



EMODnet



European Marine
Observation and
Data Network

EMODnet Thematic Lot n° 4 - Chemistry

EASME/EMFF/2018/1.3.1.8

Start date of the project: 03/10/2019 - (24 months)

EMODnet Phase IV – Quarterly Progress Report (7th)

Reporting Period: 01/04/2021 – 30/06/2021



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1. Highlights in this quarter

This report covers the second quarter of 2021. In the following, the highlights for the period April - June 2021 are outlined for each of the tasks specified in Section 1.4.1 of the Tender Specifications:

Task 1: Develop a common method of access to data held in repositories:

- All EMODnet data centres continued populating EMODnet Chemistry data services with new raw chemistry data, gathered from many sources, and completing or amending the datasets already available in the portal. During the period, the network of NODCs and their data handling capacity was introduced to relevant EU stakeholders (JRC, TG-ML, RSCs, etc.) as the mechanism for micro-litter data collection, following the request by EU MSFD Technical Group on Marine litter. EMODnet is, in fact, identified as the data platform to collect MSFD monitoring data by all Member States.

Measurement data are available through the CDI Data Discovery and Access service that allows users to browse data sets in more detail, to narrow down their query and to download a selection of data sets.

The webODV Data Explorer and Extractor facilitates to explore, subset, visualize, and extract data sets in multiple formats from eutrophication and contaminants aggregated, standardized, validated data collections. Users get access to thirty-one large, regional datasets spanning from contaminants in sediments, water, biota, to eutrophication time series and profiles. The Video tutorial and the User Manual dedicated to this new webODV online tool provide user-friendly instructions.

Task 2: Construct products from one or more data sources that provide users with information about the distribution of parameters in time and space:

- Updated aggregated data collections are released for all groups of parameters covering eutrophication, ocean acidification, contaminants, and marine litter. Based on those new collections, derived map products are computed and published for 5 eutrophication variables: Dissolved inorganic nitrogen (DIN), Phosphate, Silicate, Chlorophyll - a, and Dissolved oxygen concentration. Maps concern pan-European climatological maps created over all data with monthly basis, 6-year analyses interpolated on a regular grid at basin scale, while high resolution analyses are performed on selected coastal areas. Spatial distributions of sampling stations for ten selected contaminant substances show data below and above Limit of Quantification (LOQ), data with LOQ above or below 30 percent of EQSD threshold values, and sampled matrix. Updated maps for beach litter and seafloor litter at measurement points were also made available. All data products are tuned based on feedback received from the meetings with the board of experts of MSFD.

Task 3: Develop procedures for machine-to-machine connections to data and data products:

- The public discovery and access of all EMODnet Chemistry data sets is already arranged and operational through the CDI Data Discovery & Access service, that has a versatile user Interface, is INSPIRE compliant, and progress is being made as part of ENVRI-FAIR and Blue-Cloud projects with the development of an API for the CDI service.

EMODnet Chemistry products catalogue provides INSPIRE metadata fields, including a data URL and a metadata URL and this metadata description links users to OGC services available on the product, as WMS and WFS services. There is an OGC CSW service for the products catalogue itself.

Task 4: Develop a web portal allowing users to find, visualise and download data:

- The EMODnet Chemistry portal has earlier been reviewed and restyled following the observations received from the EU DG MARE and the EMODnet Secretariat. During the reporting period, the section

ABOUT has been extended with new Guidelines, Reports and Project Meetings. The section DATA ACCESS has been updated with the harmonized and validated data collections, while webODV has been made fully operational, linked and described in all its functionalities. The section DATA PRODUCTS and the thematic sections “Eutrophication”, “Ocean acidification”, “Contaminants” and “Marine litter has been rewritten with clear descriptions of the new data products. News and events (twenty-five additions for the period), Posters and Presentations (three additions) and Use cases (two additions) are continuously updated as part of the PROMOTION section. The new **EMODnet Chemistry: the treasure box for marine strategies** video was presented at the EMODnet Open Conference 2021. EMODnet Chemistry has also contributed to “EMODnet for policy” the fifth video of a series of eight illustrating the fundamental role of EMODnet in society.

Task 5: Ensure the involvement of regional sea conventions:

- Dialogue with four Regional Sea Conventions has been maintained through the participation in the MSFD Technical Groups (on Contaminants and Marine Litter), where a regular dialogue is established, and through the MSFD Board of experts, consulted prior to the release of new products. During the reporting period we organised **3 meetings with the board of experts of MSFD**: the first one on 30 March 2021 on Marine litter maps; the second one on 27 May 2021 on Eutrophication maps; the third one on 01 June 2021 on Contaminant maps. Thanks to the high quality of data collections and the increased knowledge of EMODnet from the experts, the maps were well received and discussed in a constructive way. The meetings demonstrate a significant increase of cooperation and trust for mutual benefits. More information on the three meetings is available on the EMODnet Chemistry Portal.

Task 6: Facilitate interoperability with data distributed by non-EU organisations:

- During this reporting period, EMODnet Chemistry participated to the International Conference on Marine Data and Information Systems (IMDIS), organised by SeaDataNet, that took place online from 12 to 14 April 2021 and to the writing of the wide scientific manuscript *A global ocean oxygen database and atlas for assessing and predicting deoxygenation and ocean health in the open and coastal ocean*. As EMODnet Chemistry builds upon the SeaDataNet pan-European infrastructure, it has strategic links and long-standing communication with non-EU countries and in particular with Australia, Canada, and USA.

