



**EMODnet**



European Marine  
Observation and  
Data Network

# **EMODnet - Ingestion and safe-keeping of marine data**

**CINEA/EMFAF/2021/3.4.10/02/SI2.868290**

**Start date of the project: 30/03/2022 (24 months)**

**Centralisation Phase**

**Quarterly Progress Report (1)**

**Reporting Period: 01/07/2022 – 30/09/2022**



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### Disclaimer

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# 1. Highlights in this quarter

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## ***Task 1: Maintain, further develop and migrate a web-portal***

During the reporting period the EMODnet Ingestion portal and its services were maintained and care was taken to ensure that all services continued to operate as required. Maintenance involves: content updates; adding new data centres contacts; manual work on submitted metadata mapping and missing values, automatic updating of Submission service vocabularies on a regular basis (every day); exchange (JSON) of Submission service with Summary service; users support; and technical upgrades and improvements.

A number of improvements were made to the Submission service as follows:

- The function “Re-Assignment” is now available at the production service allowing the data centres contact persons to change by themselves the responsible person for the submission processing without the intervention of the administrators or requiring status changes. The Ingestion service manuals were updated accordingly and made available.
- A dedicated endpoint to retrieve on demand the statistics and sizes of the downloading of ‘as-is’ data packages was developed, which is used for the quarterly reporting.
- Data Submitters and data centres are alerted by emails to undertake the necessary actions for finalizing their processing steps in order: a) to improve their response speed and, b) narrowing the time gap between Phase I ‘as-is’ publishing data packages and their Phase II integration into EMODnet data and products.

Remark: Another new planned action is to analyse how the Ingestion portal and its services could be migrated to the Central Portal like all other EMODnet thematic lots. However, at the kick-off meeting of the coordination team (MARIS and HCMR) with CINEA and DG-MARE it was agreed that this analysis will not start before 2023 as the full focus of the migration is now on releasing the Central Portal with all thematics integrated by end 2022.

## ***Task 2: Implement pathways for delivering data to final repositories***

The total number of received submissions increased from 1216 to 1248, while the number of processed and published data submissions increased from 1073 to 1119 and of which, the number of fully elaborated data submissions went from 486 to 508 data. This is illustrated in the following image which the separate statistics provide more insight in the division over EMODnet themes and external data providers.

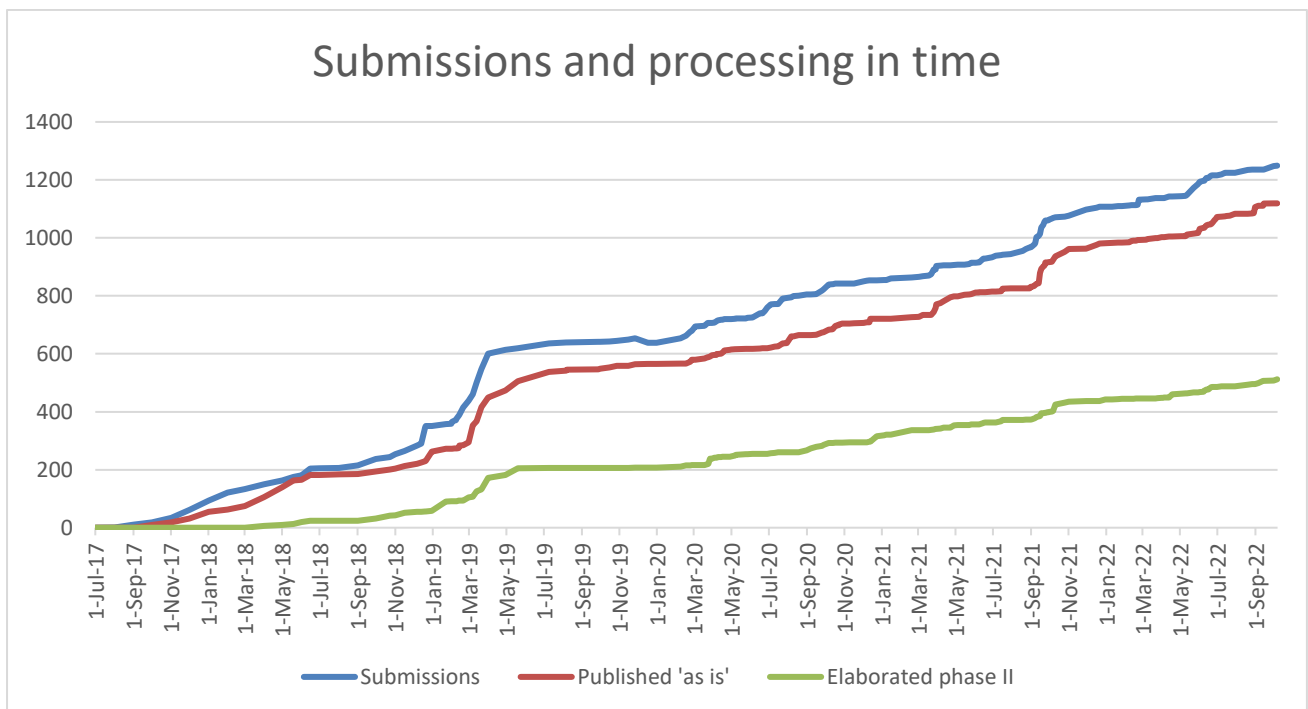


Image: number of submissions and phase 1 and phase 2 publications over the 3 contracts

Again, a major contribution came from the exchange with the SeaDataNet SEANOE data citing service (<https://www.seadatanet.org/Software/SEANOE>). In practice, EMODnet Ingestion partners encourage researchers to submit their scientific papers and associated data collections first to SEANOE in return for a DOI which promotes their wider citation. As a next step, the SEANOE submissions are exchanged with EMODnet Ingestion for further metadata completion, publishing 'as-is', and further elaboration aimed at inclusion in national and European portals. 12 new SEANOE data sets have been harvested by the ingestion service during the 3<sup>rd</sup> quarter of 2022. On a total of 219 SEANOE records, 158 are now in Phase 1 and 27 in Phase 2.

Another continuing driver is the cooperation with the H2020 Eurofleets+ project which organizes scientific cruises with research vessels from the European fleet as transnational access activities. Eurofleets+ has an open data policy which requires scientific teams to publish their metadata and data in the established national and European portals. Thereby, scientific teams are encouraged to submit their data submissions to EMODnet Ingestion as an effective way for reaching the expert data centres. So far, this has resulted in 15 published data submissions of which 4 have been elaborated to common standards.

### Task 3: Facilitate machine-to-machine transfers

The goal of the task is to continue facilitating faster availability of data by establishing direct connections between monitoring stations and repositories and towards EMODnet by machine-to-machine transfers and expand and upgrade the Sensor Web Enablement (SWE) demonstrator.

During the reporting period the activities have focused on cleaning and fine tuning some of the connected links from the previous periods. A number of new platforms started delivering on already set connections (69

new platforms from the JRC-TAD, 2 eMOLTs from Berring Data Collective, and 38 meteorological buoys from NDBC).

WP3 is also supporting the adoption of ERDDAP as part of the cooperation between EMODnet Physics and EMODnet Ingestion. As described in the previous report, an EMODnet docker package is already available to organizations willing to adopt it. The GitHub page was updated to facilitate new users to find, use and install it: <https://github.com/EMODnet-Physics>

Moreover, the collaboration and ingestion from the ARICE project was continued, more specifically data from the Arctic Net and Amundsen were linked and are now available into EMODnet Physics.

During the period the University of Goteborg manifested the interest to move to ERDDAP. Updates about this will be reported in coming reports. During the period the dialogue with EUROPEAN MARINA NETWORK OF ENVIRONMENTAL DATA STATIONS (EMANEDS) was continued and has resulted in the drafting of a white paper/guidance for marinas to become focal points of community ecosystems dedicated to harmonised marine environmental monitoring and data generation (see Annex to the Q3 Report). The main outcome of the dialogue is that the Marinas community is ready and willing to contribute, but there is a need for a small supported pilot action to prepare a proof of concept and show the implementation of the data flow.

***Task 4: Operate a help-service for users to provide their data in the most appropriate format***

The portal has a service-desk, which is operated on working days. Users can either email their questions or ask for a call back. Emails are sent to a generic service desk mailbox. All queries are saved and tracked in the Open-source Ticket Request System (OTRS), allowing providing statistics on the questions received. Recorded queries are analysed in order to elaborate a Frequently Asked Questions (FAQ) page at the portal. In the reporting period only one question was received and answered.

***Task 5: Allow providers of data to track the progress of their data from submission through to their storage in a repository***

Data providers can follow the processing of their data submissions in the Submission Service, which is done in several steps each indicated by a status field. Data providers are contacted by assigned data centres, in case there are additional questions about the ingested data sets.

***Task 6: Participate in discussions with EMODnet partners in order to improve the efficiency of the whole collection, assembly and dissemination process***

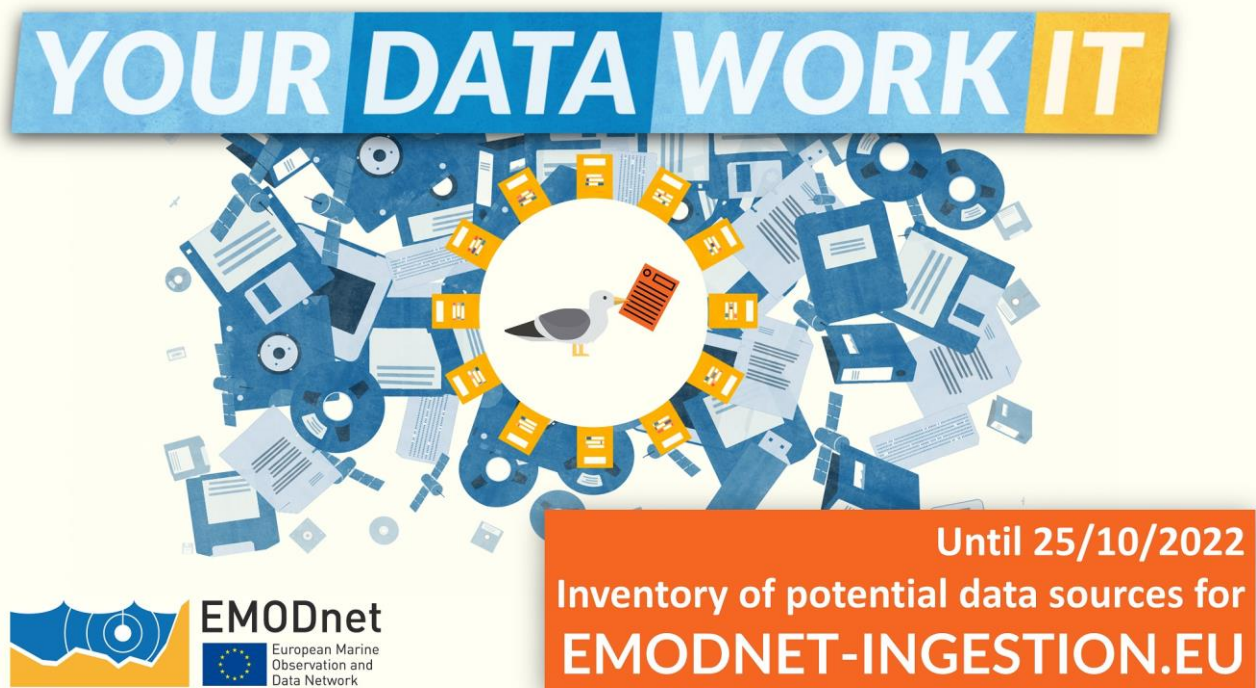
Representatives of the EMODnet Ingestion Coordination team participated in the EMODnet Technical Working Group meetings 20 – 21 September 2022. Furthermore, all coordinators of EMODnet Thematic projects are partners in EMODnet Ingestion which guarantees a mutual tuning with EMODnet Ingestion.

***Task 7: Maintain a summary record of data delivered***

This function is offered by the View Submissions service. Each completed submission is migrated to that service for publishing as part of a discovery and access service. Distinction is made in phase I and II which is one of the search facets. Editing activities take place aimed at replacing so-called orphan data for organisations from free text into controlled EDMO terms, orphan data for projects into controlled EDMERP terms, and orphan terms for Cruises into controlled Cruise Summary Reports (CSR) terms in order to improve the integrity and richness of the metadata.

