



**EMODnet**



European Marine  
Observation and  
Data Network

# **EMODnet Thematic Lot n°7 – Human Activities**

**EASME/EMFF/2019/1.3.1.9/Lot 7/SÍ2.835999**

**Start date of the project: 03/03/2021 - (24 months)**

**EMODnet Phase III – Quarterly Progress Report (16)**

**Reporting Period: 01/01/2021 – 31/03/2021**



## Contents

<b>1.Highlights in this quarter.....</b>	<b>3</b>
<b>2.Identified issues: status and actions taken .....</b>	<b>5</b>
<b>3.User feedback (Contact Us form, online chat &amp; other communication means).....</b>	<b>6</b>
<b>4.Meetings/events held/attended &amp; planned .....</b>	<b>9</b>
<b>5.Communication assets.....</b>	<b>11</b>
<b>6.Monitoring indicators .....</b>	<b>14</b>
<b>7.Annex: Other documentation attached .....</b>	<b>17</b>

## 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. Highlights in this quarter

---

## **Task 1: develop a common method of access to data held in repositories**

New data sets made available:

- MSP
- Power cables

A new data source (SHOM) was added for telecommunication cables.

The government of the Åland Islands submitted their MSP via EMODnet Data Ingestion. This is potentially very important, as EMODnet Human Activities might become the preferred platform for Member States to transmit their spatial plans.

Further to the work carried out on INSPIRE in the past, we have been working on the design of a single INSPIRE-compliant data model for EMODnet human activities data, based on the recommendations from the report last year. As INSPIRE data models cannot fully fit EMODnet Human Activities' data set, the idea is to take as much as possible from the existing INSPIRE land use model, and adapt it to create INSPIRE-compliant data models that can be used on EMODnet Human Activities. The work has been informed, amongst other things, by the experience with the recently-released MSP data sets, which was also an adaptation from INSPIRE's land use model. Guidelines have been written and the plan – to be discussed during the next Steering Committee meeting – is to make all data set available both with the EMODnet and the INSPIRE data model.

## **Task 2: construct products**

- Route density maps updated to February 2021
- Vessel density maps updated with 2020 data

## **Task 3: develop procedures for machine-to-machine connections to data and data products**

With the new contract the current server will be migrated to Germany. The process has just been started.

## **Task 4: maintain and further develop a thematic web portal**

Nothing to report. The portal will be phased out in the current phase of EMODnet, so only ordinary maintenance will be performed.

## **Task 5: ensure the involvement of regional sea conventions**

Black Sea Commission: a questionnaire was sent at the beginning of March, and feedback was received at the end of March.

UNEP-MAP (Barcelona Convention): A meeting was originally scheduled in March, but it was then postponed by the Bureau of the Barcelona Convention. It then took place on 9 April 2021, and so it will be reported in the next progress report.

Helcom: meeting scheduled in March was postponed to 13 April. It will be reported in the next progress report.

OSPAR: meeting will take place on 20 April..

## **Task 6: install a process to monitor performance and deal with user feedback**

- 31.2% users from industry.

**Task 7: operate a help desk offering support to users**

Nothing noteworthy. With no live chat service, users mostly reach out via email. Total number of help requests has decreased, though.

<b>Status of the Milestones and Deliverables listed in the workplan</b>				
Milestone/Deliverable	WP	Date due	Status (Delivered/Delayed)	If Delayed: reason for delay and expected delivery date
Final Report	all	02/03/2021	Delivered with a delay	The report was submitted a few days later than the deadline. It hasn't yet been approved, but the comments received are being addressed.

N.B. the workplan of EMODnet Human Activities is not structured around milestones, other than project deliverables.

