



**EMODnet**



European Marine  
Observation and  
Data Network

# **EMODnet Thematic Lot n° V - BIOLOGY**

**EASME/EMFF/2016/1.3.1.2- Lot 5/SI2.750022 – Biology**

**Start date of the project: 19/04/2019 - (24 months)**

**EMODnet Phase III – Quarterly Progress Report (11)**

**Reporting Period: 01/10/2019 – 31/12/2019**



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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 Highlights during the reporting period

## WP1. Project management (Tasks 7 & 8)

The last quarter of 2019 was quite busy, with staff changes (one member leaving and responsibilities being reassigned to another one) as well as the launch for the call for data grants and subsequent evaluation of the proposals received (amounting to a total of 32).

The grant evaluation was completed in early December and proponents contacted with information on the status of their proposals. Further work to complete the admin side of the grant contracts (drafting contracts, receiving proponents details) will take place within Q12, with an expectation that the grant work will start in earnest during Q13.

Following the request from EASME, the Data Privacy Notice was redrafted and published and the https protocol implemented in mid-December.

Finally, an analysis of the web metrics and usage data (data download monitoring) using Matomo was conducted. A total number of 2303 visits were made by, on average, 23 visitors per day. During the reporting period, seven days registered an excess of 50 visitors, possibly due to the data grant call as most of these spikes occurred before the submission deadline.



Figure 1. Evolution of visitors of [emodnet-biology.eu](http://emodnet-biology.eu) during the reporting period

## WP2: Data access to marine biological data (Task 1)

The deliverable "[Evaluation and definition of partner-specific data flows, and the technical implementation of partner-specific data flows](#)" was produced and submitted within the reporting period and can be accessed via the website.

The last harvest of 2019 started in mid-November and accounted for a total of 32 datasets, of those 24 include updates and the remainder are new datasets. These datasets added a total of 86376 occurrences from 11923 events and 1034965 Extended Measurements or Facts (eMoF) records.

One dataset in particular (REBENT: Benthic Network) was cleaned up and this resulted in the removal of 17210 occurrences from the database.

The individual datasets can be accessed via the metadata catalogue, which contains a link to their selection in the download toolbox. A list of the harvested dataset names and links is provided below:

- [Arqueomonitor project: Abundance of the Bucentaure and Fougueux shipwrecks benthic communities, Cadiz Bay \(Spain\) 2012-2013](#)
- [Cymodocea nodosa in the slovenian coastal area](#)
- [Ecological study on the algal population of the rocky coasts of "Le Dramont" \(Saint Raphaël, France\) between 1986 and 1972](#)
- [Epibenthos and demersal fish monitoring at long-term monitoring stations in the Belgian part of the](#)

North Sea

- [Epibenthos and demersal fish monitoring in function of aggregate extraction in the Belgian part of the North Sea](#)
- [Epibenthos and demersal fish monitoring in function of dredge disposal monitoring in the Belgian part of the North Sea](#)
- [Epibenthos and demersal fish monitoring in function of wind energy development](#)
- [Eurytemora affinis in the Sluice Dock Oostende \(1970-1971\)](#)
- [Gelatinous zooplankton in the Belgian part of the North Sea and the adjacent Westerscheldt estuary, period 2011-2012](#)
- [Global Distribution and Diversity of Solenidae Species](#)
- [LifeWatch observatory data: phytoplankton observations by imaging flow cytometry \(FlowCam\) in the Belgian Part of the North Sea](#)
- [LifeWatch observatory data: zooplankton observations in the Belgian Part of the North Sea](#)
- [Macrobenthos monitoring at long-term monitoring stations in the Belgian part of the North Sea from 2001 on](#)
- [Macrobenthos monitoring in function of aggregate extraction activities in the Belgian part of the North Sea](#)
- [Macrobenthos monitoring in function of dredge disposal monitoring in the Belgian part of the North Sea](#)
- [Micro- and nanoplankton in Belgian coastal waters near Nieuwpoort between 1970 and 1972](#)
- [Nanophytoplankton along the salinity gradient in the Tamar estuary in 1969](#)
- [Observation of the cultivation of oyster larvae in the Spuikom Oostende in 1964](#)
- [Phytoplankton and environmental study in the Southern North Sea between 1971 and 1973](#)
- [Phytoplankton in the western North Sea between 1976 and 1977](#)
- [Phytoplankton inventory in the Sluice Dock between 1989 and 1991](#)
- [Phytoplankton study in the Sluice Dock between 1971 and 1973](#)
- [Quantitative determination of bacteria by the membrane-filtration method in the Sluice Dock in 1966](#)
- [REBENT: Benthic Network](#)
- [Recolonization of a disturbed sandsediment by macrobenthos in the Sluice dock \(Oostende\) in 1980](#)
- [Study of the biotic environment in the Sluice Dock in relation to oyster farming between 1960 and 1964](#)
- [Total diatom abundance in the Southern Bight of the North Sea in January and February 1971](#)
- [Total phytoplankton inventory in the North Sea and the river Scheldt in 1972](#)
- [Total phytoplankton inventory in the Scheldt estuary on the 19th of March 1974](#)
- [Total phytoplankton inventory in the Southern Bight of the North Sea between 1973 and 1974](#)
- [Total phytoplankton inventory in the Southern Bight of the North Sea in 1971](#)
- [Total phytoplankton inventory in the western part \(Grote Rede, Negenvaam, Buiten Rateel, Oost Dyck\) of the North Sea between 1977 and 1978](#)