***Task 8: Engage in outreach activities towards significant holders of marine data whose data are not yet available.***

During this reporting period, RBINS continued promoting the project in the social media and supported some partners to increase the visibility of their communication activities. RBINS also launched in August 2022 the exercise of compiling together with all EMODnet Ingestion partners an inventory of potential data sources (D4.1) which has a deadline end of October 2022. The partners, acting as “data ambassadors, have two months to complete their inventory in line with the approach that was discussed at the project kick-off meeting in June 2022. The guidelines that were provided contained the lessons learned during the previous phases of the project, instructions to complete the inventory, and a reporting template. The information was also relayed and promoted through social networks Twitter and LinkedIn by the partners. At the end of September 2022, nine partners from eight countries had already completed the dataset inventory and twenty-nine partners from eighteen countries were still to do so. About 70 datasets were identified. RBINS is encouraging partners to make further progress as the compilation of the inventory with priorities for datasets is due for delivery by M8 (November 2022).



A new “success story” was drafted with partner NIMRD entitled “Mare Nostrum NGO contribution to the European Marine Litter database”. It will be promoted soon on the website and in the social media, and included in one of the two poster contributions that were accepted for the upcoming MARBLUE conference (<http://www.marblue.ro/>), that is being organized by NIMRD in Romania in October 2022. The theme of the conference is “Blue Growth: Challenges and opportunities for the Black Sea”. The first poster explains how EMODnet Ingestion functions and is entitled “Wake up, safeguard and share your marine data with EMODnet-Ingestion.eu”. The second poster showcases key achievement of the project so far and focuses on three success stories collected from Romania, Bulgaria and Georgia; it is entitled “Your data work at EMODnet-Ingestion.eu”. At the MARBLUE conference also an oral presentation will be given about EMODnet Ingestion by the coordinator (MARIS), while IFREMER will present the SeaDataNet work and its relation with EMODnet.

Partner ENEA has posted a number of EMODnet videos and promotion texts on the Marina Platform website, by which it is shared with a large community of people interested in blue biotechnology of the Mediterranean Sea, as part of the training material of the B-Blue project. See: <https://www.marina-platform.eu/registeredarea/labs/viewLab/127>

According to the schedule of activities, in the coming months, three use cases will be added to the series and RBINS will prepare a briefing to allow the data ambassadors to record a video presentation of their use case. In 2023, it is also planned to print a new R/V leaflet with two flagship case studies, particularly in support of the objective of mobilising coastal and off-shore licensing data.

Partners participated in quite a number of events which are listed in Chapter 4 while an overview of communication items is given in Chapter 5.

### ***Task 9: Improve and document the availability of data provided for coastal and offshore licensing.***

A new challenge is to engage with public authorities in Member States who receive data from licensing procedures for coastal or offshore activities, with particular emphasis on aquaculture and offshore energy. The tender requirements mention that work shall include:

- Promoting common reporting standards that facilitate data ingestion;
- Documenting in a searchable database the parameters, specifications and accessibility of the data from each country;
- Organising a workshop on license data with a view to starting the road towards a more harmonised approach.

This activity is led by Deltares and requires input from all partners concerning their national situation. A first step (M1 – M6) has been to identify potential stakeholders (e.g. public authorities). Identified stakeholders have been described in an inventory to ensure a proper representation of the regional/country situation and the needs in terms of data on coastal and offshore activities.

During the kick-off meeting, it became apparent that it is not quite clear to the whole consortium what type of stakeholders should be included in the assessment. Therefore, a detailed manual was prepared by Deltares with suggestions from the Netherlands Rijkswaterstaat, which was circulated to all partners with guidance on how to fill in the survey together with an example. Following this guidance, partners have submitted input from 16 different countries with over 80 potential stakeholders identified. All results have been summarised in Deliverable D4.4, which is attached to this Quarterly Report. The survey will be kept open, so additional stakeholders can be added to the survey and Deliverable during the next two months. The focus will be on the countries that have not provided any information yet. This is important as the outcomes of this exercise will be the base for the second step in this task.

The second step will deal with establishing a baseline Assessment or Inventory of Data Collection and Licensing Processes in each country (M7 – M12). This requires further surveys and contacts with identified stakeholders, assisted by EMODnet Ingestion partners, to make available relevant documentation and information. This should be followed by setting up a Database: (M12-M18) and Initiating development of a Roadmap towards a more harmonised approach: (M12-M22), which will include organising a Workshop.

In this context representatives of EMODnet participated in a Workshop that was organized by EU DG MARE concerning 'marine data for and from the offshore renewable energy (ORE) sector'. The first Workshop took place 20 – 21 September 2022 for the Northeast Atlantic, North Sea and Baltic Sea areas. Several EMODnet representatives gave a presentation and joined the discussions, whereby scientific coordinator HCMR presented EMODnet Ingestion. The next version of the Workshop is planned for 20-21 October 2022, aiming for the Mediterranean and Black seas, whereby EMODnet Ingestion will be presented by its copordinator MARIS.

### ***Task 10: Service continuity during operation and for transition***

Coordination of the consortium is undertaken by MARIS and HCMR to ensure the continuity of the EMODnet Ingestion portal and its array of services.

Status of the Milestones and Deliverables listed in the workplan					
Milestone/Deliverable in numerical order	WP	Date due	Status (To do/ Delivered/ Delayed)	Date delivered	If Delayed: reason for delay and expected delivery date
D0.1: Quarterly concise progress reports	0.1	M4, M7, M10, M13, M16, M19, M22, M24	D0.1-a delivered; others to do	M4, M7	
D0.2: Interim report	0.1	M12	To do		
D0.3: Final report	0.1	M24	To do		
D0.4: Transition and hand over protocol	0.1	M24	To do		
<i>D0.5i</i> : Agreement and subcontracts	0.1	M1	All done		
<i>D0.6i</i> : Short minutes - action lists of internal coordination meetings	0.1	Regularly	Ongoing		
D1.1: Web portal operational, incl extranet	1.1	M1 – M24	Delivered	Operational since M0	
D1.2: Guidelines, manuals, handbooks on portal	1.1	M1 – M24	Delivered	Operational since M0	
D1.3: User Management service operational (Marine-ID /EU Login)	1.2	M1 – M24	Delivered	Operational since M0	
D1.4: Data Submission Service operational	1.3	M1 – M24	Delivered	Operational since M0	
D1.5: Data Submission Service upgraded	1.3	M1 – M8	Delivered	Operational since M6	
D1.6: Data tracking service operational	1.4	M1 – M24	Delivered	Operational since M0	
D1.7: View Submissions service operational	1.5	M1 – M24	Delivered	Operational since M0	



D1.7: Portal and services moved to Central Portal	1.1 – 1.5	M1 – M12 <sup>1</sup>	To do		
D2.1: Pathways operational	2.1	M1 – M24	Delivered	Operational since M0	
D2.2: Many submissions processed and published ‘as is’ (phase 1) and at EMODnet thematic services (phase 2)	2.1	M12, M24	Underway		
D2.3: Help service operational	2.2	M1 – M24	Delivered	Operational since M0	
D3.1: Updated documentation, standards and procedure for NRT and RT data published	3.1	M12, M24	To do		
D3.2: Connections with new NRT and RT monitoring stations operational	3.1	M12, M24	Underway		
D3.3: ERDDAP installation package	3.1	M12	Delivered.	M6	See Github in Task 3
D3.4: DAB installation package	3.1	M12	To do		
D3.5: SWE to ERDDAP software module	3.2	M22	To do		
D3.6: Upgraded Viewing service for NRT and RT stations	3.2	M12	To do		
D4.1: Inventory updated of potential data sources and providers in European countries and priorities	4.1	M8	Well underway		
D4.2: Updated promotion material	4.4	M12, M24	Regularly		

<sup>1</sup> Depending on start of migration process by Contracting Authority and complexity

D4.3: Results of marketing and outreach activities	4.2	M12, M20	To do		
D4.4: Inventory of identified stakeholders for licensing data	4.3	M6	Delivered, but open for further input	M6	See text under Task 8.
D4.5: Inventory of current license data practices	4.3	M14	To do		
D4.6: Database about availability of license data per country	4.3	M18	To do		
D4.7: Reporting on license data Workshop	4.3	M22	To do		

## 2. Identified issues: status and actions taken

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<b>A. Priority issue(s) identified and communicated by CINEA/ DG MARE/ SECRETARIAT</b>				
Priority issue	Status (Pending/ Resolved)	Action(s) taken/ remaining actions planned	Date due	Date resolved

<b>B. Issues / challenges identified by the thematic assembly group itself</b>				
Priority issue / challenge	Status (Pending/ Resolved)	Action(s) taken / remaining actions planned	Date due	Date resolved

### 3. User feedback

Overview of user feedback and/or requests received in this quarter							
Date	Organisation	Type of user feedback (e.g. technical, case study, etc.) and short description of the feedback received	Means of contact	Response time	Status of user query (Resolved/Pending)	Measures taken to resolve the query	Status: if not (yet) resolved/pending, explain reason why and expected timeline
5 Jul 2022	Tarsus University, TR	A master student indicated to have bathymetric data in the Istanbul strait which might be interesting for EMODnet-Bathymetry.	Feedback form and e-mail	Few days later	The suggestion has been forwarded to the EMODnet Bathymetry contact at IFREMER with the student in CC. The exchange is still ongoing.	Will await progress.	

## 4. Meetings/events held/attended & planned

A. Meetings/events organised and attended in the quarter					
Date	Location	Type event (internal or external meeting; training/ workshop)	Was a presentation given? (yes/no + short description)	Meeting attended (A) / organised (O)	Short description and main results (# participants, agreements made, etc.)
5 Jul 2022	Batumi, Georgia	National event	Yes	O	TSU: presented and exhibited visual and video material for promotion of the goals and results of EMODnet Ingestion and EMODnet Chemistry projects. The national event was organized under the auspice of government of Georgia dedicated to the Black Sea affairs, problems, achievements etc. TSU was one of the organizers. The computer accessories made from the plastic waste with the logos of the projects were presented and distributed among attendees during the sessions.
5 Jul 2022	web	workshop	yes	A	ETT: European Glider Data Management Workshop - <a href="https://www.groom-ri.eu/european-glider-data-management-workshop-agenda-2/">https://www.groom-ri.eu/european-glider-data-management-workshop-agenda-2/</a> - <a href="https://docs.google.com/document/d/1hQSNbznH6sm5Eo1KjrkK1og1vQDOjRtwGa0xryANe54/edit#">https://docs.google.com/document/d/1hQSNbznH6sm5Eo1KjrkK1og1vQDOjRtwGa0xryANe54/edit#</a> Highlighted EMODnet status and activities for glider network
7 Jul 2022	Bilbao, Spain	Symposium of the Iberian Atlantic Margin	Yes	A	CSIC : Oral presentation + abstract « EMODnet: Nodo de información geoespacial para el análisis y modelización de distintos procesos en el medio marino Javier Valencia Mtz. De Antoñana1*, Gemma Ercilla Zárraga2 »
9 Jul 2022	Liepaja, Latvia	external	No	A	LHEI: The Day of the Sea. Poster presentation on site, discussion with potential data holders (mostly scientific data) about data sharing and FAIR

					principles. Discussion about sandy beach pollution with plastic and available information.
11 Jul 2022	web	Summer school	yes	A	ETT: EMODnet program, goals, projects and actions were introduced before digging into in situ data management and sharing (with EMODnet provided tools such ERDDAP docker)
21 Jul 2022	Online	MEDIN Standards Meeting	No	A	BGS: MEDIN Standards Meeting including BGS, BODC and other DACs
25-29 Jul 2022	Lisbon, Portugal	the Oceanographic Department from IH organized the 2022 Summer School to Bachelor's and Master's students from the Geophysical Sciences of Lisbon University.	Yes	A	IHPT : Publicize EMODnet and particularly, EMODnet Ingestion and we made students aware of the usefulness of data sharing.
4 Aug 2022	web	Conference	Yes	A	ETT: <i>Open Science Conference</i> - SCAR OSC data session: Sharing science data FAIRly to support interdisciplinary research collaborations. About 70 attenders. Highlighted role of EMODnet as open and free data hub
13 Aug 2022	Saulkrasti, Latvia	external	No	A	LHEI: Harbour festival. Poster presentation on site, discussion about scientific data sharing and FAIR principles.
15-30 Aug 2022	Copenhagen, Denmark	Several meetings with the Ministry of Environment, Environmental Protection Agency	Yes	A	AU-DCE: The result of the meetings was a new dataset.
19 Aug 2022	Barranquilla-Columbia, Spain	Technical Week of Geology, Engineering and Geosciences of	Yes	A	IHPT: Presentation 'Scientific challenges in Marine Geology and links to EMODnet'

		the Universidad Del Norte			
9-11 Sep 2022	Lerici, Italy	The Mytiliade biennial festival	yes	A	ENEA: EMODnet has been promoted by using a video, a poster and promotional material during the 3 days event: Mythiliade organized by the Municipality of Lerici and dedicated to aquaculture.
13-15 Sep 2022	Rotterdam	External/workshop	yes	A	SMHI + ETT: NOOS Annual Meeting, approximately 25 participants. General EMODnet presentation including Data Ingestion
13-14 Sep 2022	Qawra, Malta	SHAREMED International Workshop	No	O	UM: An international workshop was organised by UM together with OGS within the project SHAREMED. EMODnet poster was exhibited and the concept of EMODnet was discussed especially with the Non-EU participants.
14-15 Sep2022	Gijon (Spain)	Meeting	yes	A	IEO-CSIC: Internal meeting in the framework of Marine Strategy Directive for Spain. Data Ingestion tools and SEANOE portal were presented.
16-19 Sep 2022	Porto Heli, Argolida, Greece	Marine & Inland Waters Research Symposium		A	HCMR: presented the EMODnet data Ingestion with a focus on the data sharing and its benefits
20-21 Sep 2022	Online	EMODnet for Business Workshops – Marine Data for and from the Offshore energy sector in the Northeast Atlantic, North Sea and Baltic Sea areas		A	HCMR: presented the EMODnet Data Ingestion, service as the public EMODnet service in support of the Blue Economy towards FAIR marine data sharing.
21-22 Sep 2022	Brussels, Belgium	EMODnet TWG12 meeting		A	HCMR: discussed the centralization and presented the EMODnet Ingestion technical updates and improvements.