Task 7: Install a process to monitor performance and deal with user feedback:

- Procedures are up and running. COVID-19 emergency did not affect the functionality. The new web service developed by OGS has collected download metrics for the map viewer, DOI landing pages, the data products catalogue and webODV Data Explorer and Extractor. Unfortunately, user activities are not recorded for EMODnet Chemistry products described and made available through the Central Portal. Further analysis is needed to ensure complete monitoring forwards.

Task 8: Operate a help desk offering support to users:

- The helpdesk is kept operational in the reporting period. COVID-19 emergency did not affect the functionality. All support requests received via the Help desk are listed in Section 4.

Project Management:

The quarterly report for January – March 2021 was produced and after submission accepted by CINEA. Both the project meeting, with all members of the EMODnet Chemistry consortium, and the Steering Committee meeting were organised during the EMODnet Jamboree week on 17th June 2021. Recently, the good news was received, that the tender of the consortium for the next phase of EMODnet Chemistry has been accepted. This will allow to progress with the EMODnet Chemistry activities in a sustained way, which is important for further building the working relationships with the MSFD communities.

Status of the Milestones and Deliverables listed in the workplan				
Milestone/Deliverable	WP	Date due	Status (Delivered/ Delayed)	If Delayed: reason for delay and expected delivery date
D1.1: Quarterly concise progress reports	WP1	M3, M6, M9, M12, M15, M18, M21	Delivered	-
D1.2: Annual Interim report	WP1	M12	Delivered	-
D1.5: Consortium Agreement	WP1	M2	Delivered	-
D1.6: Short minutes/action list of Coordination Group Meetings	WP1	M1, M6, M12, M18, M23	Delivered	-
D2.1: Revised guidelines for contaminants data management	WP2	M2	Delivered	-
D2.2: Remote technical workshop to train DC in contaminants data management	WP2	M2	Delivered	-
D2.3: Guidelines for QC for contaminants	WP2	M6	Delivered	-
D2.4: Close data harvesting for contaminants	WP2	M6	Done	-
D2.5: Close data harvesting for eutrophication	WP2	M6	Done	-
D2.6: Guidelines for new marine litter formats (floating macro and microplastics)	WP2	M6	Delivered	Guidelines for microplastics in sediments is published.
D3.1: Release of validated collections for contaminants to EEA	WP3	M12	Delivered	-
D3.2: Presentation of draft new maps for contaminants as viewing service to MSFD board	WP3	M15	Delivered	The new maps for contaminants were presented to the MSFD board of experts.
D3.3: Public release of new maps for contaminants as viewing service	WP3	M18	Delayed	The public release of new contaminants maps scheduled after marine litter maps, is pending due to late delivery of Marine litter data by MS

D3.4: Release of validated collections for eutrophication to EEA	WP3	M12	Delivered	-
D3.5: Higher resolution DIVA maps near major river mouths	WP3	M18	Delivered	
D3.6: Presentation of updated DIVA maps for eutrophication to MSFD board	WP3	M18	Delivered	
D3.7: Public release of updated DIVA maps for eutrophication	WP3	M21	Delivered	
D3.8: First version concentration maps of marine and beach litter	WP3	M12	Delivered	The new concentration maps are published in their final version.
D3.9: Release of aggregated and validated marine litter data collections	WP3	M18	Delivered	
D3.10 Presentation of draft marine litter maps, new and updated to MSFD board	WP3	M21	Delivered	
D3.11: Public release of marine litter maps, new and updated	WP3	M23	Delivered	
D4.1: EMODnet Chemistry portal upgraded with extra functionalities	WP4	M6	Delivered	
D4.2: Upgraded databases for marine litter	WP4	M10	Done	
D4.3: Improved viewing services in OceanBrowser	WP4	M15	Done	
D4.4: Set-up viewing services for contaminants	WP4	M12	Done	
D4.5: Adoption of SDC Collaborative Virtual Environment (CVE) prototype	WP4	M12	Delivered	wedODV represents a powerful tool for the users to explore and analyse data (in addition to extract subsets)
D4.6: On-line ODV application as part of operational CVE	WP4	M15	Done	

D4.7: Monitoring data about visits and usage	WP4	Continuously	Done	
D5.1: Operate Help-desk	WP5	Continuously	Done	
D5.2: Meetings of Board of MSFD experts	WP5	M15 , M18, M21	Done	
D5.3: International cooperation and interoperability	WP5	continuously	Done	
D6.1: Promotional plan, with listing of events	WP6	M3	Done	
D6.2: Promotional material handout	WP6	M6, M12	Delivered	As meeting in person is not feasible, a promotional video was produced and promoted
D6.3: Implementation of promotional plan	WP6	M6-M24	Done	
D6.4: Animation with existing products explaining the role of EMD Chem in the MSFD plan	WP6	M12, M24	Delivered	A tutorial animation for webODV and a promotional video for EMODnet Chemistry treasure box were produced
D6.5: Presentations at relevant conferences	WP6	regularly	Done	

