



# EMODnet



European Marine  
Observation and  
Data Network

## **EMODnet Thematic Lot n° 4 – Chemistry**

**EASME/EMFF/2016/1.3.1.2**

**Start date of the project: 06/03/2017 - (24 months)**

**EMODnet Phase III – Quarterly Progress Report (6th)**

**Reporting Period: 01/07/2018 – 30/09/2018**



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## Disclaimer

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# 1 Highlights during the reporting period

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*Provide a short summary of the key achievements and/or events of interest to a wider audience within this reporting period you wish to highlight. **Please make sure that progress in each of the tasks specified in Section 1.4.1 of the [Tender Specifications](#) is covered. For those tasks not experiencing significant progress, please state so.** In addition, you can (but not required) also consider the indicators or any other of the reporting sections.*

*[Please, provide a bullet list of maximum 1 bullet point per Tender task; and potentially max 10 main points/highlights with short explanations. Max 2 pages.]*

The main highlights for the reporting period correspond to Task 2 and Task 1. Despite the summer period, the six regional leaders were busy to release the new set of DIVA maps for eutrophication, computed on the updated harmonised data collections taking into consideration the requirements from the board of MSFD experts: consider 6-year period, focus on DIN, PO<sub>4</sub>, SiO<sub>4</sub>, O<sub>2</sub> and Chlorophyll-a, seasonal and annual maps, standard vertical layers. Bottom oxygen is very relevant. In the meantime, all partners were active in data conversion and metadata generation for contaminants and marine litter. The core partners responsible for Marine Litter data management were involved in the database update, particularly for Beach Litter data.

The highlights for the period July-September 2018 are listed below:

- Task 1. All data providers were active in populating EMODnet Chemistry data infrastructure mainly with contaminants but also with litter data (numbers of restricted and unrestricted supplied data are listed in Indicator 2), to make data interoperable, findable and accessible. Intensive interaction involved JRC to review beach litter entries compiled from Member States (MS) and from various sources with more than 20 different formats, converted to EMODnet format, aggregated and harmonized.
- Task 2. Based on regional collections of nutrients, chlorophyll and oxygen data, 6-years DIVA concentration maps were computed for five over the six areas and made available through Ocean Browser viewing service. DOIs are assigned for citation. Beach litter maps, showing data coverage and protocol used, are published at European scale.
- Task 3. Machine-to-machine connection to data and data products is provided for the validated, harmonised and aggregated data collections. The first pan-European marine litter database is presented to TG ML to evaluate development, harmonisation and data access.
- Task 4. The EMODnet Chemistry web portal has been updated with regular content updates, adding extra news and events, media and papers released, project documents and use cases.
- Task 5. Dialogue with four Regional Sea Conventions has been maintained through the participation in the MSFD Technical Groups (on Data and Marine Litter). Further contacts with INFO/RAC were undertaken during the trimester to finalise the Collaboration Agreement aiming to improve marine data management in the Mediterranean region by adopting and adapting EMODnet Chemistry standards and tools and by encouraging data sharing from additional data centres.

- Task 6. EMODnet Chemistry contributed to OceanObs'19 international conference providing input to three Community White Papers on EMODnet, on FAIRness of data and on marine debris observations. As part of this interaction, we are discussing marine litter data exchange with World Animal Protection community, who is willing to share ghost gear/ALDFG data.
- Task 7. In the reporting period, we tuned with TRUST-IT and EMODnet Secretariat the Indicators to be reported and improved the process of indicators creators.
- Task 8. The help desk is kept operational.

During this contract, a number of crucial use cases were initiated.

These concern the data exchange with EEA, who is considering the use of EMODnet/ICES data for their Marine Indicators on contaminants (Biota), Eutrophication (Chl a, Nutrients) and oxygen saturation, also encouraging their EIONET National Focal Points to make contact with EMODnet Chemistry national partner(s). From EMODnet side, we increased communication to be proactive in talking with them. The process started this year but needs to be fine-tuned and consolidated.

In addition, JRC and TG ML started a tight collaboration, which brought to the compilation of the first pan-European beach litter database to be used for Marine Litter Baselines computation at EU scale. This approach and wide collaboration will be extended to sea-floor litter and micro-litter data management as well as contaminants.

Besides, EMODnet Chemistry portal has tested the application of INSPIRE Data Specifications to model nutrient data (MSFD Criterion D5C1 "Nutrients concentrations in water") in the Mediterranean Sea. The solution proposed in synergy with SeaDataCloud to deliver data in compliance with the INSPIRE directive was adopted by TG DATA and has to be implemented on a wide scale.

These use cases are all very specific requests, which take time for their proper advancement, require dedicated effort which is prolonged over time as are setting the basis for long term collaborations. They need customised products, not basic ones that might suit a general purpose. During the last Steering Committee, the suggestion was to use the existing use cases and give a follow up.