22 Sep 2022	Brussels, Belgium	EMODnet-Copernicus Marine Service coastal workshop		A.	HCMR: participated on the discussion for the cooperation of EMODnet, Copernicus and data integration.
19 -23 Sep2022	Gdansk, Poland	Conference	Yes	A	VLIZ: European Marine Biodiversity Symposium 55 <sup>th</sup> ( <a href="https://embs55.ug.edu.pl/">https://embs55.ug.edu.pl/</a> ). A presentation was given representing EurOBIS/EMODnet Biology. EMODnet Ingestion was introduced as a way to reach EurOBIS/EMODnet Biology during the conference meals and coffee breaks
22 Sep 2022	On-line	external	Yes	O	ORION: Presentation about MUSAN Ayia Napa underwater park wave climate condition based upon use of EMODnet bathymetry with Lidar observations for simulating the extreme wave induced forces and the estimation of the extreme wave pressure at sea surface and at water depth below for December 2021 to April 2022. Also promotion made for EMODnet Ingestion.
25 Sep2022	Genova, Italy	Workshop	Yes	A	ETT: Salone Nautico 2022 – International Boat Show – The sustainability comes from the sea: living experiences according to the One Health Approach Workshop. The theatre of the sea, at the hearth of the event, hosted the workshop to discuss about sustainability and oceans. The event was attended by more than 150 people on site. The event had a big hype on local newspapers and social channels <sup>2</sup> . Overview given of EMODnet program, EMODnet Physics and Ingestion to enable new services and sustainable developments.

<sup>2</sup> E.g. <https://www.visitgenoa.it/it/evento/ocean-race-al-salone-nautico-genova-grand-finale>



27-29 Sep202 2	Brest	External	no	A	SMHI + ETT: joined Copernicus INSTAC GA together with MIC working group meeting. Periodic meeting of the Marine In situ Collaboration team to review achievements and plan new actions to unlock and include more in situ data on EOVs for the benefit of EMODnet, Copernicus Marine Service, EuroGOOS and related initiatives.
29 Sep 2022	web	Workshop	Yes	A	ETT: EuroGOOS FerryBox Annual Workshop <sup>3</sup> . Coordination with the FB TT is important for both Physics, Chemistry and Ingestion themes. The importance to work on a clear data licence (CC-BY) was largely discussed. Updates given on EMODnet and available features
26-30 Sep 2022	Brest, France	SeaTechWeek 2022. Conference	no	O	Shom: workshop on S-100 and e-Navigation organized during the conference. No specific presentation on EMODnet, but contacts made.
29 Sep202 2	Brussels, Belgium	Internal RBINS meeting	yes	A/O	RBINS : finalise the inventory of datasets to be submitted in EMODnet Ingestion 3, update the status of those ingested in last three months and identify opportunities for the mobilisation of extra datasets.
30 Sep202 2	Riga, Latvia	external	no	O	LHEI: European Researcher's Night 2022. Poster presentation on site, discussion about scientific data sharing and FAIR principles. Discussion about sandy beach pollution with plastic, mercury in biota and available information.
30 Sep 2022	St. Elmo, Valletta	Science in the City / Researchers Night	yes.	A	UM: UM participated in the Science in the City street festival with a stand dedicated to <u>Open Science</u> . During this event, a presentation was made about EMODnet and how Open Science benefits the public with special reference to the Atlas of the Seas and the Teachers Corner.

<sup>3</sup> <https://eurogoos.eu/events/8th-ferrybox-workshop-eurogoos-task-team-meeting/>

30 Sep 2022	St. Elmo, Valletta	Science in the City / Researchers Night	No	A	UM: THE Oceanography Malta Research Group from UM had a stand in the Science in the City street festival called " <u>An ocean of possibilities</u> " where we had the opportunity to dialogue with visitors to the stand about the activities of EMODnet.
30 Sep 2022	Varna Bulgaria	European Night of Scientists	Yes.	A	IO-BAS: At the IO-BAS stand for marine science the Emodnet Ingestion project was presented with poster and flyers. Organised by IO-BAS, Varna Municipality, Medical University, Maritime School, Institute of Fish Resources, and Higher School of Management. <a href="http://io-bas.bg/2022/08/25/">http://io-bas.bg/2022/08/25/</a>
<b>SUM</b>				<b>O</b>	<b>Total # of meetings organised = 5</b>
<b>SUM</b>				<b>A</b>	<b>Total # of meetings attended = 25</b>

Date	Location	Type event (meeting, training (workshop), etc.)	Meeting to be attended (A) / organised (O)	Short description and main expected outcomes
03-05 Oct 2022	Milazzo, Italy	Metrology of the Seas conference: workshop	O	ETT+SMHI: Organising session: <a href="https://www.metrosea.org/special-sessions">https://www.metrosea.org/special-sessions</a> Including EMODnet presentations
03 – 04 Oct 2022	Brussels, Belgium	Workshop EU-Canada – Ocean partnership	A	MARIS, SMHI, JNCC, VLIZ, and others: participated in brainstorming workshop about topics for cooperation. Included lot of attention for data management and exchange.
5-6 Oct 2022	Online	UK Centre for Seabed Mapping meetings	A	BGS: Meeting for management group, Standards, National Coordination and International Coordination. <a href="https://www.admiralty.co.uk/uk-centre-for-seabed-mapping">https://www.admiralty.co.uk/uk-centre-for-seabed-mapping</a>
10-11 Oct 2022	Taranto, Italy	workshop	A	ETT: GreenBlueDays
14 Oct 2022	Web	meeting	A	ETT: EuroGOOS DATAMEQ
Oct – Dec 2022	Deltares, Delft, Netherlands / Online	Workshops, webinar and/or symposia	O	Deltares: During the Deltares Software Days (DSD), attended by different stakeholders from Europe and beyond, it is planned to further promote the activities of EMODnet Ingestion.
Oct 2022	Reykjavík, Iceland	Aquaculture Conference	A	FMRI: Introduction of EMODnet Ingestion with a poster

		Iceland – Aqua Ice		
Oct 2022	International Scientific-Practical Conference "The development of mining and geology is the precondition for the revival of economy"	International Conference	A	TSU: submitted a paper and presentation on Marine Litter and EMODnet for the proceedings of the conference (using inter alia data from EMODnet databases).
Oct 2022	Online	Online meetings	O	ENEA: Contacts with colleagues involved in the Blue Lakes project that collected microplastics data in the main Italian lakes.
19-20 Oct 2022	Web: EMODnet for Business Workshops – Marine Data for and from the Offshore energy sector in the Mediterranean and Black Seas	workshop	A	ETT + MARIS: organised by DG-MARE. Presentations on EMODnet included.
20 – 21 Oct 2022	Varna, Bulgaria	Conference Black Sea 2022	A	IO-BAS: Promotional Emodnet Ingestion materials will be provided to the participants from potential data sources. <a href="https://nts.varna-bg.org/bg/52794">https://nts.varna-bg.org/bg/52794</a>
22 Oct 2022	Web	workshop	A	ETT: TG NOISE
24-28 October 2022	Copenhagen, Denmark	Meeting with potential data providers at the Ministry of Environment	A	AU-DCE: A presentation will be given and further potential data sets will be discussed.

		and Aarhus University		
26-28 Oct, 2022	Constanta, Romania	International <i>MARBLUE</i> 2022 conference	O	RBINS, NIMRD, IO-BAS, TSU, HCMR and MARIS: will give EMODnet Ingestion presentation and poster with Black Sea success stories
Oct2022	Lisbon	Historical data recovery	O	IHPT: intends to start working with Inst. Oceanography from the University of Lisbon to recover data from historical cruises.
Oct/Nov 2022	Constanta, Romania	Meeting	O	NIMRD: Meeting with DOORS project coordination team: To decide if the data obtained during the project by Romanian partners will be submitted to the EMODNet Ingestion
Nov 2022	Reykjavík, Iceland	The Seafood Conference Iceland	A	FMRI: Introduction of EMODnet Ingestion with a flyers
Nov 2022	Varna, Bulgaria	EMODnet Geology Meeting	O	GTK: Discussions related to the progress of the EMODnet Geology project and the EMODnet collaboration.
9-10 Nov 2022	Online	Workshop	A	SMHI: Presenting at Arctic data workshop “Opportunities and challenges for in situ ocean observing in the Arctic”
11 Nov 2022	Online	MEDIN OGC API Workshop	A	BGS: Improving access to marine environmental data using an Application Programming Interface (API) standard ( <a href="https://ogcapi.bgs.ac.uk/">https://ogcapi.bgs.ac.uk/</a> )
21 Nov 2022	Online	MEDIN Standards Meeting	A	BGS: MEDIN Standards Meeting including BGS, BODC and other DACs
20-21 Nov 2022	Florence, Italy	workshop	O	ETT: HFR TT – MONGOOS WS and GA

TBC	Online	MEDIN Data Archive Centres Meeting	A	BGS: MEDIN DAC Meeting including BGS, BODC and other DACs
22-24 Nov 2022	Florence	AM	A	SMHI: MONGOOS AM
7 Nov -7 Dec 2022	Malta	IOI course	O	UM: Training programme on regional ocean governance for the Mediterranean, Black, Baltic, and Caspian seas
24 Oct 2022 – 2 Dec 2022	Online – University of Cadiz	SEA-EU Marine Data Literacy Course	O	UM: The SEA-EU Marine Data Literacy Course will include lectures on EMODnet.
6-8 Dec 2022	Monaco	Conference	A	Shom: HYDRO22 Conference – organized by IFHS (International Federation of Hydrographic Societies)
2022-2023	The Netherlands/Online	Meeting	A	Deltares: Regular meetings with the Directorate-General for Public Works and Water Management (Rijkswaterstaat) which is part of the Ministry of Infrastructure and Water Management of the Netherlands are planned. These meetings are intended to discuss making data available.
TBD	TBD	Workshop on data management for offshore license related data collection in EU member states	O	Deltares: A workshop will be organised together with representatives of stakeholders and EMODnet Ingestion members to present and discuss the findings on current practices and approaches in different Member State countries. This will help to refine the understanding of EMODnet Ingestion and stakeholders about data acquisition and management in the framework of governmental license procedures in their countries. This should drive a discussion whether a more harmonised approach between and possibly also within Member States might be desirable and feasible. This could lay the basis for support from stakeholders for

				initiating development of a roadmap for a more harmonised approach.
TBD	Online/La Spezia, Italy	Internal meetings with the DLTM working team for the LabMare initiative	A	ENEA is confident that the time series that is going to be collected as part of LabMare initiative this year will be shared too.
TBD	Online	Internal meetings with the working team of the MedFever project	A	ENEA is confident that the time series that is going to be collected as part of MedFever project this year will be shared too.
TBD	Online	Online meetings	O	ENEA: Contacts with a team of a racing boat that is going to collect oceanographic data.
TBD	Online	Online meetings	O	ENEA: Contacts with colleagues involved in the Blue Lakes project that collected microplastics data in the main Italian lakes.
TBD	Riga, Latvia	Lecture	O	LHEI: University of Latvia: lectures to students about marine sample preparation and analysis, as well as data processing, FAIR principles, data depositories, SEANOE and EMODnet DI