The geographical, temporal and taxonomical distribution of the data added and updated in this reporting period can be seen in the figures below.

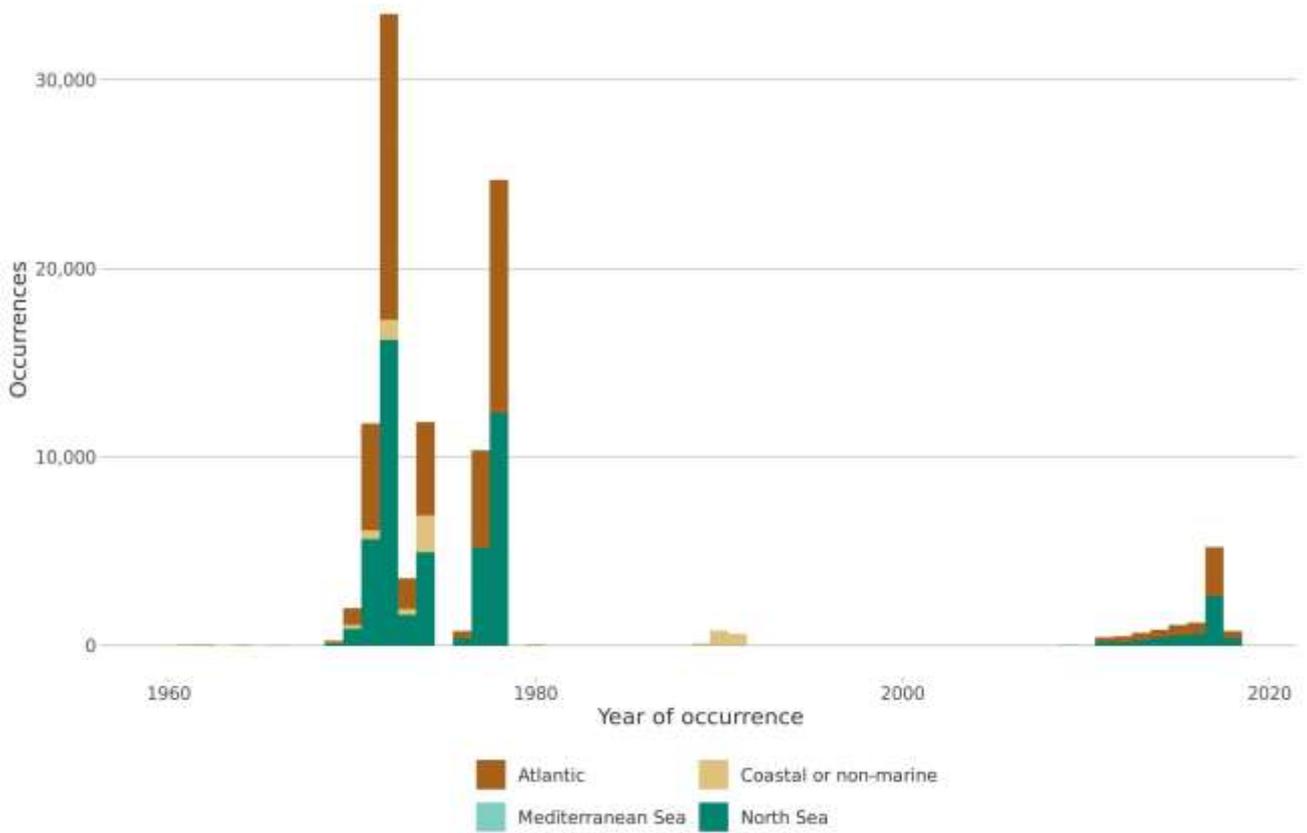


Figure 2. Number of records per occurrence year and marine region that have been harvested during the reporting period.