## 2 Challenges encountered during the reporting period

*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>Data release to EEA - contaminants</b>	Open dialogue with EEA (through ICES) to tune data format and metadata to be included in the data collection for Contaminants. Adjustment of ODV, Common Vocabularies and tools.
<b>Revision of beach litter data to be used for Baselines</b>	Additional efforts were dedicated to tune and review beach litter data to be included in harmonised way in the Beach Litter database and to match with Baselines timing.
<b>Release of Marine Litter maps</b>	Communication among partners to share and focus efforts.
<b>Monitoring data availability</b>	Communication with MS and Ministry through EMODnet partners.

### 3 User Feedback

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
4-5/9/2018	EEA	A series of requests on the released data collections was provided through ICES. In particular, it was requested to split P01 in subcomponents and to transpose the matrix with all data. This would allow ICES to easily merge EMODnet data.	Within the next release planned for November
27/08/2018	JRC	Feedbacks on EU 2012-2016 beach litter dataset were received through MSFD TG ML Wiki, as part of the collaboration with JRC.	On-going

There was no user feedback through the Helpdesk in this Summer period.

## 4 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>03/7/2018</b>	On-line	Meeting	O	Data products videoconference. *
<b>09/8/2018</b>	On-line	Meeting	A	Update EMODnet Secretariat on last project developments.
<b>30/8/2018</b>	On-line	Meeting	A	Meeting with JRC to coordinate feedbacks to Beach litter database.
<b>4-5/9/2018</b>	Rome, Italy	Meeting	O	EMODnet Chemistry 4 <sup>th</sup> Steering Committee meeting.
<b>7/9/2018</b>	Rome, Italy	Meeting	O	Meeting with Adriatic LNG to agree on monitoring data exchange.
<b>7/9/2018</b>	On-line	Meeting	A	1 <sup>st</sup> Communication meeting with EMODnet Secretariat.
<b>14/9/2018</b>	On-line	Meeting	O	Data products videoconference. *
<b>18-21/9/2018</b>	Antwerp, Belgium	Conference	A	INSPIRE Conference. Presentation of the transformation of EMODnet nutrients data to INSPIRE data models.
<b>SUM of O</b>			4	<b>(Total # of meetings organised)</b>
<b>SUM of A</b>			4	<b>(Total # of meetings attended)</b>

\* Data products videoconferences are periodic working events to align the regional data aggregation and validation activity. Consultation on results and open issues faced by the regional leaders preparing the data products.

## 5 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.)
10/7/2018	Oral communication	Bilateral meeting with Saipem S.p.A. Promotion of EMODnet Chemistry infrastructure for data management.	Started dialogue with Saipem S.p.A. as part of EMODnet for Business campaign
7/9/2018	Oral communication	Bilateral meeting with Adriatic LNG. Promotion of EMODnet Chemistry infrastructure for data management.	Adriatic LNG agreed to share metadata with EMODnet as well as data under request. Both data and metadata will be included in the Italian NODC.
10/9/2018	Oral presentation	From data to knowledge for sustainable blue growth	Lessons for Master ASSESS - Advanced Skills in Safety, Environment and Security at Sea. Organized by the MARITIME TECHNOLOGY CLUSTER FVG, OGS, University of Trieste, CNR - Marine Technology Research Institute and co-funded by the European Maritime and Fisheries Fund
<b>SUM of oral presentations</b>	3		<b>(Total # of oral presentations)</b>

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.

Date	Name of journal, conference, ...	Publication title	Authors	Organisation(s)

Nothing to report.



## 6 Annex: Other documentation attached

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

## 7 Comments about the monitoring indicators

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*The yellow worksheets are provided by external organisation (TRUST-IT) in accordance with the Secretariat.*

*The present report refers to summer months, and this has a clear effect on the reported metrics, e.g. a big drop in data download metrics.*

*Volume of available acquired data (Indicator 1.1) still reports an increase (minor).*

*The best results are shown in Indicator 5.1, which reflects to Indicator 5.2, despite the summer vacations of the data products authors (Regional Leaders).*

*The individual web pages metrics (Table 6.1.1. of Indicator 6) relates, for this portal design, only to the navigation page opened upon clicking the menu item. It seems irrelevant, in the case of Chemistry, and destructs the reader, especially since it's the first table. At least the list of web pages should be modified to adjust it to this Portal, following the example of the Data Policy page, which can stay in this list. The new table (6.2) which aggregates views of all pages belonging to a specific web section has much more sense. However, as a general comment for indicator 6, only the unique page views should be listed. Term definition from Matomo's glossary (<https://glossary.matomo.org/>): "The number of visits that included this page. If a page was viewed multiple times during one visit, it is only counted once."*

*Keywords in worksheet 6b are not relevant for EMODnet Chemistry, which is focused on eutrophication data and products, marine litter etc. We have agreed with TRUST-IT to revise this list.*

*Please see the attached workbook.*