Status of the Milestones and Deliverables listed in the workplan

Milestone/Deliverable	WP	Date due	Status (Delivered/ Delayed)	If Delayed: reason for delay and expected delivery date
MS1: Chemistry (contaminants and eutrophication) CDI metadata and data sets included in CDI Service	WP2	M6	Done	
MS2: Marine litter and microlitter data sets from data providers, OSPAR, EEA, DeFishGear, ICES, MEDITS and Member States included in the EMODnet databases	WP2	M12	Done	
MS3: First version concentration maps of marine and beach litter and microplastics	WP3	M12	Done	
MS4: Updated data collections for contaminants and eutrophication to EEA	WP3	M12	Delivered	
MS5: Updated dedicated maps for contaminants in viewing service	WP3	M15	Delayed	The discussion and presentation of new contaminants results

				expected after delivery of marine litter maps, was delayed for late delivery of Marine litter data by MS
MS6: Updated DIVA maps for eutrophication and high resolution pilots near major river mouths	WP3	M18	Done	
MS7: Updated marine litter maps for marine litter and microplastics	Wp3	M21	Done	
MS8: On-line ODV application as part of operational initial CVE	WP4	M15	Done	
MS9: Implementation of the promotional plan	WP6	M6-M24	On-going	

2. Identified issues: status and actions taken

[Provide an overview of the issues identified by CINEA (Table A), if any, since the start of the project phase (provide date), the status of those issues and actions taken to address them and/or roadmap with remaining actions planned to resolve the issues. in Table B, provide information about issues and challenges identified by yourself, if any.]

A. Priority issue(s) identified and communicated by CINEA/ DG MARE/ SECRETARIAT				
Priority issue	Status (Pending/Resolved)	Action(s) taken / remaining actions planned	Date due	Date resolved
Constant monitoring of Matomo's traffic. Not urgent but a better coordination is needed	Pending	To be discussed and agreed at the TWG	Sept 2021	

B. Issues / challenges identified by the thematic assembly group itself				
Priority issue / challenge	Status (Pending/Resolved)	Action(s) taken / remaining actions planned	Date due	Date resolved
Grafana graphics are not significant nor updated promptly (JIRA EM-119)	Pending. We asked for a more consistent definition of web session, now waiting for its implementation by TRUST-IT	Trust-IT script should sum multiple Matomo entries as single number saved in the database used by Grafana	12/2020	04/2021
Missing statistic and download form from Central portal (JIRA EM-209)	We are required to use Download Forms to fill our indicators. However, we miss all downloads from the Central Portal. There is no download form (for Indicator 5), and I'm not aware of any download metrics for other indicators.	We got a response that the nodes are responsible for collecting such metrics, so we have decided to remove the 'Direct Download' option from our catalogue. Once it's	09/2021	

	Only in case the end-user is choosing the DOI landing page as a download link, we as a node will get all metrics. The 'Direct Download' option is not a problem in Chemistry's own catalogue since Sextant presents a download form.	done, the automatic harvesting will make sure that also EMODnet Central users will not be able to download directly. This solution also affects all third-party portals harvesting from EMODnet Central		

3. User feedback (Contact Us form, online chat & other communication means)

[Provide a list of all user feedback received on your portal in chronological order since the start of the project (provide date). Indicate the type of the feedback received, a clear description of the query, and the actions undertaken to resolve the issue (e.g. update of metadata, fixing a particular issue with the map viewer). Indicate the status of the query (i.e. has the query been resolved or not yet), and if not provide an explanation why. List any feedback you received on the portal that can be used to build EMODnet use cases.]

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
6/4	Tejo Energia, Pego Electricity Production Center	Request physical-chemical data in the Atlantic Ocean.	Web form	8 days	resolved	Information provided	
3/5	UNEP/MAP	Use of EMODnet Chemistry data	e-mail	10 hours	resolved	Data provided	

4. Meetings/events held/attended & planned

[Organisational meetings/events held/participated (incl. presentations, lectures, trainings, demonstrations, workshops, etc.) by the contractant since the last quarterly report and planned in the future. Please add a short description on the meeting as well as the nature and volume of the audience.

When listing a meeting, please indicate whether it was an internal (i.e. within your partnership/lot) or external meeting (i.e. outside your partnership/lot).]

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.)
30/03/2021	Video conference	External	YES, 1. EMODnet Chemistry now and in the next phase (OGS) 2. EMODnet Chemistry marine litter: planning maps for marine litter (IFREMER)	O	Meeting with MSFD experts on new marine litter data products Participants: ICES, OGS, IFREMER, many other EMODnet Chemistry partners, international experts on marine litter, members of the board of experts of MSFD.
07-22/04/2021	Video conference	Internal	NO	O	Meeting to discuss the script and the storyboard of the new promotional and tutorial EMODnet Chemistry video and EMODnet4policy video Participants: RBINS, OGS, MARIS, Uliege, AWI
02/04/2021	Video conference	Internal	NO	O	Meeting to inform EMODnet Human Activities on how to provide EMODnet Chemistry with information for the CMEMS-EMODnet data catalogue Participants: OGS and COGEA