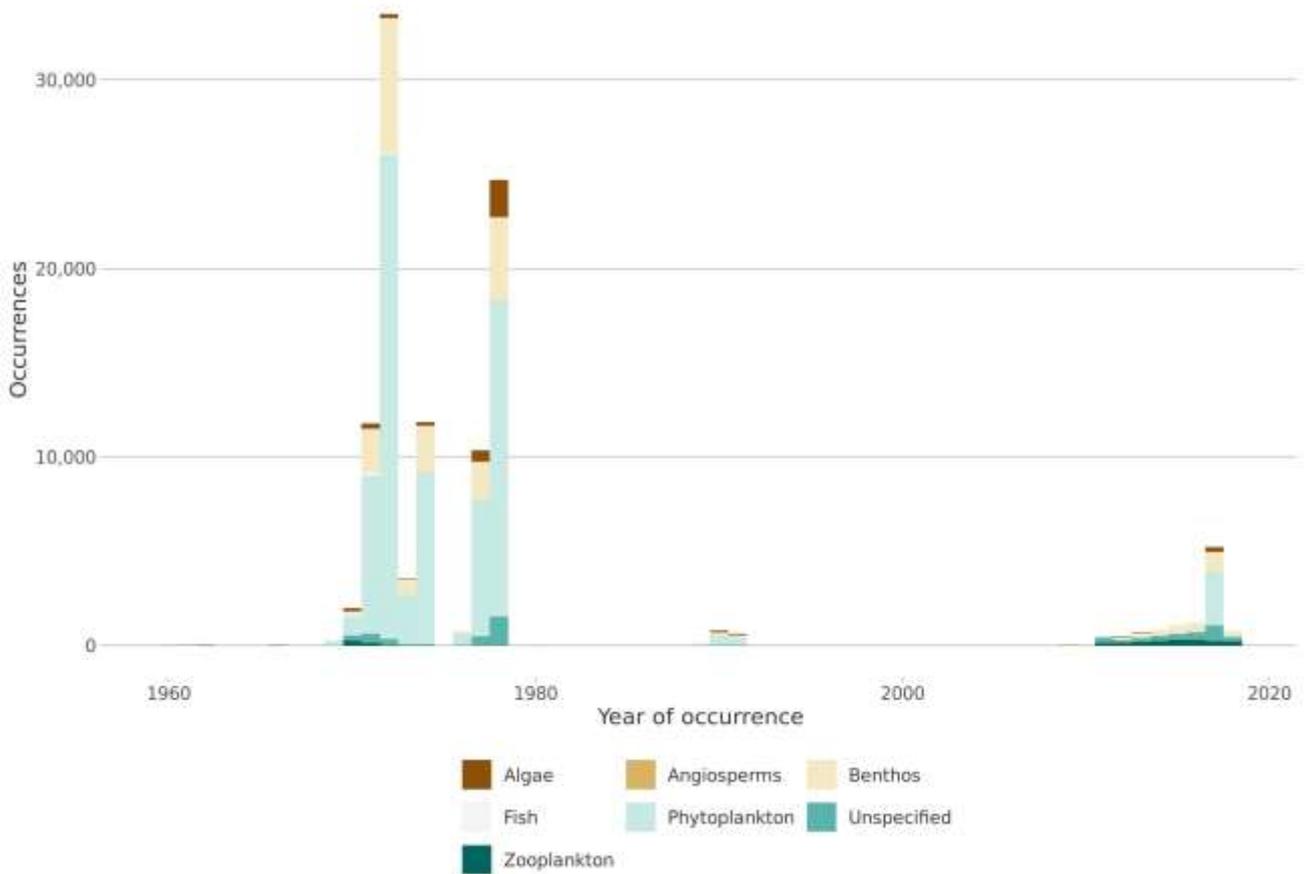


Figure 3. Number of records per occurrence year and functional group that have been harvested during the reporting period.

NB: Unspecified refers to occurrences where no functional group could be identified in WoRMS. This grouping can be found in 11 datasets, comprising 2931 occurrences, from all regions.