## 5. Communication assets

A. Communication products developed				
Date	Communication material	Short description (of the material, title, ...) of the asset	Main results	Name of event at which material was disseminated (if applicable)
6 Jul2022	Twitter post	Our colleague <b>Sara Almeida</b> from <b>Instituto Hidrográfico</b> (PT) promoting @EMODnet #DataIngestion at the 7th Hydro Engineering Conference / 2nd Luso-Spanish Hydrographic Conference in Lisbon PT on 21-23 June 2022 tinyurl.com/3jpcfn7 @shom_fr @TheBelgianNavy @SeaDataNet	Visibility of partner's promotion	@MarianneBMDC Followers: 195 Impressions: 50 Engagement: 8
6 Jul 2022	<a href="#">Twitter post</a>	The 3rd phase of @EMODnet Data Ingestion Project, which #METUIMS is involved as a partner, has been kicked off! In the meeting, our researcher Volodymyr Myroshnychenko presented #METUIMS activities within #EMODnet and @BRIDGE_BlackSea research as a source of new datasets.		@METU_IMS Followers: <b>1960</b> Retweets: 4 Likes: 10
8 Jul2022	Twitter post	📷 Nuestra compañera Gemma Ercilla nos manda esta foto del Simposio del Márgen Ibérico Atlántico, donde ha presentado @EMODnet, un nodo de información geoespacial para el análisis y modelización de distintos procesos en el medio marino. 🎉 ¡Felicidades por la presentación, Gemma!		@ICM-CSIC
13 Jul2022	<a href="#">Twitter post</a>	Our colleagues from CSIC, <b>Gemma Ercilla</b> & <b>Javier Valencia</b> , presenting #EMODnet #DataIngestion at the Symposium of the Iberian Atlantic Margin, Bilbao (Spain), 7-9 July 2022. 🌐 <a href="https://emodnet-ingestion.eu">https://emodnet-ingestion.eu</a> @ICMCSIC @EMODnet @SeaDataNet #GemmaErcilla		@MarianneBMDC Followers: 195 Impressions: 121 Engagement: 8
1 Sep2022	<a href="#">LinkedIn post</a>	The #EMODnet-INGESTION III #MarineData inventory campaign runs until 25th October 2022.	Visibility of the two videos and inventory campaign	@MarianneSchlesser Followers: 1012 Impressions: 568 Engagements: 13 Likes: 13 Repost: 4
1 Sep2022	<a href="#">Twitter post</a>	📣 The #EMODnet-INGESTION III #MarineData inventory campaign runs until 25th October 📦 <b>Collect once and use many times.</b> Get back to your national @EMODnet data ambassador. Check how => <a href="https://youtube.com/watch?v=p3vwngxyXuo">https://youtube.com/watch?v=p3vwngxyXuo</a>		@MarianneBMDC Followers: 195 Impressions: <b>831</b> Engagement: 56 Retweet: 11 Likes: 20



		#BlueGrowth @EU_MARE @SeaDataNet @HcmrInOcean		
1 Sep2022	<a href="#">Twitter post</a>	<p>📅 Last day to submit an <b>abstract</b> for the #MARBLUE conference on 26-28th October 2022</p> <p>📍 Registration until 15th September to participate in <b>#BlueGrowth: Challenges and opportunities for the BLACK SEA Sea</b> @EU_BlackSeaAM@GeoEcoMar @ConnectBlackSea</p> <p>+ With #EMODnetIngestion colleagues, we submitted a poster on ingestion success stories collected from around the Black Sea 😊 Stay tuned</p>		@MarianneBMDC Followers: 195 Impressions: 104 Engagements: 10 Likes: 5
14 Sep2022	<a href="#">Twitter post</a>	<p>Guess who's here? EurOBIS harvest update!!</p> <p>🌱🐟🐠🐡🐢🐙🐚🐛</p> <p>1 Updated and 12 #NewDataset !!</p> <p>145K+ new occurrence records</p> <p>@EMODnet @VLIZnews @Marecamp_CT #NIMRD @ipma_pt @SBRoscoff #FAIRdata #Ingestion @unitartu @SYKEint #marinescience @LifeWatchVLIZ @OBISNetwork</p>		@EuroBIS_VLIZ Followers : 793 Likes: 11 Retweets: 5
30 Sep 2022	Use Case #12	Case 12. Mare Nostrum NGO contribution to the European Marine Litter database (prepared with NIMRD)		To be presented at MARBLUE conference in Oct.22
15 Oct2022	<a href="#">LINKEDIN post</a>	<p>#EMODnet keeps your data future proof #BlueEconomy. Get inspired by stories of (sleeping) #marine_data openly shared for safekeeping, further distribution &amp; analysis.</p> <p>- Watch this 2 min #video on three of our success stories <a href="https://lnkd.in/d6K85Q58">https://lnkd.in/d6K85Q58</a></p> <p>- Find out more about our collaborations with companies, governments, research institutes and NGOs through this collection of cases: <a href="https://lnkd.in/dfadY92X">https://lnkd.in/dfadY92X</a></p> <p>- Join us at EMODnet-Ingestion.EU</p> <p>- Browse through our available data at <a href="http://emodnet.ec.europa.eu">emodnet.ec.europa.eu</a></p> <p>#OceanDecade #EMODnet #SeaDataNet #marine #data #research #future #innovation</p>		Account Marianne Schlessler Impressions: 526 Reactions: 15 Shares : 6
19 Oct 2022	<a href="#">Twitter post</a>	<p>When data publishing to @EMODnet #Ingestion leads to a joint publication <b>Aarno Kotilainen &amp; STUK (Finland)</b></p> <p>Case 1: <sup>137</sup>Caesium peak in the sedimentary records of the Baltic Sea is used to define recent rates of sedimentation in #EMODnet #Geology</p>	Promotion use case 11	Account @MarianneBMDC Impressions: 204 Engagement: 14 Likes: 2 Retweet: 1
22 Oct 2022	<a href="#">Twitter post</a>	<p>#MarineLitter data from 8 research surveys, monitoring &amp; cleaning initiatives of NGO's are accessible via #EMODnet #Chemistry EELTBGROSIHRTRCY</p>	Promotion use case 10	Account @MarianneBMDC Impressions: <b>1780</b> Engagement: 79

		Case 11: Marine litter #data shared with @EMODnet #Ingestion and fit for #MSFD reporting @OGS @TalTech @lheilv @tudavtudav		Likes: 18 Retweet: 8

B. Planned communication products			
Date	Communication material	Short description (of the material, title, ...) and/or link to the asset	Main results expected
Oct. 22	News	Contribution to EMODnet News Digest + Ingestion website	Visibility of the dataset inventory and stakeholders inventory results
17 Oct 2022	Poster	Poster entitled "Your data work at EMODnet-Ingestion.eu"	To showcases the MARBLUE conference participants key achievements of the project so far and focus on three success stories collected from around the Black Sea (Romania, Bulgaria and Georgia).
17 Oct 2022	Poster	Poster entitled "Wake up, safeguard and share your marine data with EMODnet-Ingestion.eu"	Inform the MARBLUE conference participants of the practice in EMODnet-Ingestion.
Nov. 22	Use case #13	Offshore wind parks ecological monitoring data - Biology (Fish and Benthos monitoring)	
Nov. 22	Use case #14	Swedish marine beach litter data and data from the Baltic marine litter project MARLIN	
Nov. 22	Use case #15	Learning by doing: How starting with the ingestion of a small dataset can lead to promising collaborations	BODC (UK) & European Marine Energy Center (EMEC)
Nov. 22	Use case #16	Can the EMODnet network deal with raw data? (with VLIZ)	
Start Dec.22	Videos	Feed a YT playlist for Ingestions videos + invite colleagues to present their case studies in a series of self recorded presentations with Zoom. A good briefing will be prepared.	
Jan 23	Leaflet A4 R/V	Update leafletA4 R/V with two new use cases in support of the objectives of WP4.2 and 4.3 (Off-shore licensing data)	
2023	ResearchGate	Publication of EMODnet Ingestion posters	Visibility of the project in Science Social Media (several EMODnet publications available)

2023	Academia.edu	Publication of EMODnet Ingestion posters	Visibility of the project in Science Social Media (several EMODnet publications available)

A. (Co-)Authored peer-reviewed publications in the quarter					
Date of publication	Type of publication	Full reference	ISBN	DOI	Is it open access? Yes/No
2022	Paper	D.Demetrashvili, K.Bilashvili, N.Machintadze, N.Tsintsadze, V.Gvakharlia, N.Gelashvili, V.Trapapaidze, I.Kuzanova "Numerical modelling of Marine Litter distribution in Georgian coastal waters of the Black Sea, Journal of Environmental Protection and Ecology, Vol. 23, No 2 (2022), p.p. 531-542.	ISSN 1311-5065		Yes
2022	Paper	D. González-Fernández <sup>1</sup> , G. Hanke, M. Pogojeva, N. Machitadze, Y. Kotelnikova <sup>6</sup> , I. Tretiak, O. Savenko, K. Bilashvili, N. Gelashvili, A. Fedorov, D. Kulagin, A. Terentiev, J. Slobodnik. Floating marine macro litter in the Black Sea: toward baselines for large scale assessment, Journ. Of Environmental Pollution, ELSEVIER, <u>Volume 309</u> , 15 September 2022, 119816		<a href="https://www.sciencedirect.com/journal/environmental-pollution">https://www.sciencedirect.com/journal/environmental-pollution</a>	no

**B. Other/non-peer reviewed types of publications (co-)authored in the quarter**

Date of publication	Type of publication	Full reference	ISBN	DOI	Is it open access? Yes/No
May 2022	Abstract Volume	Kotilainen, A.T., Kotilainen, M.M., Jokinen, S., Virtasalo, J.J., Kaskela, A.M, 2022. Coastal estuaries – Baltic Sea habitat types under threat. In: The GeoHab 2022 Conference: marine geological and biological habitat mapping, 16-20 May, 2022, Venice, Italy: Abstracts, 65. <a href="https://geohab.org/wp-content/uploads/2022/05/Abstract_Volume_GEOHAB2022.pdf">https://geohab.org/wp-content/uploads/2022/05/Abstract_Volume_GEOHAB2022.pdf</a>			Yes
8 June 2022	The Prime Minister's Office's publication (Finland)	Prime Minister's Office, 2022. National Implementation Plan for the UN Decade of Ocean Science (in Finnish). 25 pages. <a href="https://urn.fi/URN:ISBN:978-952-383-122-3">https://urn.fi/URN:ISBN:978-952-383-122-3</a> The Actions include developing uniformity and usability of marine data flows, where key areas include e.g. cooperation between EMODnet	978-952-383-122-3		Yes
14 Oct 2022	paper	Zodiatis, G., Brenner, S., Gertman, I., Ozer, T., Simoncelli, S., Ioannou, M., and Savva, S., (2022) Twenty years of in-situ monitoring in the south-eastern Mediterranean Levantine basin: basic elements of the thermohaline structure and of the mesoscale circulation during 1995-2015. <i>Frontier Marine Science</i> , topic: Climate Change impacts on Mediterranean Coastal and Transitional Areas: Assessment, Projection, and Adaptation.			yes

*For a compressive overview of publications referring to/making use of EMODnet data and/or data products, please consult Google Scholar.*

## 6. Monitoring indicators

Comments on the progress indicators in the indicators spreadsheet		
Progress indicator	Means of collecting figures	Comment
1A) Volume and coverage of available data	Submission Viewing service	The total number of new phase 1 + phase 2 submissions in the current quarter is 46 and of this 22 were elaborated to phase 2. The overall number of published submissions went from 1073 to 1119.
1B) Usage of data in this quarter	Cloud storage of Submission Viewing service	The total number of download transactions and volume decreased substantially compared to the previous quarter from circa 190 GB to circa 8 GB. However, the volume of downloads in the previous quarter was exceptionally high.
3) Organisations supplying/ approached to supply data and data products	Submission Viewing service	There is a good mix in organisation types and countries. The total number of data providers has increased with 3 in the last quarter to 187.
9. Visibility & Analytics for web pages	Grafana	The number of daily page views is low, but could be expected. Most users consider the homepage and the data submission service. There is no indicator given for the data viewer service page views.
10. Visibility & Analytics for web sections	Grafana	The stats indicate that more users go to the Data Viewing service and then much less to the Data Submission service and Guidance pages.
11. Average visit duration for web pages	Grafana	The stats indicate the average viewing time per section which is quite low. The idea is that these pages are interesting for already really interested users, while many other just are browsing.

*The monitoring numbers reported as part of the progress monitoring of EMODnet performance are collected through Matomo and/or Europa Analytics, unless reported otherwise.*

## 7. Annex: Other documentation attached

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Attached is:

### **D4.4: Inventory of identified stakeholders for licensing data**

*Note: this is an initial version and the survey is kept open for additional partners and countries.*



## **EMODnet Ingestion and Safe-Keeping of Marine Data - Phase III**

### **D4.4 Inventory of identified stakeholders for licensing data**

#### **Technical Report**

Date: 30-09-2022

Prepared by: Sonja Wanke (Deltares)

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.