13/04/2021	Video conference	Internal	NO, minutes available	O	DIVA maps for eutrophication Participants: OGS, MARIS, ULiege, AWI, EMODnet Chemistry Regional Coordinators (AU-DCE, HCMR, IFREMER, IMR, NIMRD, SMHI)
from 12 to 14/04/2021	Video conference	International Conference	YES, EMODnet Chemistry: progresses and challenges along the path to the European marine litter data management	A	International Conference on Marine Data and Information Systems (IMDIS)
15/04/2021	Video conference	External	NO, minutes available	O	EMODnet and CMEMS shared data products meeting Participants: OGS, Mercator Ocean International
from 19 to 21/04/2021	Video conference	Internal	YES, Key achievements and outputs, collaborations and upcoming plans	A	EMODnet Steering Committee and TWG meetings Participants: restricted to members of the EMODnet SC and TWG.
30/04/2021	Video conference	General Assembly	YES, New and consolidated large scale cooperation actions of 2020 and beyond	A	European Geosciences Union: General Assembly Participants: scientists, especially early career researchers, and experts in all fields of geoscience.
12/05/2021	Video conference	External	NO	O	Presentation and discussion of UNEP/MAP needs Participants: OGS, UNEP/MAP, 2 Experts from MED-POL
06-20-25/05/2021	Video conference	Internal	NO, minutes available	O	DIVA maps for eutrophication Participants: OGS, MARIS, ULiege, AWI, EMODnet Chemistry Regional Coordinators (AU-DCE, HCMR, IFREMER, IMR, NIMRD, SMHI)

06-25/05/2021	Video conference	External	NO, minutes available	O	EMODnet and CMEMS shared data products meeting Participants: OGS, Mercator Ocean International
20/05/2021	Video conference	Workshop	NO	A	European Technical Commission CEN/TC 444 workshop on microplastics
26/05/2021	Video conference	Internal	No	A	Meeting on contaminant maps Participants: OGS, IFREMER, ISPRA, ULiege.
27/05/2021	Video conference	External	YES, 1. EMODnet Chemistry The pan-European network for data and products on marine water quality (OGS) 2. EMODnet Chemistry: Eutrophication map products review (ULiege) 3. EMODnet Chemistry 4 Eutrophication map products review – Regional DIVA/DIVAnd 6-year seasonal analysis (SMHI) 4. EMODnet Chemistry 4 Eutrophication map products review - Coastal areas DIVAnd maps Po River, Gulf of Riga, Danube Delta (NIMRD)	O	Meeting with MSFD experts on new DIVA maps concerning eutrophication. Participants: ICES, OGS, Uliege, EMODnet Chemistry Regional Coordinators (AU-DCE, HCMR, IFREMER, IMR, NIMRD, SMHI), many other EMODnet Chemistry partners, international experts of eutrophication, members of the board of experts of MSFD.
27/05/2021	Video conference	Training workshop	YES, 1. Microlitter data collection with EMODnet 2. EMODnet Chemistry: microlitter data management, formats,	O	Webinar on microlitter data management Participants: Members States and the MSFD TG ML

			and relevant information		
31/05/2021		Training workshop	YES, 1. Microlitter data collection with EMODnet 2. EMODnet Chemistry: microlitter data management, formats, and relevant information	O	Webinar on microlitter data management Participants: EMODnet Chemistry network
01/06/2021	Video conference	External	YES, 1. Board of MSFD Experts: Contaminants (ICES) 2. EMODnet Chemistry: the pan-European network for data and products on marine water quality 3. Dataset collection for contaminants, and the map products	O	Meeting with the MSFD experts on new contaminant maps Participants: ICES, OGS, ISPRA, many other EMODnet Chemistry partners, international experts of contaminants, members of the board of experts of MSFD.
11/06/2021	Trieste (Italy)	Festival	YES, Let's get marine data free	O	Festival of the Sea: let's get marine data free Participants: general public
14/06/2021	Video conference	External	NO	O	Discussion of UNEP/MAP needs Participants: OGS, UNEP/MAP, 2 Experts from MED-POL
14/06/2021	Video conference	kick-off external meeting	NO	A	EOSC Future project: kick-off meeting Participants: the Partners of EOSC Future project
from 14 to 16/06/2021	Video conference	Open conference	YES,	A	EMODnet Open Conference: Connecting Open Data, Delivering Marine Knowledge: A Vision for 2030

			<p>PPT - EMODnet Achievements and forward look (OGS)</p> <p>PPT - EMODnet Chemistry and Copernicus work together (OGS)</p> <p>PPT - EMODnet Chemistry - OBPS use case (OGS)</p> <p>Poster and pitch - EMODnet Chemistry: a value for marine strategies (RBINS)</p> <p>Poster and pitch - Combining multidisciplinary interoperable EMODnet data products to support conservation and management of Mediterranean Sensitive Habitats: example of the North Adriatic maërl beds. (OGS)</p> <p>Poster and pitch - Marine Litter Database and associated products (IFREMER)</p> <p>Poster and pitch - EMODnet Ingestion Success stories fFour cases related to EMODnet CHEMISTRY)</p>		<p>Participants: EMODnet partners, international data providers and users</p>
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			Final notes - EMODnet for Global (OGS) Oral contribution - EMODnet for EU Green Deal (OGS)		
16/06/2021	Trieste (Italy)	Festival "MareDireFare" for the UN Decade of the Ocean	YES, Marine litter data: Collection and Management (OGS)	O	"Alternative plastic" event: examples of new and consolidated virtuous initiatives. Participants: general public
17/06/2021	Video conference	Internal	YES, 1. WP1 - Project management, progress on deliverables, including interaction with JRC, CMEMS and EEA. Preparation to phase 5 (OGS) 2. WP2 - Status of metadata and data population, including increase over time, and harvesting for products (MARIS) 3. WP2 - Microlitter data collection and link to Member States (OGS) 4. WP3 - Generation of products: aggregated datasets. Data quality and quantity gaps (HCMR) 5. WP3 - New DIVA maps on Map viewer (SMHI)	O	EMODnet Chemistry - Project meeting Participants: EMODnet Chemistry consortium Steering Committee meeting Participants: EMODnet Chemistry partners and NOC-BODC subcontractor