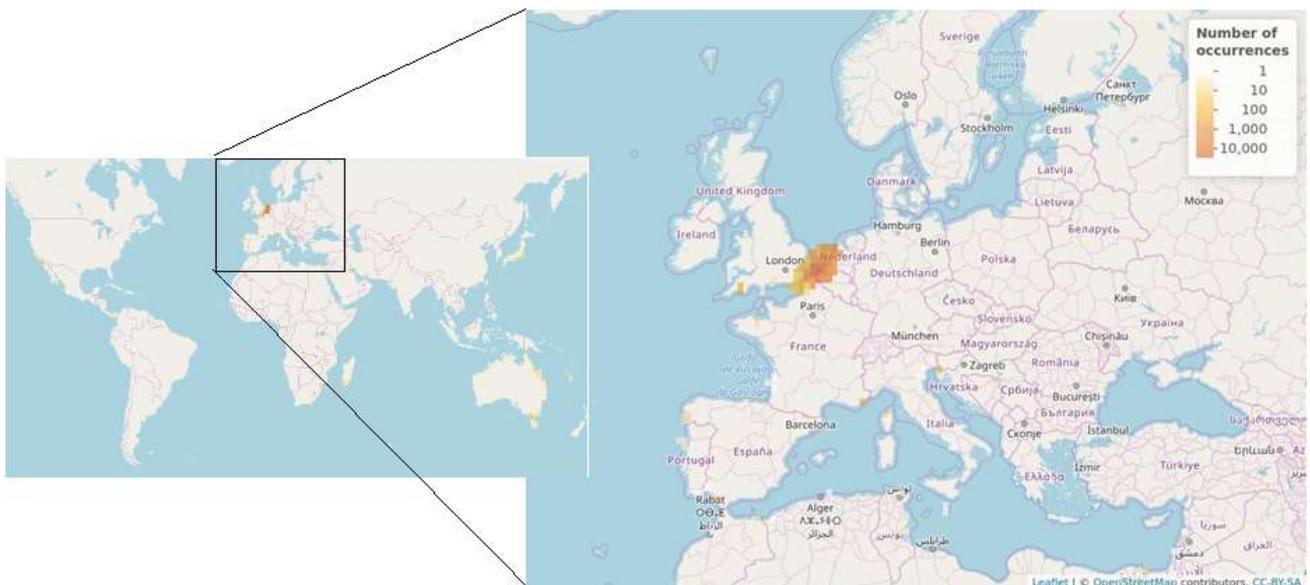


Figure 4. Map of gridded number of occurrences that have been harvested during the reporting period.

NB: The map above shows a zoom to the European area, but records collected in other parts of the world (e.g coastal Pacific and Indian oceans) were also harvested.

### **WP3: Data archaeology and rescue (Task 1)**

The following activities were completed:

- Data and meta-data digitization/mobilization for the dataset:
- Phytoplankton of coastal waters in the Aegean Sea, Eastern Mediterranean, 2002-2003.
- Check and correction of metadata for 5 datasets on IPT.
- Dataset uploading on MedOBIS viewer.

The main ongoing activity was the prioritisation of the Mediterranean historical datasets.

### **WP4. Data product creation (Task 2)**

The main activity comprised of the drafting of the deliverable "[Report with proposed list of data packages and underlying datasets with specific recommendations on \(meta\)data gaps](#)" which was submitted and is accessible via the website.

Work regarding the organisation of the Data product workshop was also initiated, although in its infant stages.

### **WP5: Uptake and outreach (Tasks 5 & 6)**

Discussions and planning have started on the next key deliverable of WP5. A Transatlantic data integration and product development workshop is planned for M14 of this phase and will take place alongside the EMODnet Open Conference in September 2020.

Through liaison and engagement with US, Canadian and other colleagues in the Western Atlantic region we will identify a subset of the existing suit of data products, developed in the previous phase of EMODnet Biology, and apply data from near-coast and bay systems with comparable characteristics. In this way we can test the utility and repeatability of the existing workflows and investigate if the EOv-based approach taken in the demonstration products can be applied to datasets more widely.

The previously submitted manuscript for D5.2 is still under peer review with the journal Marine Policy.

### **WP6: Technical update EMODnet biological portal & machine to machine connections (Task 3 & 4)**

The main developments that took place during this quarter were enhancements in the reporting tool and the changes required to comply with data privacy regulation, including the setup of the https protocol for the portal. A Brexit disclaimer was also prepared and its implementation is ready to be made live following EASME's decision.

## 2 Challenges encountered during the reporting period

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*Provide an overview of the main challenges encountered during the reporting period and the measures taken to address them, including those related to technical and data provision issues.*

*[Please, provide information in the table.]*

Main challenge	Measures taken
<b>Change of staff</b>	The previous EMODnet Biology coordinator left in late October and tasks were assigned to a new member of the team recruited in September. In November this member took over, on a permanent basis, the coordination role for the project
<b>Reporting tool</b>	<ul style="list-style-type: none"> <li>- Marine regions compliant with EMODnet report</li> <li>- Various updates performed:               <ul style="list-style-type: none"> <li>Additional colour pallets</li> <li>Fixed bugs in export buttons</li> <li>Improved data reporting tables</li> </ul> </li> </ul>

### 3 Identified issues: status and actions taken

Provide an overview of the issues identified, if any, during the reporting period, the status of those issues, and actions taken to address them.