## 2. Identified issues: status and actions taken

<b>A. Priority issue(s) identified and communicated by EASME/ 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 (Contact Us form, online chat & other communication means)

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
05/01/21	Individual	Technical: corrupt file	E-mail	Same day	Resolved	File wasn't corrupt	
08/01/21	Individual	Technical: user needed to know how to open geotiffs	E-mail	Same day	Resolved	Explained how to do it	
12/01/21	Individual	Data: user needed fishing intensity data for all EU sea basins	E-mail	Same day	Pending		Explained that fishing intensity data was made available voluntarily. Full coverage will be ensured with the new contract by March 2022
14/01/21	Individual	Data: user asked why no wind farms from the Baltic Sea were available for download	E-mail	Same day	Solved	Explained there are two wind farms data sets.	
19/01/21	Individual	Technical: user was expecting a shapefile instead of a geotiff	E-mail	Same day	Solved	Explained that raster files are not provided in vector format. Explained how to open a geotiff	

<b>26/01/21</b>	Individual	Technical / Data: user wanted to know whether (i) it's possible to access raw AIS data; (ii) there will be an update of vessel density maps with 2020 data; (iii) route density can be converted into number of hours	E-mail	Same day	Solved	Explained that (i) raw AIS data cannot be made available to third parties; (ii) vessel density maps were being updated (they're now available); route density can't be converted into number of hours.	
<b>28/01/21</b>	Individual	Technical: web services down	E-mail	Immediate	Solved	Restarted GeoServer	
<b>03/02/21</b>	Individual	Citation	E-mail	Same day	Solved	Redirect user to data policy page	
<b>04/02/21</b>	Individual	Data: user asked whether vessel density maps will be made available for years before 2017	E-mail	Same day	Pending		Explained there are no plans to do so at the moment.
<b>11/02/21</b>	Individual	Data: user wanted to download the wrecks data set	E-mail	Same day	Solved	Explained that the data provider did not agree to make the data available for download. Suggested contacting the data provider themselves	
<b>19/02/21</b>	Individual	Data: user asked for a shapefile of lighthouses	E-mail	Same day	Solved	Explained where to download it from	
<b>23/02/21</b>	Individual	MSP data provider asked how to submit data	E-mail	Same day	Solved	Explained how to do it.	

<b>26/02/21</b>	Individual	Data: users asked for raw AIS data	E-mail	Same day	Solved	Explained these can't be made available to third parties.	
<b>03/03/21</b>	Individual	Technical: feature to download data in tabular format not working with vessel density	E-mail	Same day	Solved	Explained it can't work with vessel density	
<b>11/03/21</b>	Individual	Data: user found inconsistencies in vessel density data	E-mail	One week	Solved	After careful research, it emerged that the user was importing the data in the wrong way.	
<b>16/03/21</b>	Individual	Data: user asked about the source of waste disposal data for Cyprus	E-mail	Same day	Solved	Explained.	
<b>31/03/21</b>	Individual	Data: user asked why there are no African ports in the port data set	E-mail	Same day	Solved	Explained that the data is sourced from Eurostat, which doesn't have a mandate to collect data on African countries.	



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

A. Meetings/events organised and attended					
Date	Location	Type event (internal or external meeting, training/workshop)	Indicate if a ppt was given (yes/no + short description)	Meeting attended (A) / organised (O)	Short description and main results (# participants, agreements made, etc.)
24-25/04/21	Remote meeting	Workshop	No	A	Workshop on Marine Data for Aquaculture
15/01/21	Remote meeting	Workshop on the Geolittoral Website (France)	No	A	The aquaculture portal does not contain site locations at this stage but the site is evolving.
11/02/2021	Remote meeting	External technical expert group	Yes, introduction of the MSP data model	A	Technical expert group on MSP created by EASME and DG-Mare
25/02/2021	Remote meeting	External technical expert group	Yes, presentation of the MSP data model	A	Technical expert group on MSP created by EASME and DG-Mare
<b>SUM</b>				<b>O</b>	<b>Total # of meetings organised =</b>
<b>SUM</b>				<b>A</b>	<b>Total # of meetings attended = 4</b>

B. Meetings/events planned in the future				
Date	Location	Type event (meeting, training (workshop), etc.)	Meeting to be attended (A) / organised (O)	Short description and main expected outcomes
To be decided after the Steering	Remote meeting	Partners meeting	O	Getting organised for the new EMODnet phase