			<p>6. WP3 – Generation of maps on contaminants (ISPRA)</p> <p>7. WP3 – New maps for marine litter on Map viewer (IFREMER)</p> <p>8. WP4 – Technical developments, services and tools: information about centralization process (MARIS)</p> <p>9. WP4 – Improving of the SDC VRE and webODV (AWI)</p> <p>10. WP5 – Report of the meetings with the MSFD board of experts and of EMODnet/ICES data integration for EEA indicators (ICES)</p> <p>11. WP6 – Outreach & Promotion activities (RBINS)</p>		
18/06/2021	Video conference	Internal	NO, oral contribution (OGS)	A	EMODnet Jamboree: Citizen Science Workshop Participants: EMODnet partners
SUM				O	Total # of meetings organised = 16
SUM				A	Total # of meetings attended = 8

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
July-Sept 2021		Meetings resulting from the EMODnet Chemistry 4 project meeting	A	
09/2021	Ostende (Belgium)	EMODnet SC	A	
20-24/09/2021	TBD	An Ocean of Values: The 5th Community Workshop of the IOC-UNESCO Ocean Best Practices System	A	
09/2021	Trieste (Italy)	Trieste Next Festival of Science	O	
6-7/10/2021	On line	MED POL meeting	A	Present EMODnet Chemistry results and align with MED POL needs
October 2021	Italy	MSFD micro-litter workshop organised by JRC	A	Cooperate
15-26/11/2021		Ocean Data Conference	A	Show results

5. Communication assets

[List all the relevant communication and dissemination products and assets you have developed since the start of the project phase (provide date) (e.g. brochures, videos, press releases, newsletters, blogs) and are planning to do. At the bottom of the table, provide a total number for every type of communication product you have developed (e.g. total # of press releases, etc.) or provide a summary from the actions on Twitter from (e.g. Twitter Analytics: number of Tweets and followers of Twitter account).]

A. Communication products				
Date	Communication material	Short description (of the material, title, ...) of the asset	Main results	Name of event (if applicable)
April 2021	EMODnet Central Portal use case section	EMODnet Chemistry use case: A joint list of litter categories	Provide EMODnet partnership and users with detailed information on why and how EMODnet Chemistry contributed to the joint list of litter categories	
April 2021	EMODnet Central Portal news digest section	EMODnet Chemistry use case: A joint list of litter categories	Briefly inform EMODnet partnership and users on main EMODnet Chemistry monthly achievements	
06/04 /2021	EMODnet Chemistry portal news section	EMODnet Open Conference and Jamboree 2021: a vision for 2030	Briefly inform EMODnet Chemistry partnership and users on the main objectives of the EMODnet Open Conference and Jamboree 2021	
07/04 /2021	EMODnet Chemistry portal project meeting section	4th Phase meeting on DIVA maps for eutrophication: 30 March 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
08/04 /2021	EMODnet Chemistry portal guidelines section	Quality Control steps and dataset formats for EMODnet Chemistry contaminant aggregated datasets	provide detailed technical information on dataset formats and Quality Control checks made to get the regional data collections for contaminants	
April 2021	Poster & abstract	General poster (that could also serve as a printed leaflet as a leaflet when physical conferences will be held again). Title: <i>EMODnet Chemistry, a treasure for Marine Strategies</i>	Advertisement on the Chemistry website, shown at conference	Poster session - Shown in the Virtual Exhibition room of EMODnet Open