*[Please, provide information in the table.]*

Issue identified	Status (Pending/Resolved)	Action taken	Date due
<b>Implementing https on all EMODnet portals</b>	Resolved		31/12/2019
<b>Implementing Marine-ID</b>	Pending	Review of potential alternatives (QR10 report feedback)	
<b>Updates to Data Protection compliance</b>	Resolved	Data Privacy notice published	11/12/2019
<b>EASME request for Brexit disclaimer on all EMODnet portals</b>	Pending	Information has been added to websites and its rollout is pending EASME's confirmation	01/02/2020
<b>Including dataURL in web services of data products</b>	Ongoing	Feedback received from EMODnet's Technical coordinator	

## 4 User Feedback

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List any useful feedback you received on your portal, your activities or those of other EMODnet projects/activities. Also provide any suggestions you have received for EMODnet case studies and/or future products/activities/events.

[Please, provide information in the table. If you wish to include the full user feedback in the report you can attach it in Annex.]

Date	Organisation	Type of user feedback (e.g. technical, case study, etc.)	Response time
16/10/2019	VLIZ	LifeWatch EMODnet Biology QC tool technical issues	1 day

## 5 Meetings held/attended since last report

List here the internal and external meetings held/participated by the contractant (e.g. meeting, conference, training (workshop), etc.) since the last quarterly report. Please add a short description on the meeting as well as the nature and volume of the audience. At the bottom of the table, provide the total number of events organised and events participated.

[Please, provide information in the table.]

Table: Meetings organised and attended.

Date	Location	Type event (meeting, training (workshop), etc.)	Attended (A) / Organised (O)	Short description and main results (# participants, agreements made, etc.)
<b>02/10/2019 to 04/10/2019</b>	Pisa, Italy	EOSC Blue-Cloud Kick-off meeting	A	Presentation on the current state of EMODnet Biology and EurOBIS infrastructures.
<b>22/10/2019 to 25/10/2019</b>	Leiden, Netherlands	BioDiversity Next Conference	A	Main objective this year was networking More than 700 attendees from 76 countries
<b>05/11/2019 to 08/11/2019</b>	Santa Marta, Colombia	SG-OBIS-Eighth session of the IODE Steering Group for OBIS	A	WP2, WP3 and WP5 leaders attended this meeting. Report not published at the time of report drafting
<b>02/12/2019 and 06/12/2019</b>	Online	Data grant evaluation (WP1, WP2, WP3, WP4 and WP5 leaders)	O	Analysis of submitted proposals Evaluation of said proposals following criteria established in the call
<b>16/12/2019</b>	Online	WP3 archaeology datasets meeting	O	From an initial inventory of >230 datasets a discussion was held on which ones to prioritise and how to proceed with the available information
<b>20/12/2019</b>	Lisbon, Portugal	Meeting with EMSA	A	Overview of EMODnet Biology Discussion of opportunities for the use of EMODnet Biology data Highlighted Annual conference in 2020
<b>SUM</b>			<b>O</b>	<b>Total # of meetings organised = 2</b>
<b>SUM</b>			<b>A</b>	<b>Total # of meetings attended = 4</b>

## 6 Outreach and communication activities

Please list all the relevant communication/outreach activities or products you have developed/executed during this period (including presentations, lectures, trainings, demonstrations, workshops, etc., and development of communication materials such as brochures, videos, press releases, newsletters, etc.). At the bottom of the table, provide a total number for every type of communication activity you have developed/executed (e.g. total # of press releases, total # of presentations given, etc.).

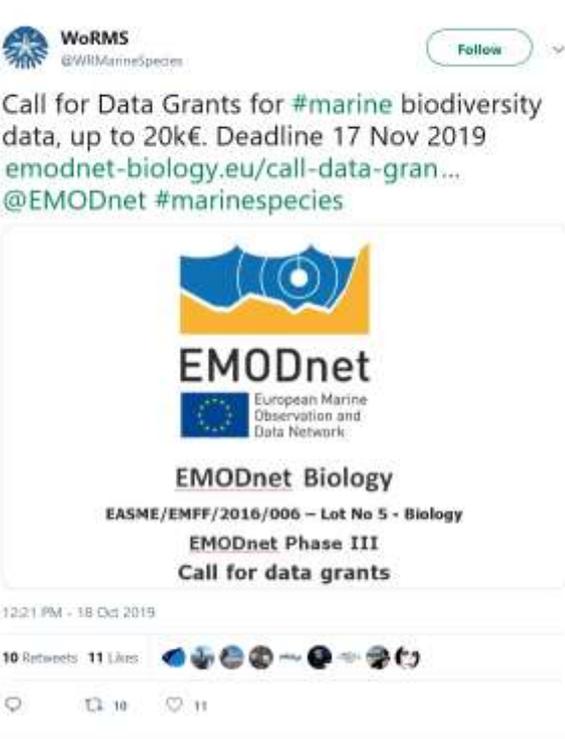
[Please, provide information in the table.]

