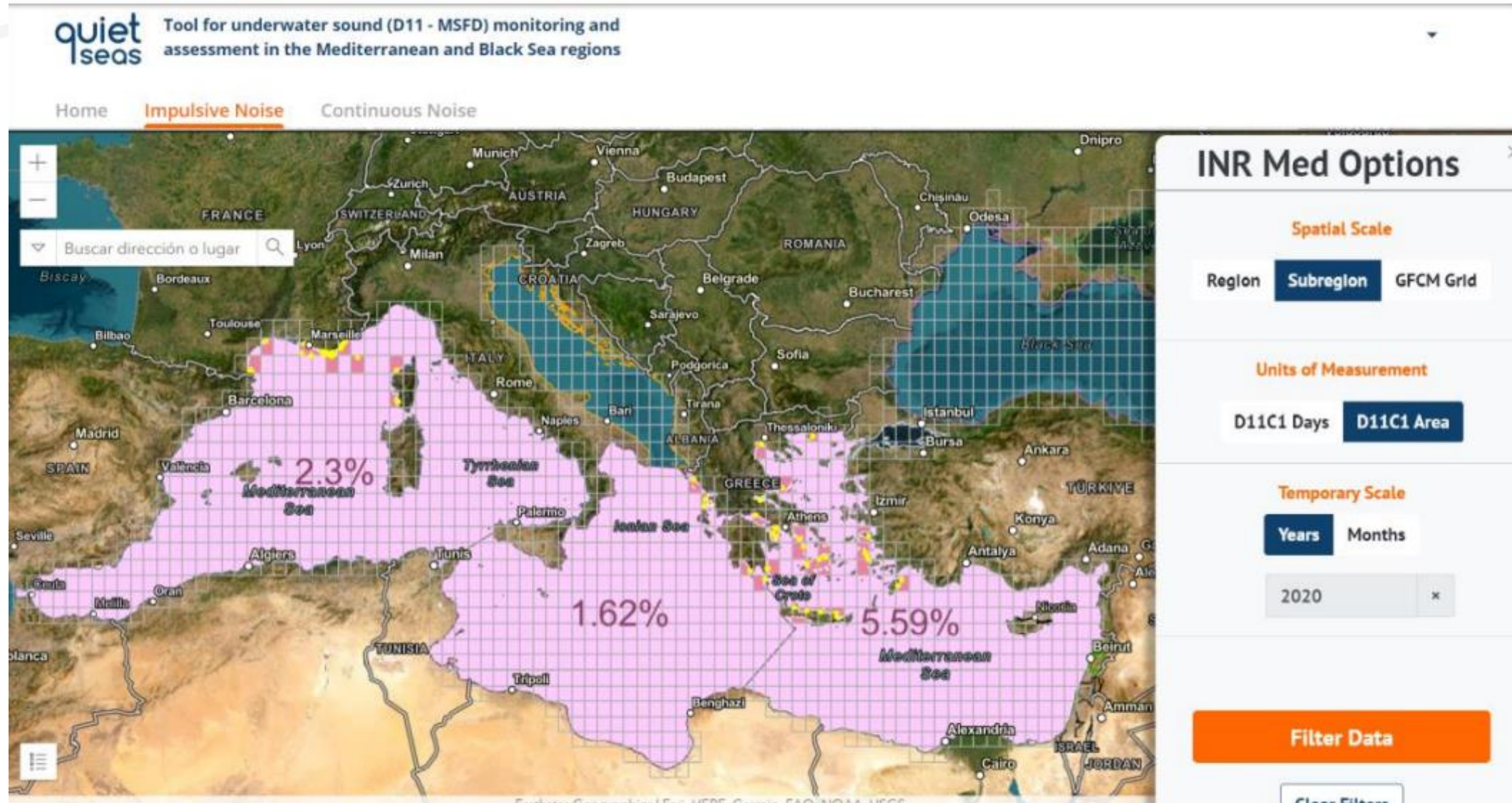
Water Clarity

Noise Events



Products using EMODnet Physics and Data

Underwater noise register for impulsive noise



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EMODnet



European Marine
Observation and
Data Network

Thank you for your attention

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Townhall: EMODnet for the Blue Economy

Plenary discussion (SR)

How many of you in the room are from the private sector?

How does the existing EMODnet data portfolio and service serve the Blue Economy?

- Do you use or are you aware of Blue economy companies and organisations using EMODnet data?
- Which datasets and data services?
- What for (planning, monitoring, ..)?
- What have they achieved thanks to EMODnet data?

EMODnet service evolution for the Blue Economy

- Do you perceive changes in your environment that may change your needs as regards EMODnet services?
- Which changes?
- How will that impact your needs?

Data sharing by the blue economy sector

- Have you or do you know Blue economy companies which have shared data with EMODnet?
- What motivated you/them?
- What do you think could incentivize Blue Economy stakeholders to share their data?

Townhall: EMODnet for the Blue Economy

Plenary discussion round 1 (SR)

How does the existing EMODnet data portfolio and service serve the Blue Economy?

- Do you use or are you aware of Blue economy companies and organisations using EMODnet data?
- Which datasets and data services?
- What for (planning, monitoring, ..)?
- What have they achieved thanks to EMODnet data?

Townhall: EMODnet for the Blue Economy

Plenary discussion round 2 (LM)

EMODnet service evolution for the Blue Economy:

- Do you perceive changes in your environment that may change your needs as regards EMODnet services?
- Which changes?
- How will that impact your needs?

Townhall: EMODnet for the Blue Economy

Plenary discussion round 3 (SR)



Data sharing by the blue economy sector:

- Have you or do you know Blue economy companies which have shared data with EMODnet?
- What motivated you/them?
- What do you think could incentivize Blue Economy stakeholders to share their data?

Townhall: EMODnet for the Blue Economy

Reporting back to plenary and future outlooks

What recommendations do you have for enhancing EMODnet services?



<https://app.sli.do/event/qmh4KdM1cRpJocGCvq23d9/embed/polls/d2ba652a-8e66-4b97-ba3b-380d7f6cb585>

slido



What recommendations do you have for enhancing EMODnet services for the blue economy?

ⓘ Start presenting to display the poll results on this slide.

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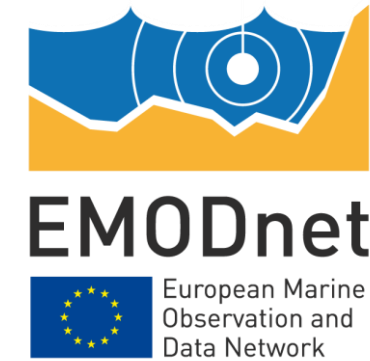
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The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund and its predecessor, Regulation (EU) No. 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.