				Conference in June
April 2021	Creation of two mailing lists	New mailing lists were created with the help of the Chemistry Partners to grow the dissemination of the project and reach out to potential users and data submitters.	List 1 - Extra Outreach & Promotion contacts (people likely to publish our info on their institute websites, twitter, LinkedIn, newsletter, magazine) List 2 - Extra Experts (likely to use the EMODnet data and products but not involved in the project)	Ongoing increase of contacts thanks to EMODnet Chemistry partners
12/04 /2021	EMODnet Chemistry portal news section	New marine litter data products: next meeting today	inform the partnership and users on coming meetings	
12/04 /2021	EMODnet Chemistry portal news section	EMODnet-CMEMS shared catalogue of products: next meeting on 15 April	inform the partnership and users on the coming meetings	
15/04 /2021	EMODnet Chemistry portal event section	International Conference on Marine Data and Information Systems: 12-14 April 2021	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
16/04 /2021	EMODnet Chemistry portal use case section	EMODnet Chemistry contributed to the Joint List of Litter Categories for Marine Macrolitter Monitoring	Provide EMODnet Chemistry partnership and users with detailed information on why and how EMODnet Chemistry contributed to the Joint List of Litter Categories for Marine Macrolitter Monitoring	
20/04 /2021	Tweet on the Joint List of Litter Categories	EMODnet Chemistry contributed to the Joint List of Litter Categories for Marine Macrolitter Monitoring	Views 323 Total engagements 16 Like 4 Retweets 2	Published on the account of MarianneBiodiv
21/04 /2021	EMODnet Chemistry portal event section	EMODnet Steering Committee and TWG meetings: 19-21 April 2021	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
30/04 /2021	EMODnet Chemistry portal guidelines section	Guidelines and formats for gathering and management of micro-litter data sets on a European scale (floating and sediment micro-litter). Version 0 https://doi.org/10.6092/	provide detailed technical guidelines and formats for gathering and managing EU micro-litter data	

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30/04 /2021	EMODnet Chemistry portal event section	European Geosciences Union: General Assembly, 19-30 April 2021	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
May 2021	EMODnet Central Portal news digest	Online the EMODnet Chemistry data collections 2021 EMODnet Chemistry: released a new beach litter data product	Briefly inform EMODnet partnership and users on main EMODnet Chemistry monthly achievements	
05/05 /2021	EMODnet Chemistry portal report to EU section	4th Phase: 2021Q1 Trimonthly Report, Jan-March	inform the partnership and users on the past 3 months achievements reported to the EC	
06/05 /2021	EMODnet Chemistry portal project meeting section	4th Phase meeting on DIVA maps for eutrophication: 13 April 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
07/05 /2021	EMODnet Chemistry portal guidelines section	Sediment microlitter data format template https://doi.org/10.6092/a306cc44-b463-48e7-9540-cb9992ba30d9	inform on and provide the template to be used to deliver data of microlitter in sediment	
13/05 /2021	EMODnet Chemistry portal project meeting section	4th Phase meeting on DIVA maps for eutrophication: 6 May 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
13/05 /2021	EMODnet Chemistry portal project meeting section	4th Phase EMODnet and CMEMS shared data products meetings: Dec2020-May 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
19/05 /2021	EMODnet Chemistry portal news section	View and download the new data collections	Briefly inform EMODnet partnership and users on the new aggregated data sets available	
19/05 /2021	EMODnet Chemistry portal news section	Beach litter: the new maps are now available	Briefly inform the partnership and users on the the new visualizations available for coastal litter	
21/05 /2021	Promotional Video	Participation in the EMODnet4Policy video	inform on EMODnet Chemistry contribution to the MSFD implementation	Published on EMODnet YouTube channel

26/05 /2021	EMODnet Chemistry portal project meeting section	4th Phase meeting on DIVA maps for eutrophication: 18Feb-25 May 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
31/05 /2021	EMODnet Chemistry portal event section	Watch the webinar on microlitter data management	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
31/05 /2021	EMODnet Chemistry portal project meeting section	4th Phase meeting with MSFD experts on new DIVA maps: 27 May 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
June/2 021	EMODnet Central Portal use case section	Copernicus Marine and EMODnet joint data catalogue	Provide EMODnet partnership and users with detailed information on why and how Copernicus Marine and EMODnet collaborated to create a joint data catalogue	
June 2021	EMODnet Central Portal news digest section	Copernicus Marine and EMODnet joint data catalogue	Briefly inform EMODnet partnership and users on the latest achievement brought about the collaboration between Copernicus Marine and EMODnet	
01/06 /2021	EMODnet Chemistry portal news section	Eutrophication: view and download the new maps	Briefly inform the partnership and users on the new visualizations available for eutrophication	
03/06 /2021	EMODnet Chemistry portal project meeting section	4th Phase meeting with the MSFD experts on new contaminant maps: 1 June 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
7/6/2 021	Tweet Importance of EMODnet Chemistry for Marine Strategies	Promotion of the new video EMODnet for Policy	Views 345 Total engagements 14 Like 3 Retweets 1 With one comment in English.	Published on the account of MarianneBio div
7/6/2 021	LinkedIn post on the Importance of EMODnet Chemistry for Marine Strategies	Promotion of the new video EMODnet for Policy	Views 326 Interactions 6	
08/06 /2021	EMODnet Chemistry portal news section	EMODnet Chemistry Project and SC meetings: 17 June 2021	inform the partnership and users on coming meetings	