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### Disclaimer

The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the EASME or of the European Commission. Neither the EASME, nor the European Commission, guarantee the accuracy of the data included in this study. Neither the EASME, the European Commission nor any person acting on the EASME's or on the European Commission's behalf may be held responsible for the use which may be made of the information.

## 1 Introduction

A partnership of over a hundred and twenty European organisations work together under EMODnet in seven thematic groups to assemble marine data from diverse sources and resources in order to make them more accessible and more interoperable. Part of their work involves building gateways to national, regional or thematic repositories and creating products based on marine and maritime data held by public bodies.

However, many data collected by public authorities, researchers and private operators of coastal or offshore facilities still do not arrive to these national or regional repositories and are thus unavailable to potential users. This creates additional costs for those working on marine issues who will have the choice of accepting lower confidence in their analysis than would otherwise be the case, or being compelled to needlessly repeat observations. There is therefore the need to streamline the data ingestion process so that data holders from public and private sectors can easily release their data for safekeeping and subsequent distribution through EMODnet or other means.

The general objective of EMODnet Ingestion III is to facilitate and streamline the process whereby marine data from whatever source (including national monitoring programmes, research projects, licensing data and private companies) be delivered on a voluntary basis for safekeeping to data repositories from where it can be freely disseminated.

*Task 9* (Improve and document the availability of data provided for coastal and offshore licensing) which falls under WP4 – Marketing and outreach activities will tackle the challenge of licensing procedures for coastal and offshore activities. The aim is to identify and engage with public authorities who receive data from licensing procedures for coastal or offshore activities with particular emphasis on aquaculture and offshore energy, in order to get more insights in related monitoring data management, to promote use of common standards, and start a path towards a more harmonised approach, by means of a workshop. The first task deals with **identifying stakeholders that give out licences/permits for coastal and offshore activities, do monitoring or collect data**. Later on, these stakeholders will be asked about their processes.

An example of how marine data flows in the Netherlands is given below. The project data that is collected and/or maintained by different institutes are channelled to a national portal for open data access. Then suitable data are transposed to a format suitable for uptake in EMODnet (Figure 1.1).

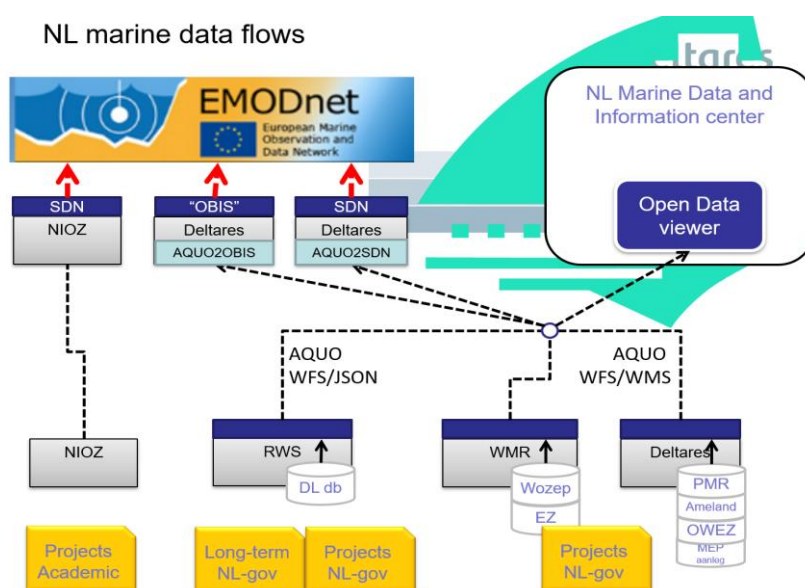


Figure 1.1: Example of marine data flows in the Netherlands

## 2 Approach

Besides national monitoring programs, marine data are collected for other purposes, e.g. to determine ecological effects of offshore activities like wind farms, aquaculture, sand mining etc. These collected data may come available publicly, but more often, they are kept at organisations responsible for data collection or licensing processes. In EMODnet Ingestion III the aim is to get a better picture of each country’s procedures around such data collection. The first step is to identify all relevant stakeholders (e.g. public authorities). Therefore, a stakeholder mapping process has been set up. The purpose is to identify relevant stakeholders, specify their interests and determine their roles and mandates and their desired involvement in the different phases of the project.

Deltares will lead this process, but each local EMODnet Ingestion partner will be closely involved in this process as they have local connections. The purpose is to identify relevant stakeholders, specify the interests and determine their roles and mandates as well as their desired involvement in the different phases of the project. A stakeholder analysis table will facilitate this process.

It should be noted that not all stakeholders need, want and/or can participate in the same degree and should be involved in the same intensity throughout the project. This very much depends on the stakeholders’ interest, their role and influence, their capacity to participate and the specific purpose of the different stages.

## 3 Stakeholders per Country

In total 77 stakeholders were identified by 16 countries (an overview can be found in Appendix II). An additional four countries have indicated that they are in contact with potential stakeholders, but were not able to fill in the provided survey at the time of submission. The survey will be kept open, so as soon as other stakeholders are identified, they can be added to the list and included in all relevant activities. More than half (54%) of the identified stakeholders are national governments from different ministries such as the Ministry of Energy, Ministry of Renewable Energy, Ministry of Environment and Water and the Ministry of Agriculture. This is followed by agencies (18%) and local/regional governments (9%) (Figure 3.1).

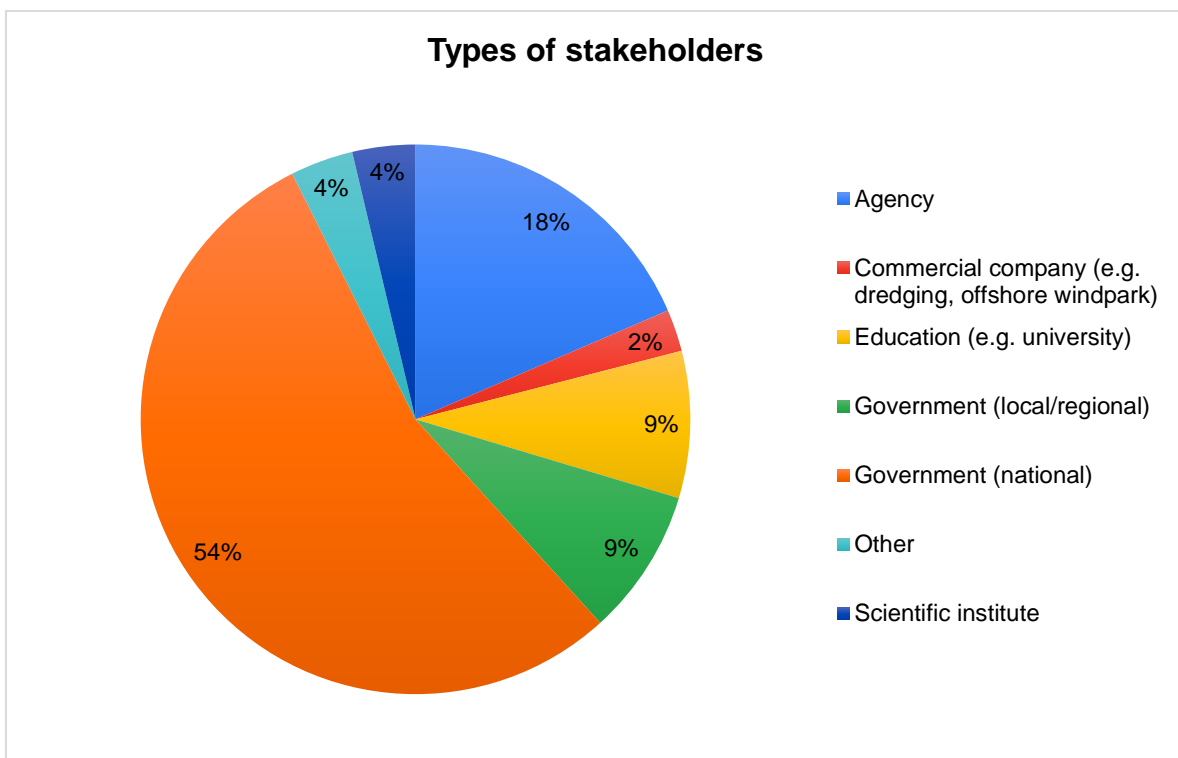


Figure 3.1: Different types of stakeholders responsible or involved in the offshore licensing process

When asked about their role concerning data, the majority of stakeholders had three roles: data producers, data owners and data holders (48%), followed by data owners (17%) and data holders (10%) (Figure 3.2).

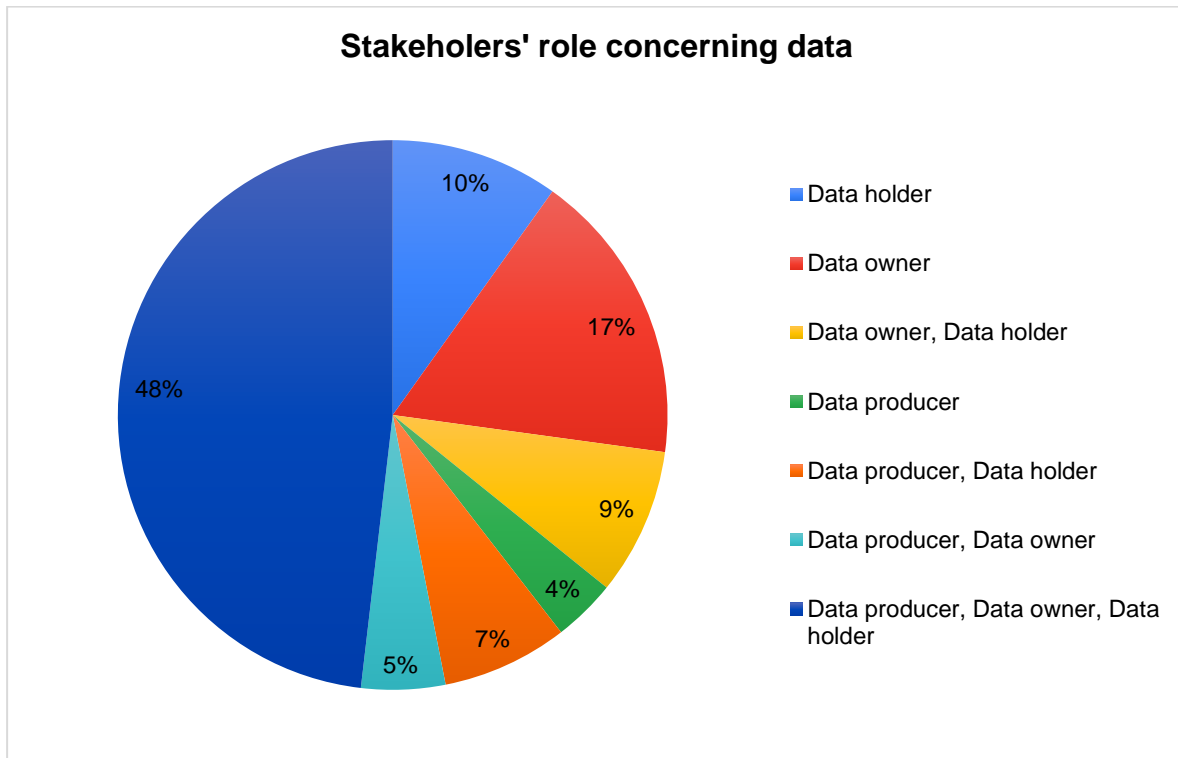


Figure 3.2: Stakeholders according to their current role concerning data (i.e. data holder, data owner, data producer)

Additionally, some specific EMODnet Ingestion questions were asked to check whether potential stakeholders already know about the project or would like to be involved more which is important information for the following phase. Many of the asked stakeholders already know about EMODnet Ingestion, while there is only a few that are not yet aware of it. On the other hand, when asked about wanting to collaborate with EMODnet Ingestion, only 21% said yes, while the majority did not know yet (Figure 3.3).