Table: Communication activities.

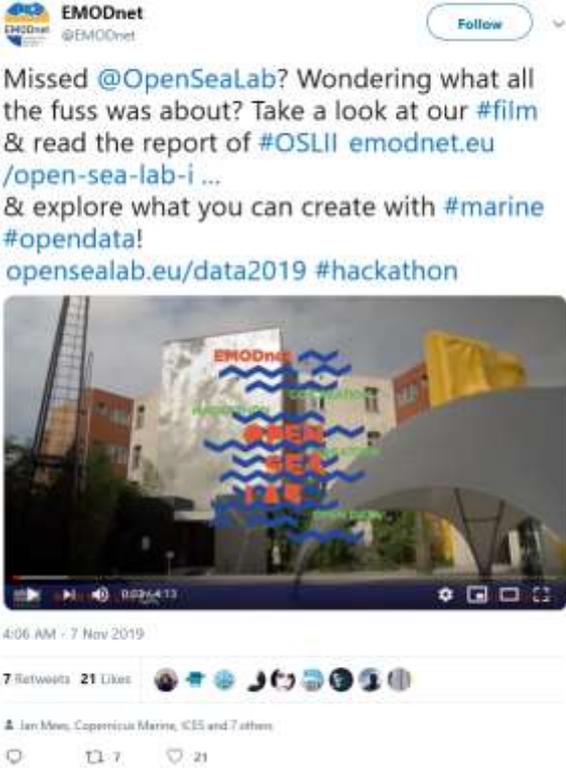
Date	Communication action/material	Short description (of the material, title, ...) and/or link to the activity	Main results (# participants, # views, # press clippings, etc.)
01/10/2019	Tweet	<a href="https://twitter.com/EurOBIS_VLIZ/status/1046731393299042305">https://twitter.com/EurOBIS_VLIZ/status/1046731393299042305</a> 	Retweets: 2 Likes: 4
02/10/2019	Tweet	<a href="https://twitter.com/EMODnet/status/1179424510933688320">https://twitter.com/EMODnet/status/1179424510933688320</a>	Retweets: 2 Likes: 2

			
<p>03/10/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EMODnet/status/1179743758595821568">https://twitter.com/EMODnet/status/1179743758595821568</a></p> 	<p>Retweets: 4 Likes: 8</p>
<p>09/10/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/G_W_Graham/status/917402593734856704">https://twitter.com/G_W_Graham/status/917402593734856704</a></p>	<p>Retweets: 1 Likes: 2</p>

			
<p>17/10/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EurOBIS_VLIZ/status/1052556094915129347">https://twitter.com/EurOBIS_VLIZ/status/1052556094915129347</a></p> 	<p>Retweets: 3 Likes: 8</p>
<p>18/10/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EurOBIS_VLIZ/status/1185105937813704704">https://twitter.com/EurOBIS_VLIZ/status/1185105937813704704</a></p>	<p>Retweets: 16 Likes: 19</p>

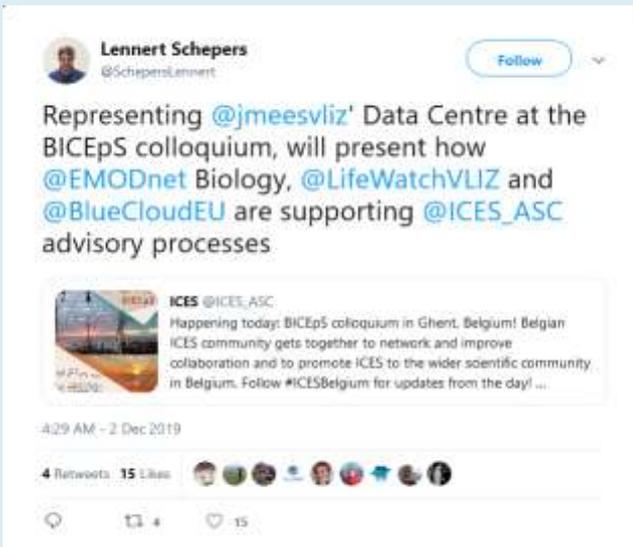
			
18/10/2019	Tweet	<a href="https://twitter.com/WRMarineSpecies/status/1185274758243475456">https://twitter.com/WRMarineSpecies/status/1185274758243475456</a>	Retweets: 10 Likes: 11
			