08/06 /2021	EMODnet Chemistry portal news section	Watch the video EMODnet for Policy!	Promote the new EMODnet video, which EMODnet Chemistry participated in as it is an essential support for the MSFD implementation	
09/06 /2021	EMODnet Chemistry portal news section	A new catalogue to support the Marine Strategy Framework Directive: a joint Copernicus Marine and EMODnet initiative	Promote the new joint Copernicus Marine and EMODnet initiative	
9/06/ 2021	Tweets on Joint Portfolio with CMEMS	A new catalogue to support the Marine Strategy Framework Directive: a joint Copernicus Marine and EMODnet initiative	Views 377 Total engagements 11 Like 2 Retweets 2	Published on the account of MarianneBio div
9/06/ 2021	LinkedIn post on Joint Portfolio with CMEMS	A new catalogue to support the Marine Strategy Framework Directive: a joint Copernicus Marine and EMODnet initiative	Views 204	Published on the account of Marianne Schlesser
10/06 /2021	Facebook (OGS account) message	A new catalogue to support the Marine Strategy Framework Directive: a joint Copernicus Marine and EMODnet initiative	Promote the new joint Copernicus Marine and EMODnet initiative	Facebook on the OGS account
11/06 /2021	EMODnet Chemistry portal guidelines section	EMODnet Visualization products for Beach Litter data https://www.emodnet-chemistry.eu/about/documents/EMODnet_Visualization_products_for_Beach_Litter_data	provide detailed technical information on how visualizations for Beach Litter data were generated	
14/06 /2021	EMODnet Chemistry portal event section	EOSC Future project: kick-off meeting	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
14/06 /2021	EMODnet Chemistry portal event section	Festival of the Sea: let's get marine data free	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
14/06 /2021	NODC/OGS portal Highlights section	Festival of the Sea: let's get marine data free	Promote EMODnet Chemistry via other websites	

14/06 /2021	Release on of the new promotion video " <i>EMODnet Chemistry, a value for marine strategies</i> " with subtitles in English and French (https://www.youtube.com/watch?v=4NobECD4k18)	Presentation of EMODnet-Chemistry portfolio (data, products and services), how you can make the most of it, and appreciate the strength of our network.	Inform on EMODnet Chemistry activities, structure and goals. Above 300 views in three days.	EMODnet Open Conference, published on EMODnet youtube channel
14/06 /2021	EMODnet Central Portal video gallery	New EMODnet Chemistry promotional and tutorial video included in the EMODnet Central Portal video Gallery.	Promote EMODnet Chemistry via other websites	
14/06 /2021	EMODnet Chemistry portal news section	News on EMODnet Chemistry promotional and tutorial video	Advertise the new EMODnet Chemistry video	
14/06 /2021	EMODnet Chemistry Portal video gallery (/videos/Emodnet_Chemistry_Youtube.mp4)	New EMODnet Chemistry promotional and tutorial video included in the EMODnet Chemistry video Gallery.	Increase the visibility of the new EMODnet Chemistry video	
14/06 /2021	EMODnet Chemistry Portal Poster and presentation section	Publication of the poster dedicated to the new EMODnet Chemistry promotional and tutorial video	Increase the visibility of the communication material dedicated to the new EMODnet Chemistry video	
14/06 /2021	Email to all EMODnet Chemistry Consortium	News on the just released EMODnet Chemistry promotional and tutorial video	Inform all EMODnet Chemistry partners and members of the Advisory forum on the new video release	
14/06 /2021	SeaDataNet website https://www.seadatanet.org/	New EMODnet Chemistry promotional and tutorial video included in different sections of the SeaDataNet website	Promote the new video via other websites	
15/06 /2021	EMODnet Chemistry portal event section	EMODnet Open Conference and Jamboree: Chemistry contribution, 14-18 June 2021	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
15/06 /2021	EMODnet Chemistry portal news section	What do stakeholders say about EMODnet Chemistry? Some answers from the EMODnet Open Conference	inform the partnership and users on some stakeholders' opinion on EMODnet Chemistry, that were collected during the EMODnet Open conference 2021	

16/06/2021	Poster + pitch presentation	Poster entitled "Combining multidisciplinary interoperable data products to support conservation and management of Mediterranean Sensitive Habitats: example of the North Adriatic maërl beds"	Communicate the importance of data interoperability among EMODnet lots	EMODnet Open Conference
16/06/2021	EMODnet Chemistry Portal Poster and presentation section	Poster entitled "Combining multidisciplinary interoperable data products to support conservation and management of Mediterranean Sensitive Habitats: example of the North Adriatic maërl beds"	Increase the visibility of the Poster that won 1 st prize of the Poster session Visibility during virtual exhibition of posters and in plenary during the EMODnet Open Conference	
16/06/2021	EMODnet Chemistry portal news section	Look at the best poster of the EMODnet Open Conference 2021 "Combining multidisciplinary interoperable data products to support conservation and management of Mediterranean Sensitive Habitats: example of the North Adriatic maërl beds"	inform the partnership and users that the the best poster of the EMODnet Open Conference 2021 was designed by OGS, scientific coordinator of EMODnet Chemistry	
16/06/2021	Tweet on key messages from the discussion on EMODnet for Global with A. Giorgetti	EMODnet Open Conference 2021: Discussion on EMODnet for Global	Retweets 2 Like 10	
17/06/2021	EMODnet Chemistry portal event section	"Alternative plastic" event: what examples of new and consolidated virtuous initiatives?	inform the partnership and users on the main events attended and/or organized by EMODnet Chemistry	
17/06/2021	NODC/OGS portal Highlights section	"Alternative plastic" event: what examples of new and consolidated virtuous initiatives?	Promote EMODnet Chemistry via other websites	
17/6/2021	New promotion video "EMODnet Chemistry, a value for marine strategies"	Full visioning of the new EMODnet Chemistry promotional and	Present EMODnet-Chemistry portfolio and appreciate the strength of our network.	EMODnet Chemistry