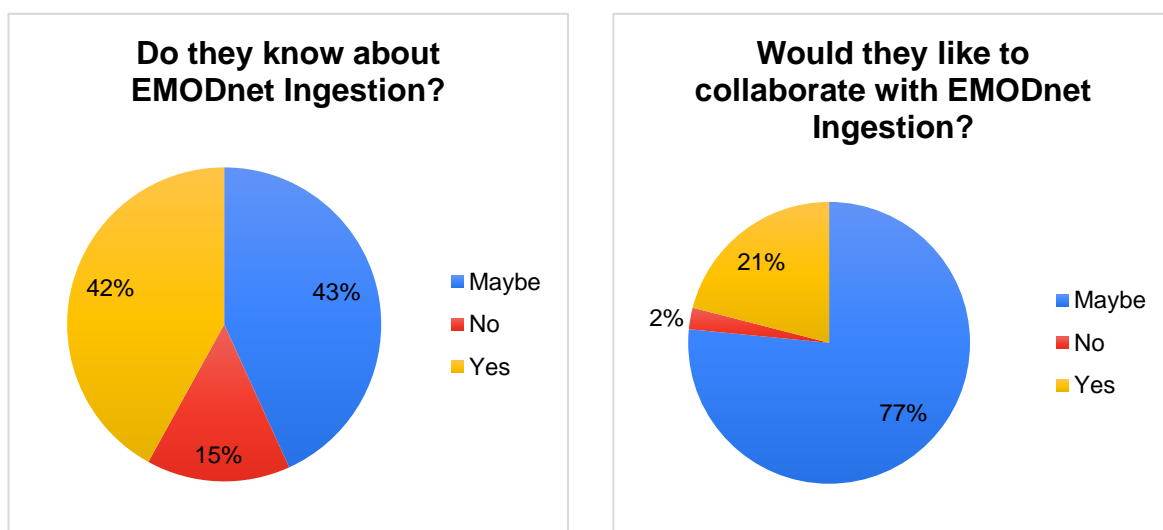


Figure 3.3: Stakeholders' knowledge on (a) and potential to collaborate (b) with EMODnet Ingestion

The following sections provide a detailed breakdown of all stakeholders per country.

### 3.1 Bulgaria

1	<b>Ministry of Environment and Water</b>			
	<i>Responsibilities</i>			
	Responsible for integrated water management in order to achieve their good environmental status in the Black Sea region for basin water aquaculture. They give permissions for building or installing "installations" in, on, up, below or over the bottom of the Bulgarian part of Black Sea. Examples are constructions for fish breeding or the entrance of mussel seed, the installation of windmills and other large constructions, or the excavation of pipelines and cables.			
	Used Legislation - Water Law, Environmental protection Law			
	<i>Role</i>	✓ Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
2	<b>Ministry of Regional Development and Public Works</b>			
	<i>Responsibilities and activities</i>			
	Responsible for Coastal and offshore licenses. Responsible for Maritime Spatial Planning for Black Sea – Bulgaria. Maritime Spatial Planning (MSP) is a public process for analysis and planning of human activities in marine areas to achieve ecological, economic, and social objectives. The goal is to develop spatial plans which define the effective use of marine areas for different marine activities and sustainable use of marine and coastal resources.			
	Used Legislation - Water Law, Law on the development of the Black Sea Coast, Environmental protection Law			
	<i>Role</i>	✓ Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
3	<b>Ministry of Energy</b>			
	<i>Responsibilities and activities</i>			
	Responsible for oil and gas production licenses. Permits for search and exploration or for exploration of underground resources on the territory of the Republic of Bulgaria, including in the continental shelf and in the exclusive economic zone in the Black Sea, issued by the Council of Ministers and the Minister of Energy.			
	Used Legislation - Underground wealth law			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
4	<b>Ministry of Agriculture (Executive Agency for Fisheries and Aquaculture)</b>			
	<i>Responsibilities and activities</i>			
Fisheries is bound by the Common Fisheries Policy of the EU and therefore to strict measures and rules. These relate to areas, catches (quotas), seasons and sea days, engine power and regulations for the fishing gear.				
Used Legislation- Fisheries and Aquaculture Law				

	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		

### 3.2 Croatia

5	<b>Hrvatske Vode (Croatian Waters)</b>			
	<i>Responsibilities and activities</i> Legal entity for water management, give out specific licences, the monitoring, collect data, responsible for WFD performed by consultant institutes.  Some activities: Preparation of planning documents for water management, water regulation and protection from adverse effects of water, Amelioration drainage, Water use, Water protection, Irrigation, Expert supervision, Management of special projects			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
6	<b>OIKON Ltd. – Institute of Applied Ecology</b>			
	<i>Responsibilities and activities</i> Monitoring, data collection; licensed and accredited consulting company / research institute in the field of applied ecology in Croatia among other activities provides services in the fields of nature and environmental protection			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
7	<b>DVOKUT-ECRO Ltd.</b>			
	<i>Responsibilities and activities</i> Monitoring, data collection, it provides services in the area of environmental and nature protection.			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
8	<b>Ministry for Economy and Sustainable Development</b>			
	<i>Responsibilities and activities</i> Give out licenses: Energy approvals, Environmental permit, Environmental impact assessment, Strategic environmental impact assessment, Assessment of the need for an environmental impact assessment, Ecological network Natura 2000...).  Responsible for implementation of MSFD Directive in Croatia through nominated consultants (Institute of oceanography and fisheries and Institute Ruđer Boskovic).  Owner of MSFD data. Gives permission for publishing data for wide users.			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	No		

9	<b>Ministry of Agriculture - Directorate for Fisheries and Aquaculture</b>			
	<i>Responsibilities and activities</i> Give out licenses related fisheries and aquaculture.			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
10	<b>Institute Ruđer Bošković, Zagreb</b>			
	<i>Responsibilities and activities</i> Research, monitoring, data collecting			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
11	<b>Hydrographic Institute of the Republic of Croatia</b>			
	<i>Responsibilities and activities</i> Monitoring, data collection (bathymetry, seabed, physical oceanography and chemistry)			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
12	<b>Institute for Marine and Coastal Research, University of Dubrovnik</b>			
	<i>Responsibilities and activities</i> Marine monitoring, data collection, assessment of marine environment			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
13	<b>The Blue World Institute of Marine Research and Conservation</b>			
	<i>Responsibilities and activities</i> -			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		

### 3.3 Estonia

14	<b>Environmental Agency</b>			
	<i>Responsibilities and activities</i> Environmental monitoring, collecting data and analyzing it for the public			
	<i>Role</i>	Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		

### 3.4 France

15	<b>BRGM - Bureau de recherches géologiques et minières (French National Geological Service)</b>					
<i>Responsibilities and activities</i> Even though their activities are mainly conducted inland, they have some activities in the Marine environment. They may conduct survey for their own research (risk assessments, core samplings,...). BRGM is consulted before any permit is granted for mining activities in French territory and they usually have access to data collected during such activities (prospection and exploitation).						
<table border="1" style="width:100%"> <tr> <td style="width:15%"><i>Role</i></td> <td style="width:30%">✓ Data producer</td> <td style="width:30%">✓ Data owner</td> <td style="width:25%">✓ Data holder</td> </tr> </table>			<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
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<table border="1" style="width:100%"> <tr> <td style="width:30%"><i>Data policy in place</i></td> <td>Yes, <a href="https://www.brgm.fr/en/activities/knowledge-dissemination-open-science">https://www.brgm.fr/en/activities/knowledge-dissemination-open-science</a></td> </tr> </table>			<i>Data policy in place</i>	Yes, <a href="https://www.brgm.fr/en/activities/knowledge-dissemination-open-science">https://www.brgm.fr/en/activities/knowledge-dissemination-open-science</a>		
<i>Data policy in place</i>	Yes, <a href="https://www.brgm.fr/en/activities/knowledge-dissemination-open-science">https://www.brgm.fr/en/activities/knowledge-dissemination-open-science</a>					
16	<b>CEREMA - Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement</b>					
<i>Responsibilities and activities</i> CEREMA has a dedicated mission on Environmental risks and another in the Sea and Littoral areas. They are one of the main institutions providing expertise to the French Ministry for the Environment (for instance on the attribution of wind farms permits) and to local administrations. They also operate a network of coastal Swell buoys (CANDHIS).						
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<i>Data policy in place</i>	Yes					
17	<b>OFB - Office français pour la biodiversité (French Biodiversity Agency)</b>					
<i>Responsibilities and activities</i> OFB coordinates national information systems on biodiversity, water and both aquatic and marine habitats. It manages French protected areas (both marine and inland). It is consulted before the attribution of permits for most activities on French territory: wind farms, fisheries, marine mining activities,...						
<table border="1" style="width:100%"> <tr> <td style="width:15%"><i>Role</i></td> <td style="width:30%">✓ Data producer</td> <td style="width:30%">✓ Data owner</td> <td style="width:25%">✓ Data holder</td> </tr> </table>			<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
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<i>Data policy in place</i>	Yes					
18	<b>Météo-France (French meteorological office)</b>					
<i>Responsibilities and activities</i> Météo-France collects and disseminates meteorological data (observations, predictions, climatology, etc.), including at sea. They are consulted before the attribution of permits for most activities at sea, and data collected by the permit-owner must be transmitted to Météo-France.						
<table border="1" style="width:100%"> <tr> <td style="width:15%"><i>Role</i></td> <td style="width:30%">✓ Data producer</td> <td style="width:30%">✓ Data owner</td> <td style="width:25%">✓ Data holder</td> </tr> </table>			<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
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<i>Data policy in place</i>	Yes, <a href="https://donneespubliques.meteofrance.fr/">https://donneespubliques.meteofrance.fr/</a>					
19	<b>Shom - Service hydrographique et océanographique de la marine (French Hydrographic Office)</b>					
<i>Responsibilities and activities</i>						



	Refer to provided document on French context.		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	Yes, <a href="https://data.shom.fr">https://data.shom.fr</a> , <a href="https://diffusion.shom.fr">https://diffusion.shom.fr</a>		
20	<b>Ifremer - Institut français de recherche pour l'exploitation de la mer</b>		
<i>Responsibilities and activities</i> Refer to provided document on French context.			
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	Yes		
21	<b>DGEC - Direction générale de l'énergie et du climat (Directorate General for Energy and Climate)</b>		
<i>Responsibilities and activities</i> Marine Wind farms: definition of areas and permits attribution.			
<i>Role</i>	Data producer	✓ Data owner	Data holder
<i>Data policy in place</i>	Yes		
22	<b>DGAMPA - Direction générale des affaires maritimes, de la pêche et de l'aquaculture (Directorate General for Maritime Affairs, Fisheries and Aquaculture)</b>		
<i>Responsibilities and activities</i> Issuing of permits			
<i>Role</i>	Data producer	✓ Data owner	Data holder
<i>Data policy in place</i>	Yes		
23	<b>Préfectures Maritimes (Channel &amp; North Sea, Atlantic, Mediterranean Sea)</b>		
<i>Responsibilities and activities</i> Authorization for Marine research and other activities in French waters			
<i>Role</i>	Data producer	✓ Data owner	Data holder
<i>Data policy in place</i>	Yes		
24	<b>DDTM - Direction départementale des territoires et de la mer (a total of 26 directions in the coastal "Départements")</b>		
<i>Responsibilities and activities</i> Issuing of authorizations to occupy the Maritime Public Domain (Territorial Sea)			
<i>Role</i>	Data producer	✓ Data owner	Data holder
<i>Data policy in place</i>	Yes		

### 3.5 Georgia

25	<b>The National Environment Agency (NEA)</b>		
<i>Responsibilities and activities</i>			

	<p>The National Environment Agency is a legal entity of public law within the system of the Ministry of Environmental Protection and Agriculture of Georgia. The following activities are carrying out by Agency:</p> <p>Plan and project marine infrastructure facilities and conduct researches needed for these works; developing sea and river bank-protection projects; conducting monitoring and ichthyological, hydrobiological, microbiological studies and study of marine mammals in Georgia's Black Sea continental shelf, territorial waters and special economic zone; Authorization of vessels sailing under the flag of Georgia engaged in fishing or fishing activities in territorial seas and exclusive economic zones (EEZ) of foreign country, also in high seas; At the request of the applicant, verification of catch certificates for vessels sailing under the flag of Georgia for the export of fishing products; Validation of notification on catch certificates issued by foreign countries and keeping records of the states and their competent authorities from which the relevant notification was received; Assess fish stocks at the Black Sea coast and inland waters of Georgia and establish quotas.</p> <p>The Agency is guided by the Constitution of Georgia, international treaties of Georgia, decrees of the President of Georgia, resolutions and directives of the Government of Georgia, orders of the Minister of Environmental Protection and Agriculture of Georgia, its Statutes, other legislative and by-law normative acts and individual administrative-legal acts of the head of the Agency.</p>								
	<table border="1"> <tr> <td><i>Role</i></td> <td>✓ Data producer</td> <td>✓ Data owner</td> <td>✓ Data holder</td> </tr> <tr> <td><i>Data policy in place</i></td> <td colspan="3">No</td> </tr> </table>	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder	<i>Data policy in place</i>	No		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder						
<i>Data policy in place</i>	No								
26	<p><b>Iv.Javakhishvili Tbilisi State University (TSU)</b></p> <p><i>Responsibilities and activities</i> ADU of IODE/IOC/UNESCO, collator</p> <table border="1"> <tr> <td><i>Role</i></td> <td>Data producer</td> <td>Data owner</td> <td>✓ Data holder</td> </tr> <tr> <td><i>Data policy in place</i></td> <td colspan="3">Yes</td> </tr> </table>	<i>Role</i>	Data producer	Data owner	✓ Data holder	<i>Data policy in place</i>	Yes		
<i>Role</i>	Data producer	Data owner	✓ Data holder						
<i>Data policy in place</i>	Yes								
27	<p><b>Labaratory Research Centre, Poti</b></p> <p><i>Responsibilities and activities</i> Monitoring</p> <table border="1"> <tr> <td><i>Role</i></td> <td>✓ Data producer</td> <td>Data owner</td> <td>Data holder</td> </tr> <tr> <td><i>Data policy in place</i></td> <td colspan="3">Yes</td> </tr> </table>	<i>Role</i>	✓ Data producer	Data owner	Data holder	<i>Data policy in place</i>	Yes		
<i>Role</i>	✓ Data producer	Data owner	Data holder						
<i>Data policy in place</i>	Yes								
28	<p><b>State Hydrographical Service of Georgia</b></p> <p><i>Responsibilities and activities</i> Do the monitoring, collect data</p> <table border="1"> <tr> <td><i>Role</i></td> <td>✓ Data producer</td> <td>Data owner</td> <td>Data holder</td> </tr> <tr> <td><i>Data policy in place</i></td> <td colspan="3">No</td> </tr> </table>	<i>Role</i>	✓ Data producer	Data owner	Data holder	<i>Data policy in place</i>	No		
<i>Role</i>	✓ Data producer	Data owner	Data holder						
<i>Data policy in place</i>	No								
29	<p><b>Ministry of Economy and Sustainable Development of Georgia</b></p> <p><i>Responsibilities and activities</i> leads facilitation of issuance of licenses and permits and reform of the system of technical regulation; Law of Georgia on Licenses and Permits regulates spheres of licenses and</p>								