Committee meeting				

## 5. Communication assets

A. Communication products				
Date	Communication material	Short description (of the material, title, ...) of the asset	Main results	Name of event at which material was disseminated (if applicable)

B. Planned communication products			
Date	Communication material	Short description (of the material, title, ...) and/or link to the asset	Main results expected
To be decided	Blog posts / use cases	A list of use cases (energy, transport, cooperation with CMEMS, etc.) are being prepared jointly with the Secretariat	Mainstreaming the potential of EMODnet Human Activities in previously unexplored domains.

### List of known publications using EMODnet data or data products

Date	Type and name of journal, conference, ...	Publication title including DOI (if known)	Author(s)	Organisation(s)
<b>24/01/2021</b>	Sustainability	Ecosystem-Based MSP for Enhanced Fisheries Sustainability: An Example from the Northern Adriatic (Chioggia—Venice and Rovigo, Italy) <a href="https://doi.org/10.3390/su13031211">https://doi.org/10.3390/su13031211</a>	Farella G. et al.	National Research Council (Italy) et al.
<b>29/01/2021</b>	Journal of Wildlife Diseases	Influence of pathogens, fish-related characteristics, and environmental factors on the development of skin ulcerations in wild common dab ( <i>limanda limanda</i> ) from the North Sea <a href="https://doi.org/10.7589/JWD-D-20-00088">https://doi.org/10.7589/JWD-D-20-00088</a>	Vercauteren M. Et al.	Ghent University (Belgium) et al.
<b>2021</b>	Guide to Maritime Informatics (book) <a href="https://doi.org/10.1007/978-3-030-61852-0">https://doi.org/10.1007/978-3-030-61852-0</a>	Navigating the Ocean of Publicly Available Maritime Data	Tzouramanis T.	University of Thessaly (Greece)
<b>03/02/2021</b>	Nature	Scientific, societal and pedagogical approaches to tackle the impact of climate change on marine pollution <a href="https://doi.org/10.1038/s41598-021-82421-y">https://doi.org/10.1038/s41598-021-82421-y</a>	Alves T. M. et al.	Cardiff University (UK)
<b>18 March 2021</b>	Frontiers in Climate	Alkalinization Scenarios in the Mediterranean Sea for Efficient Removal of Atmospheric CO <sub>2</sub> and the Mitigation of Ocean Acidification	Butenschön M. et al.	Ca' Foscari University (Italy)

		<a href="https://doi.org/10.3389/fclim.2021.614537">https://doi.org/10.3389/fclim.2021.614537</a>		
<b>10/02/2021</b>	International Journal of Sustainable Energy Planning and Management	Determination of the most appropriate site selection of wind power plants based Geographic Information System and Multi-Criteria Decision-Making approach in Develi, Turkey	Karipoğlu F. et al	Izmir Institute of Technology (Turkey) et al.
<b>13/03/2021</b>	ICES Journal of Marine Science	Identifying marine ecological production units in Vietnam <a href="https://doi.org/10.1093/icesjms/fsab047">https://doi.org/10.1093/icesjms/fsab047</a>	Bell J. et al.	Cefas (UK)
<b>07/01/2021</b>	Transactions on Aerospace and Electronic Systems (pre-print)	Deep Learning Methods for Vessel Trajectory Prediction based on Recurrent Neural Networks	Capobianco S. et al.	NATO CMRE
<b>27/01/2021</b>	Frontiers in Marine Science	Current Status of the Algae Production Industry in Europe: An Emerging Sector of the Blue Bioeconomy <a href="https://doi.org/10.3389/fmars.2020.626389">https://doi.org/10.3389/fmars.2020.626389</a>	Araújo R. et al.	European Commission, Joint Research Centre et al.
<b>15/03/2021</b>	Ringling & Migration	Migratory movements of British and Irish Common Shelduck Tadorna tadorna: a review of ringing data and a pilot tracking study to inform potential interactions with offshore wind farms in the North Sea	Green R.M.W. et al.	British Trust for Ornithology (UK)