23/10/2019	Email	Data grant call distributed to several networks (e.g. EuroMarine-European Marine Research Network, MARS- the European Network of Marine Stations)	
23/10/2019	Grant call	<a href="http://www.emodnet.eu/emodnet-biology-call-data-grant">http://www.emodnet.eu/emodnet-biology-call-data-grant</a>	
27/10/2019	News article	<a href="https://www.marinestations.org/emodnet-biology-data-grant-call-deadline-17-november/">https://www.marinestations.org/emodnet-biology-data-grant-call-deadline-17-november/</a>	
31/10/2019	Tweet	<a href="https://twitter.com/WRMarineSpecies/status/1189874051310931968">https://twitter.com/WRMarineSpecies/status/1189874051310931968</a>	Retweets: 6

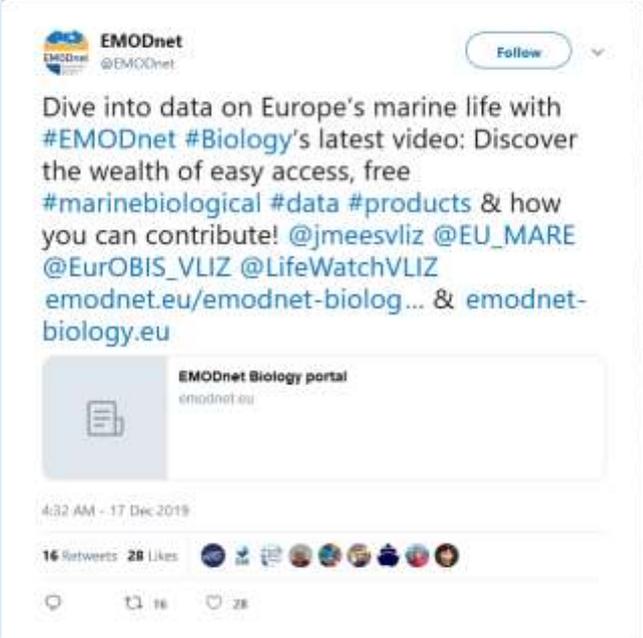
			<p>Likes: 8</p>
<p>04/11/2019</p>	<p>News article</p>	<p><a href="http://www.emodnet-biology.eu/news?p=show&amp;id=8074">http://www.emodnet-biology.eu/news?p=show&amp;id=8074</a></p>	
<p>05/11/2019</p>	<p>News article</p>	<p><a href="http://www.emodnet-biology.eu/news?p=show&amp;id=8076">http://www.emodnet-biology.eu/news?p=show&amp;id=8076</a></p>	
<p>05/11/2019</p>	<p>Tweet</p>		<p>Retweets: 3 Likes: 17</p>

06/11/2019	News article	<a href="http://www.emodnet.eu/open-sea-lab-ii-film-report-and-future">http://www.emodnet.eu/open-sea-lab-ii-film-report-and-future</a>	
07/11/2019	Tweet	<p><a href="https://twitter.com/EMODnet/status/1192413028312133632">https://twitter.com/EMODnet/status/1192413028312133632</a></p>  <p>7 Retweets 21 Likes</p> <p>Jan Muis, Copernicus Marine, ICES and 7 others</p>	<p>Retweets: 7 Likes: 21</p>
07/11/2019	News article	<a href="https://www.euromarinenetwork.eu/calls/emodnet-biology-call-data-grants">https://www.euromarinenetwork.eu/calls/emodnet-biology-call-data-grants</a>	
07/11/2019	Video	<p><a href="https://youtu.be/9sJBqQzPmXk">https://youtu.be/9sJBqQzPmXk</a></p> 	<p>Views: 286 Subscribers: 68</p>
12/11/2019	Video	<p><a href="https://youtu.be/PBiPa6X-KiM">https://youtu.be/PBiPa6X-KiM</a> (short version)</p>	<p>Views: 4 Subscribers: 68</p>

			
<p>14/11/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EMODnet/status/1194885423455244289">https://twitter.com/EMODnet/status/1194885423455244289</a></p> 	<p>Retweets: 33 Likes: 26</p>
<p>22/11/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EMODnet/status/1197899883195387907">https://twitter.com/EMODnet/status/1197899883195387907</a></p> 	<p>Retweets: 1 Likes: 4</p>
<p>28/11/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EMODnet/status/1199972756911263745">https://twitter.com/EMODnet/status/1199972756911263745</a></p>	<p>Retweets: 1</p>