	<p>permits and determines the comprehensive list of licenses and permits, including types of import and export products. Also defines rules on issuance of licenses and permits, making changes and revoking them. There are no restrictions of licensing requirements or other non-tariff barriers, except for necessity to protect public health, national security and environment. There are number of state regulation acts, as follow:</p> <p>The Law of Georgia on Environmental Protection regulates legal relations in the field of environmental protection and the use of natural resources between state bodies and natural and legal persons in the field of environmental protection and nature use throughout Georgia, including its territorial waters, airspace, continental shelf and exclusive economic zone.</p> <p>The Law on the Regulation and Engineering Protection of the Banks of the Sea, Ponds and Rivers of Georgia establishes the status of comprehensive and rational use of the sea coasts, waterbodies and rivers of Georgia and ensures sustainability of coastal engineering protection zones; it establishes forms of state control and liability for activities resulting in erosion and abrasion processes in the coastal engineering protection zone.</p> <p>The Maritime Code of Georgia regulates relations with maritime navigation. ‘Maritime navigation’ means the use of ships for carrying passengers, cargo, luggage, and mail for fishing and other offshore operations; for exploring and extracting minerals for towage and rescue operations, and for other economic, scientific and cultural purposes.</p> <p>Law on Water regulating the protection of water bodies (including the Black Sea of Georgia) and the rational use of water resources, taking into account the interests of present and future generations and the principles of sustainable development.</p> <p>Law on Licenses and Permits, which regulates the procedure for issuing licenses for mining and fishing in Georgia’s territorial sea and inland waters.</p> <p>The Law on Wildlife refers to the basic legal relations on protection, reproduction and conservation of wild animals and wildlife objects permanently or temporarily inhabiting the land, soil, water, atmosphere, territorial waters, continental shelf and special economic zone, in naturally free, semi-free or artificially created environmental conditions in the field of protection, reproduction and/or use of wildlife objects. This Law also regulates fishing issues.</p> <p>On the establishment and management of Kolkheti Protected Areas. Kolkheti Protected Area includes both terrestrial territory and sea water with an area of 15,276 hectares. The Law provides for the care, protection, restoration and rational use of land, water, fauna, flora and other natural resources within the Kolkheti Protected Areas; protection of sea water with a width of 5 nautical miles to maintain ecological balance on the adjacent coastline; create favourable conditions for education and scientific research;</p> <p>The environmental Assessment Code regulates matters related to strategic documents and public or private activities, which may have significant effects on the environment, human life and/or health. The procedures for environmental impact assessment, strategic environmental assessment, transboundary environmental impact assessment, and public participation in decision-making, as well as the conduct of expert examinations, fall within the scope of this Code.</p>		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	Yes		

### 3.6 Greece

30	<b>Hellenic Hydrocarbons and Energy Resources Management Company S.A. (HEREMA S.A.)</b>			
<i>Responsibilities and activities</i>				
<p>HEREMA S.A is a state-owned company with the Hellenic State being the sole stakeholder (100%), however it operates independently as a private-sector economic entity. It gives out licenses, do monitoring, collect data (<a href="https://www.greekhydrocarbons.gr/gr/CompanyOverview_gr.html">https://www.greekhydrocarbons.gr/gr/CompanyOverview_gr.html</a>).</p> <p>The company besides the hydrocarbon projects is broadening its scope to new energy technologies that can support the country's energy transition to renewable sources.</p> <p>Since May 2022 the company has signed a memorandum of Cooperation with HCMR (<a href="https://www.greekhydrocarbons.gr/news_en/PR_REL_120522_EN.html">https://www.greekhydrocarbons.gr/news_en/PR_REL_120522_EN.html</a>).</p>				
<i>Role</i>		✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>		Yes		

### 3.7 Iceland

31	<b>The Environment Agency of Iceland</b>			
<i>Responsibilities and activities</i>				
<p>The Environment Agency operates under the direction of the Ministry for the Environment and Natural Resources. Its role is to promote the protection as well as sustainable use of Iceland's natural resources, as well as public welfare by helping to ensure a healthy environment, and safe consumer goods.</p>				
<i>Role</i>		Data producer	Data owner	✓ Data holder
<i>Data policy in place</i>		Unkown		

### 3.8 Ireland

32	<b>Socio-Economic Marine Research Unit</b>			
<i>Responsibilities and activities</i>				
<p>Generate marine economic related data used in the monitoring of marine planning and development</p>				
<i>Role</i>		✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>		Unknown		
33	<b>National Biodiversity Data Centre</b>			
<i>Responsibilities and activities</i>				
<p>Generate and hold data on marine species and habitats</p>				
<i>Role</i>		✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>		Unknown		

34	<b>DHLGH - Foreshore Licensing Team</b>			
	<i>Responsibilities and activities</i> License foreshore activity, collect data through application and statutory legislative processes			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Unknown		
35	<b>DHLGH - Marine Area Regulation Authority</b>			
	<i>Responsibilities and activities</i> License offshore activity, monitor compliance, hold related data			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Unknown		
36	<b>DECC - Petroleum Affairs Division</b>			
	<i>Responsibilities and activities</i> Hold data, monitor compliance with offshore development license terms			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Unknown		
37	<b>DHLGH - National Monuments Service</b>			
	<i>Responsibilities and activities</i> Maintain data related to marine archaeological sites (e.g. shipwrecks)			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Unknown		
38	<b>Geological Service Ireland</b>			
	<i>Responsibilities and activities</i> Generate and hold data on marine geological environment data			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Unknown		
39	<b>DHLGH - National Parks and Wildlife Service</b>			
	<i>Responsibilities and activities</i> Generate and hold data on marine species and habitats			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Unknown		

### 3.9 Latvia

40	<b>Latvian Environmental, Geology and Meteorological Centre</b>	
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	<i>Responsibilities and activities</i> Collect data, did the monitoring		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	No		
41	<b>Institute of Food Safety, Animal Health and Environment (BIOR)/Fish Resource Research Department</b>		
	<i>Responsibilities and activities</i> collect data, do the monitoring and research		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	No		

### 3.10 Malta

42	<b>University of Malta</b>		
	<i>Responsibilities and activities</i> Do the monitoring, run models, and collect data		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	No		
43	<b>Department of Fisheries</b>		
	<i>Responsibilities and activities</i> Collect and manage data on aquaculture		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	No		
44	<b>Environment Resources Authority</b>		
	<i>Responsibilities and activities</i> Do the monitoring, collect data, and enforcement		
<i>Role</i>	Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	No		

### 3.11 Netherlands

45	<b>Rijkswaterstaat - Directorate Sea and Delta</b>		
	<i>Responsibilities and activities</i> They give out (parts) of the offshore sea bottom licenses related to dredging, sand extractions, cables, wrecks etc. They ask for that 2 "types" of monitoring data and reporting of the initiator a) during the operation itself (for safety reasons, noise and environment-limits etc) and b) environmental/ecological impact monitoring (local and far distance)		

	during and after the activity. Besides of that Directorate Sea Delta has an own (WOZEP)Team for ecological impact studies for "spatial policy planning choices of Windmills areas". They define ecological research studies and specify requirements for Open marine Data. NB: The Ministry of Nature and Fishery does almost the same for (Nature Conservation Law) licences/permits		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	Yes		

### 3.12 Norway

46	<b>Fiskeridirektoratet (Directorate of Fisheries)</b>		
	<i>Responsibilities and activities</i> The Directorate of Fisheries' shall promote profitable economic activity through sustainable and user-oriented management of marine resources and the marine environment.		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	Yes		

### 3.13 Portugal

47	<b>DGRM (Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos)</b>		
	<i>Responsibilities and activities</i> Fishery licencing, environmental monitoring of waste immersion operations		
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Data policy in place</i>	Yes		
48	<b>APA (Agência Portuguesa do Ambiente)</b>		
	<i>Responsibilities and activities</i> Monitor public policies for the environment and sustainable development		
<i>Role</i>	Data producer	Data owner	✓ Data holder
<i>Data policy in place</i>	Unknown		

### 3.14 Spain

49	<b>University of Granada</b>		
	<i>Responsibilities and activities</i> Collect scientific data (seismic profiles)		
<i>Role</i>	Data producer	✓ Data owner	Data holder
<i>Data policy in place</i>	Yes		

50	<b>CSIC, University of Vigo, IGME</b>			
	<i>Responsibilities and activities</i> Collect scientific data			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
51	<b>Continental Margins Group-CSIC</b>			
	<i>Responsibilities and activities</i> Mapping of seafloor geology			
	<i>Role</i>	✓ Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	No		
52	<b>Functioning and Vulnerability of Marine Ecosystems Group &amp; Continental Margins Group-CSIC</b>			
	<i>Responsibilities and activities</i> Collect scientific data (marine litter)			
	<i>Role</i>	✓ Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
53	<b>Ingeconsul.SL</b>			
	<i>Responsibilities and activities</i> Collect data on shallow waters, harbours			
	<i>Role</i>	✓ Data producer	Data owner	Data holder
	<i>Data policy in place</i>	Yes		

### 3.15 Sweden

54	<b>Swedish Agency for Marine and Water Management</b>			
	<i>Responsibilities and activities</i> Collect data, licensing fishing permits			
	<i>Role</i>	Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
55	<b>Swedish University of Agricultural Sciences</b>			
	<i>Responsibilities and activities</i> Monitor and collect data			
	<i>Role</i>	✓ Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		



56	<b>Stockholm University, Department of Ecology, Environment and Plant Sciences</b>			
	<i>Responsibilities and activities</i> Monitor national data and collect regional data			
	<i>Role</i>	✓ Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
57	<b>Tjärnö Marine Laboratory, Gothenburg University</b>			
	<i>Responsibilities and activities</i> Monitor and collect data			
	<i>Role</i>	✓ Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
58	<b>Department of Biological and Environmental Sciences, Gothenburg University</b>			
	<i>Responsibilities and activities</i> Monitor, collect data and give out licences			
	<i>Role</i>	✓ Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
59	<b>Umea Marine Sciences Centre, Umea University</b>			
	<i>Responsibilities and activities</i> National and regional monitoring			
	<i>Role</i>	✓ Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
60	<b>Geological Survey of Sweden</b>			
	<i>Responsibilities and activities</i> Monitor, collect data and give out licences Give permission for sand, gravel or stone quarrying within a general water area in the sea Monitor hazard substances			
	<i>Role</i>	✓ Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
61	<b>Land and Environmental Court</b>			
	<i>Responsibilities and activities</i> Permit examinations for installations at sea			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Unknown		
62	<b>Swedish Land and Environmental court</b>			
	<i>Responsibilities and activities</i>			

	After evaluations by the Swedish County administration boards they are often the authority that examine the Natura 2000 permits.			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
63	<b>Swedish Government</b>			
	<i>Responsibilities and activities</i> Licencing wind farms in Swedish EEZ. Give permission to extract natural resources from the continental shelf.			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		

### 3.16 United Kingdom

64	<b>Environment Agency</b>			
	<i>Responsibilities and activities</i> England only. The Environment Agency work to create better places for people and wildlife, and support sustainable development. EA is an executive non-departmental public body, sponsored by the Department for Environment, Food & Rural Affairs. The Environment Agency licenses industry, business and individuals to carry out certain activities that have the potential to pollute the environment.			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
65	<b>Maritime and Coastguard Agency (MCA)</b>			
	<i>Responsibilities and activities</i> The Maritime & Coastguard Agency (MCA) has overall responsibility for the UK's hydrographic obligations under the Safety of Life at Sea Convention (SOLAS). The MCA manages a multi-million-pound budget to systematically survey the waters around the UK. This programme is known as the "UK Civil Hydrography Programme" (UK CHP). Under the UK CHP, commercial contracts are let to ensure accurate hydrographic information is gathered for updating the nation's nautical charts and publications.			
	<i>Role</i>	Data producer	✓ Data owner	Data holder
	<i>Data policy in place</i>	Yes		
66	<b>Scottish Environmental Protection Agency (SEPA)</b>			
	<i>Responsibilities and activities</i> Scotland only. As Scotland's principal environmental regulator, SEPA issue a range of authorisations designed to control activities that could lead to pollution or environmental damage. e.g. Aquaculture. Although remit in the marine environment extends to three miles offshore, have no direct regulatory role in marine renewable generation. However, they act as a designated consultation authority for Marine Scotland, a Directorate of Scottish Government, and work closely with partners in marine licensing and monitoring.			