## 6. Monitoring indicators

[Please refer to the standardised monitoring tool i.e., Matomo, to complete the monitoring and progress indicators excel template, and provide a short explanation in the table below on the numbers and trends for each indicator when possible/applicable. **Please indicate clearly if monitoring was carried out using tools other than Matomo.**]

Comments on the progress indicators in the excel template		
Progress indicator	Means of collecting figures	Comment
1. Current status and coverage of total available thematic data A) Volume and coverage of available data <b>If you don't use the provided sea-basin figures, please indicate why you do not use them, as from when, and what do you use instead and why?</b>	Database	Coverage increased for those data sets that received an update. MSP and power cables are new data sets, so it wasn't possible to calculate increase. N.B.: sea-basin figures seldom make sense when dealing with discrete data.
B) Usage of data in this quarter	Download form	Except very few instances, number of downloads increased for all data sets. To be noted that for the moment it is not possible to split the newly-released power cables, from "telecommunication cables" (it can be done from the next report on), hence the number reported for telecommunication cables are inflated. It's difficult to link the general increase in number of downloads with a specific phenomenon. As downloads have been increasing steadily (except during the summer months) it is plausible that the portal is simply gaining more and more visibility.
2. Current status and coverage of total number of data products A) Volume and coverage of available data products <b>If you don't use the provided sea-basin figures, please indicate why you do not use them, as from when, and what do you use instead and why?</b>	Database	Route density increases every quarter, as new maps are released each month. Vessel density maps are released yearly. This quarter there is an increase, because almost the entire year was made available; the remaining months are just being added and so they will be reported in the next progress report. N.B.: sea basin figures can be calculated in this case.

Comments on the progress indicators in the excel template		
Progress indicator	Means of collecting figures	Comment
B) Usage of data products in this quarter	Download form	Vessel density maps are more or less steady. Route density increased by nearly 30%. Anecdotal evidence suggests that this might be due to vessel density map having just been updated to 2020; route density on the contrary is updated every month. Since a lot of research is being carried out on COVID-19, not having 2020 data made the vessel density maps less useful. It is expected that the next progress report will report increased usage.
3. Organisations supplying/approached to supply data and data products within this quarter		The government of the Åland Islands voluntarily approached the EMODnet Secretariat to ask how to contribute their maritime spatial plan to the project. The HA team offered advice and invited them to submit their plan via EMODnet Data Ingestion. While the Alacrity of the Ålandic might be more the exception than the rule, this event is particularly important in that it might suggest the beginning of a new process whereby governments submit their plans through EMODnet, which might does become the vehicle to comply with the MSP Directive
4. Online 'Web' interfaces to access or view data		Nothing noteworthy
5. Statistics on information volunteered through download forms		Users from industry on a slightly downward trend, but still higher than 30%. Interestingly, there seems to be an increasing number of students using EMODnet HA.
6. Published use cases		Nothing noteworthy
8.1. Technical monitoring		Nothing noteworthy
8.2. Portal user-friendliness (Visual harmonization score)		Nothing noteworthy
9. Visibility & Analytics for web pages	Matomo	Visibility increasing for all web pages
10. Visibility & Analytics for web sections	Matomo	Blog visibility increased probably during to a post on algae
11. Average visit duration for web pages	Matomo	Visit duration increased for 'view data' and 'search data'. This suggests that there are fewer visitors, but they're probably more active

*The monitoring numbers reported as part of the progress monitoring of EMODnet performance are collected through Matomo. In some cases, numbers from other monitoring systems may also be reported (e.g. Awstats, Google Analytics), and if so, must be reported in the table above. Each system uses different technical approaches and therefore has its strengths and shortcomings. Therefore, results are indicative and care should be taken when interpreting absolute numbers or comparing results from different tools. It is often more sensible to consider trends over time collected by the same monitoring tool.*



## 7. Annex: Other documentation attached

---

*[List in Annex if you wish to provide any additional information.]*