			Likes: 10
28/11/2019	News article	<a href="http://www.emodnet-biology.eu/news?p=show&amp;id=8115">http://www.emodnet-biology.eu/news?p=show&amp;id=8115</a>	
02/12/2019	Tweet	<p><a href="https://twitter.com/LisaDevriese/status/1201515253344931840">https://twitter.com/LisaDevriese/status/1201515253344931840</a></p> 	Retweets: 6 Likes: 17
02/12/2019	Tweet	<a href="https://twitter.com/SchepersLennert/status/1201478408129134592">https://twitter.com/SchepersLennert/status/1201478408129134592</a>	Retweets: 4 Likes:

			
<p>09/12/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/DASSH/status/1203997900830859264">https://twitter.com/DASSH/status/1203997900830859264</a></p> 	<p>Retweets: 8 Likes: 12</p>
<p>17/12/2019</p>	<p>Tweet</p>	<p><a href="https://twitter.com/EMODnet/status/1206915143373873153">https://twitter.com/EMODnet/status/1206915143373873153</a></p>	<p>Retweets: 16 Likes: 28</p>

			
17/12/2019	video	<a href="https://youtu.be/ixG2HtpGn4">https://youtu.be/ixG2HtpGn4</a>	Views: 8 Subscribers: 68
17/12/2019	News article	<a href="https://www.emodnet-biology.eu/news-0?p=show&amp;id=8144">https://www.emodnet-biology.eu/news-0?p=show&amp;id=8144</a>	
<b>SUM</b>	Tweets		<b>Total # of 17</b>
<b>SUM</b>	News article		<b>Total # of 7</b>
<b>SUM</b>	Videos		<b>Total # of 2</b>
<b>SUM</b>	Miscellaneous	e.g. Emails, announcements on the website	<b>Total # of 2</b>

\* All URLs were accessed on 03JAN2020

*Relevant scientific and/or popular publications (scientific papers, book chapters, conference papers, ...) you published or of which you know they have been published using/referring to EMODnet data or data products during this reporting period must also be reported here.*

*[Please, provide information in the table.]*

*Table: List of known publications using EMODnet data or data products.*

<b>Date</b>	<b>Name of journal, conference, ...</b>	<b>Publication title</b>	<b>Authors</b>	<b>Organisation(s)</b>

## 7 Annex: Other documentation attached

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

## 8 Monitoring indicators

Please consult and fill in the designated excel template in annex, and provide a comment in the table on each indicator when possible/applicable.

[Please provide information in the table.]

Table: Comments on the progress indicators in the excel template.

Progress indicator	Comment
1.1 Volume of available acquired data	Total numbers exhibit a positive evolution trend, due mostly to good planning and overview of data that might be available for each harvest period.
1.2 Number and coverage of built & external data products	No comment
2. Organisations supplying each type of data	A number of data archaeology datasets were harvested during the reporting period, which might have skewed the provider country to Belgium. These datasets were part of the WP2 work plan.
3. Interfaces to access or view data: list changes or new items within reporting period	No changes since last reporting period
4. Usage of data and data products per interface and per theme	Positive trend from the last reporting period, which might be partly explained to the post-summer (holiday) period but also an increase in visitors' numbers and the use of tools to search and access data
5. Distribution of users that have used the portal's data and data products per organisation type and country, and their main use cases	There was an increase in the number of individual users downloading the data, the majority of them from locations outside Belgium, and mainly from the Education sector, followed by the research sector. It was not possible to identify the sector of activity for a significant number of users as the information made available by them was not sufficient
6. External products (websites, apps, ...) built on top of web-services: update since last quarterly report	No comment
7. Published use case and number of readings	
8. Portal and Social Media visibility	Increase in the number of unique visitors accompanied with a decrease in the bounce rate even though the average time on the website has slightly decreased to just over 3 minutes
9.1 Technical monitoring	No comment

9.2 Portal user-friendliness	Slight decrease in visual harmonisation score but, when compared to the previous reporting period, this is due to the introduction of elements (from 78 to 81), rather than a decrease in the previous score.  Issues identified will be addressed in future reporting periods.
10. Visibility & Analytics for web pages	Home Page is the main viewed page on the website, followed by the MapViewer page and the remaining pages with fewer than 250 unique views.
11. Visibility & Analytics for web sections	The Portal and Toolbox sections are the most viewed with the Geoviewer and the Blog (stories page) not collecting much interest from visitors
12. Average visit duration for web pages	Average visit duration is under 2 minutes

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). Each system uses different technical approaches and therefore has its strengths and shortcomings. Therefore, results are indicative and care should be taken with 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.