	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
67	<b>Harbour Authorities</b>			
	<i>Responsibilities and activities</i>			
	Manage harbours. MMO issue the Harbour Orders in England, so not exactly sure the role they play in licencing.			
	<i>Role</i>	Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	No		
68	<b>Crown Estate Scotland</b>			
	<i>Responsibilities and activities</i>			
	Crown Estate Scotland's purpose is investing in property, natural resources and people to generate lasting value for Scotland. This includes maintaining and seeking to enhance income from, and the value of, the Scottish Crown Estate while supporting delivery of the Scottish Government's purpose.			
	<i>Role</i>	Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
69	<b>United Kingdom Hydrographic Office</b>			
	<i>Responsibilities and activities</i>			
	Hydrographic data from renewables licence applications required to be sent here. (also data collected as part of the Civil Hydrography Programme)			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	No		
70	<b>Department for Business, Energy and Industrial Strategy</b>			
	<i>Responsibilities and activities</i>			
	They are involved in renewables licencing.			
	<i>Role</i>	Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	No		
71	<b>Offshore Petroleum Regulator for Environment and Decommissioning (OPRED)</b>			
	<i>Responsibilities and activities</i>			
	All UK. The part of BEIS to deal with oil and gas, regulated under the Energy Act. Issue licences for oil and gas operations. Publish all the paperwork related to Nationally Significant Infrastructure Projects (licences, consent orders, environmental statements (includes EIA - contain processed data such as sediment types, species and habitats), not raw data)) on their website. Licence conditions. For monitoring and enforcement, they get sent information on returns from marine mammal observers, pipeline survey data, where rock has been laid to stabilise pipelines, etc. as part of 'Close Out Reports'.			
	<i>Role</i>	Data producer	✓ Data owner	Data holder

	<i>Data policy in place</i>	No		
72	<b>Cefas</b>			
	<i>Responsibilities and activities</i> Don't issue licences but might receive returns as part of licence conditions, e.g. contaminants.			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
73	<b>North Sea Transition Authority (NSTA)</b>			
	<i>Responsibilities and activities</i> The NSTA regulates the licensing of exploration and development of the UK's offshore and onshore (England) oil and gas resources, carbon storage, gas storage and unloading activities.			
	<i>Role</i>	Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
74	<b>Marine Management Organisation</b>			
	<i>Responsibilities and activities</i> Supports Planning Inspectorate (advising on licence conditions, depending on type of licence) but also have a regulatory role issuing licences for smaller projects, such as building harbours, aggregate extraction, cable laying. Monitoring and enforcement of Marine Licences.			
	<i>Role</i>	Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	Yes		
75	<b>Planning Inspectorate</b>			
	<i>Responsibilities and activities</i> Reviews and gives out Deemed Marine Licence. Publishes all the paperwork related to Nationally Significant Infrastructure Projects (licences, consent orders, environmental statements (includes EIA - contain processed data such as sediment types, species and habitats), not raw data)) on their website. Probably don't get sent any raw data.			
	<i>Role</i>	Data producer	Data owner	✓ Data holder
	<i>Data policy in place</i>	No		
76	<b>Department for Agriculture, Environment and Rural Affairs</b>			
	<i>Responsibilities and activities</i> Like MMO for England, have a regulatory role issuing licences for smaller projects, such as building a harbour, aggregate extraction, cable laying. Monitoring and enforcement of Marine Licences.			
	<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
	<i>Data policy in place</i>	No		

77	<b>Natural Resources Wales</b>					
<p><i>Responsibilities and activities</i></p> <p>Like MMO for England, they have a regulatory role issuing licences for smaller projects, such as building a harbour, aggregate extraction, cable laying. Monitoring and enforcement of Marine Licences. Might be sent raw data along with paperwork, but not sure.</p>						
<table border="1"> <tr> <td data-bbox="290 432 405 490"><i>Role</i></td> <td data-bbox="411 432 737 490">✓ Data producer</td> <td data-bbox="743 432 1066 490">✓ Data owner</td> <td data-bbox="1072 432 1401 490">✓ Data holder</td> </tr> </table>			<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder			
<table border="1"> <tr> <td data-bbox="290 499 587 546"><i>Data policy in place</i></td> <td data-bbox="593 499 1401 546">No</td> </tr> </table>			<i>Data policy in place</i>	No		
<i>Data policy in place</i>	No					
78	<b>Marine Scotland</b>					
<p><i>Responsibilities and activities</i></p> <p>Marine Scotland is responsible for the integrated management of Scotland's seas, working closely with delivery partners Scottish Natural Heritage (SNH) and the Scottish Environment Protection Agency (SEPA). This covers:</p> <ul style="list-style-type: none"> <li>• marine renewable, fishing vessel, freshwater fisheries and seal licensing</li> <li>• ensuring compliance with fisheries regulations</li> <li>• promoting sustainable, profitable and well-managed fisheries and aquaculture industries</li> <li>• ensuring a sound scientific evidence base exists to inform our marine policies</li> <li>• the sustainable management of freshwater fish and fisheries resources</li> <li>• promoting sustainable economic growth from the marine renewables industry</li> </ul> <p>Marine Scotland is similar to the Planning Inspectorate and MMO but just covers Scotland. They publish all the paperwork related to Nationally Significant Infrastructure Projects (licences, consent orders, environmental statements (including EIA - containing processed data such as sediment types, species and habitats, but not raw data) on their website.</p>						
<table border="1"> <tr> <td data-bbox="290 1258 405 1317"><i>Role</i></td> <td data-bbox="411 1258 737 1317">✓ Data producer</td> <td data-bbox="743 1258 1066 1317">✓ Data owner</td> <td data-bbox="1072 1258 1401 1317">✓ Data holder</td> </tr> </table>			<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder			
<table border="1"> <tr> <td data-bbox="290 1326 587 1370"><i>Data policy in place</i></td> <td data-bbox="593 1326 1401 1370">Yes</td> </tr> </table>			<i>Data policy in place</i>	Yes		
<i>Data policy in place</i>	Yes					
79	<b>Marine Scotland Science</b>					
<p><i>Responsibilities and activities</i></p> <p>Marine Scotland Science (MSS), the scientific division of the Marine Scotland Directorate, plays an integral part in supporting the Scottish Government's vision of marine and coastal environments that are clean, healthy, safe, productive, biologically diverse and are managed to meet the long-term needs of both nature and people.</p>						
<table border="1"> <tr> <td data-bbox="290 1653 405 1711"><i>Role</i></td> <td data-bbox="411 1653 737 1711">✓ Data producer</td> <td data-bbox="743 1653 1066 1711">✓ Data owner</td> <td data-bbox="1072 1653 1401 1711">✓ Data holder</td> </tr> </table>			<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder
<i>Role</i>	✓ Data producer	✓ Data owner	✓ Data holder			
<table border="1"> <tr> <td data-bbox="290 1720 587 1765"><i>Data policy in place</i></td> <td data-bbox="593 1720 1401 1765">Yes</td> </tr> </table>			<i>Data policy in place</i>	Yes		
<i>Data policy in place</i>	Yes					
80	<b>The Crown Estate including Marine Data Exchange</b>					
<p><i>Responsibilities and activities</i></p> <p>The Crown Estate has a property portfolio encompassing many of the UK's cityscapes, ancient forests, farms, parkland, coastline and communities, The Crown Estate's role as employer, influencer, manager, guardian, facilitator and revenue creator is unique. It has two main objectives: to benefit the taxpayer by paying the revenue from our assets directly to the Exchequer; and to enhance the value of the estate and the income it generates.</p>						

	<p>The estate extends throughout Britain and includes extensive marine assets throughout the UK, including 55% of the foreshore and all of the seabed out to the 12 nautical miles limit. Since 2018 Crown Estate Scotland was established as a separate organisation including responsibility for the seabed out to the 12 nautical mile limit.</p> <p>Seabed Survey Licence -Within the 12 nautical mile limit, all survey activity that interacts with the seabed requires a Seabed Survey Licence, unless the works fall within the public rights of navigation or fishing. Outside of 12 nautical mile (i.e. beyond the territorial limit) survey activity only requires a licence if it relates to an activity over which The Crown Estate holds rights, such as offshore renewable energy, marine mineral extraction, or gas and carbon storage. Non-commercial research activity outside 12 nautical miles does not require a licence.</p> <p>Coastal Survey licences provide permission to undertake a range of small scale commercial survey activities, interfering with the foreshore or seabed, usually for a period of up to 12 months.</p> <p>Marine Data Exchange, part of The Crown Estate, established in 2013, provides access to survey data and reports collected by offshore renewable and marine aggregates customers.</p>		
	Role	Data producer	<input checked="" type="checkbox"/> Data owner <input checked="" type="checkbox"/> Data holder
	Data policy in place	Yes	
81	<p><b>Marine Environmental Data and Information Network (MEDIN)</b></p>		
	<p><i>Responsibilities and activities</i></p> <p>MEDIN is a partnership of UK organisations committed to improving access to marine data. Partners are both public and private sector. MEDIN reports through the UK Marine Monitoring and Assessment Strategy to the UK Marine Science Coordination Committee (MSCC).</p> <p>MEDIN does not hold produce, own or hold any data directly but its discovery metadata portal provides information about 15,000 marine datasets. MEDIN delivers data through a network of accredited Data Archive Centres. It is responsible for the United Kingdom Directory of Marine Observing Systems (UKDMOS), a unique internet-based searchable database of marine monitoring conducted by UK organisations. In addition, MEDIN promotes the use of standardised field names and controlled vocabularies so that datasets are described in a consistent way for every type of marine data.</p> <p>NOTE: in the next question "What is their current role?", since a response is required, I have put "Data holder" as the MEDIN Data Archive Centres hold data. Coastal Survey licences provide permission to undertake a range of small scale commercial survey activities, interfering with the foreshore or seabed, usually for a period of up to 12 months.</p> <p>Marine Data Exchange, part of The Crown Estate, established in 2013, provides access to survey data and reports collected by offshore renewable and marine aggregates customers.</p>		
	Role	Data producer	<input type="checkbox"/> Data owner <input checked="" type="checkbox"/> Data holder
	Data policy in place	Yes	

## A. Appendix I Stakeholder Questionnaire

Country

What is the name of the stakeholder/organisation/institute?

What type are they?

What are the main responsibilities of the stakeholder in relation to marine monitoring and research data (e.g. give out licenses, do the monitoring, collect data, etc.)?

What is their current role?

- Data producer
- Data owner
- Data holder

Do they have a data policy (if yes, please insert a link to the document if available)?

Do they know about EMODnet Ingestion?

Would they like to collaborate with EMODnet Ingestion?

Do they have the capacity to participate?

Should they be invited to the final workshop?

## B. Appendix II Overview of Identified Stakeholders per Country

Country	Questionnaire filled in	Number of stakeholders identified
Belgium		
Bulgaria	✓	4
Croatia	✓	9
Cyprus		
Denmark		
Estonia	✓	1
Finland		
France	✓	10
Georgia	✓	5
Germany		
Greece	✓	1
Iceland	✓	1
Ireland	✓	8
Israel		
Italy		
Latvia	✓	2
Malta	✓	3
Netherlands	✓	1
Norway	✓	1
Portugal	✓	2
Romania		
Slovenia		
Spain	✓	5
Sweden	✓	10
Turkey		
UK	✓	18