		tutorial video with the 65 participants of the EMODnet Chemistry Group Meeting.		Project Meeting
18/06/2021	EMODnet Chemistry portal project meeting section	4th Phase Project and SC meetings: 17 June 2021	inform the partnership and users on the main topic discussed during a specific meeting and the resulting agreements and actions.	
18/06/2021	EMODnet Chemistry Portal Poster and presentation section	Marine Litter Database and associated products	Increase the visibility of the IFREMER poster Marine Litter Database and associated products presented at the EMODnet Open conference 2021	
23/06/2021	EMODnet Chemistry portal use case section	Joint Copernicus Marine & EMODnet catalogue: Chemistry contribution	Provide EMODnet Chemistry partnership and users with detailed information on how EMODnet Chemistry contribute to the Joint Copernicus Marine & EMODnet catalogue	
28/06/2021	EMODnet Chemistry portal news section	EMODnet Chemistry Q&A: How EMODnet Chemistry supports marine strategies.	inform the partnership and users on how EMODnet Chemistry supports marine strategies and other topics through short monthly interviews	
28/06/2021	Tweet on 1 st Q&A with A. Giorgetti	EMODnet Chemistry Q&A: How EMODnet Chemistry supports marine strategies.	Views 521 Total engagements 20 Like 6 Ouvertures des détails 6 Retweets 2	Published on the account of Marianne Biodiv
28/06/2021	LinkedIn post on 1 st Q&A with A. Giorgetti	EMODnet Chemistry Q&A: How EMODnet Chemistry supports marine strategies.	Views 232 Reactions 5	Published on the account of Marianne Schlessler
SUM				Total = 65

B. Planned communication products

Date	Communication material	Short description (of the material, title, ...) and/or link to the asset	Main results expected
from July to Sept 2021	Active dissemination of the new video on several occasion by	The new video "EMODnet Chemistry: a value for marine strategies" will be advertised in the next future EMODnet NewsDigest, and communicated in the Social Media	Increased visibility of the video (and also the video EMODnet for Policy)

	all partners, incl. in social media		
07/2021	Chinese subtitles for the new promotion video	Subtitles in Chinese will be prepared with the EMODnet Secretariat.	Facilitate the access to the work done by EMODnet Chemistry for Chinese speakers in the context of EMOD-PACE.
07-09/2021		Additional Chemistry use cases and key achievements in EMODnet monthly News Digest / on the Chemistry portal / in social media + Email	
08/2021	Subtitles in Russian, Spanish, Italian, German and Dutch for the new promotion video available on YouTube	With the help of EMODnet Chemistry partners, subtitles in RU / ES / IT / DE / NL have been provided to the secretariat at the end of June.	Facilitated access to the work done by EMODnet Chemistry in five U.N. languages (EN / FR / RU / ES + Chinese) and additional European languages (IT / DE / NL).
07/2021	EMODnet Chemistry Portal 1 Q&A news	Q&A from/to Francois Galgani and Geoge Hanke	
08/2021	Success story on Beach Litter in the mediterranean	Joint success story prepared by OGS/ HCMR for EMODnet Ingestion	New online use case published on the DIP portal and on the Chemistry portal.
09/2021	Publication of an article	Q&A with A. Giorgetti in Horizon Magazine	In collaboration with Secretariat
09/2021	Video	Updated movie on webODV with a tutorial dedicated to contaminants	Step-by-step tutorial
Routinely	social media posts on EMODnet Chemistry Portal news		
August - Sept-Oct 2021	EMODnet Chemistry Portal 3 Q&A news	Q&A from/to A.Giorgetti	

[For the reporting period, please list all publications, e.g. peer-reviewed journals, book chapters, conference papers, etc.) of which you are aware, within the reporting period, including a reference to the EMODnet data or data products which is being discussed.]

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)

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 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?	Matomo/ other (Please state which monitoring tool was used to collate the information in each case)	Several new data sets have been entered. Overall, this has resulted in a steady increase of data. There is also maintenance ongoing for marine litter entries which are being revised and will be re-added soon.
B) Usage of data in this quarter		For CDIs, this quarter there are more than twice number of requests for CDI data files as in previous quarter. While number of users is almost the same as compared to previous quarter: 27 versus 26.
2. Current status and coverage of total number of data products A) Volume and coverage of available data products 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?		Many new and updated data products. Mainly Eutrophication DIVA products.
B) Usage of data products in this quarter		"There is a big increase in map visualisations, especially for 'Silicates'. The same for manual downloads. especially for 'contaminants' sub-themes, but there is a download decrease for the marine litter products. As for the total volume downloaded, we see that this time the highest value belongs to Acidity, not to Fertilisers, comparing to the previous report."

3. Organisations supplying/approached to supply data and data products within this quarter		Several new data sets have been entered by a number of data providers. Overall, this has resulted in a steady increase of data.
4. Online 'Web' interfaces to access or view data		No changes in this period.
5. Statistics on information volunteered through download forms		"Data – CDI service: Number of users is almost the same as in previous quarter, however with twice as much CDIs requested as before. While in other interfaces the 'Academia/Research' is very dominant, we see that it's less dominant and we see higher numbers from other organisation types in the 'Data products – Catalogue' and the 'Data products – DOI landing page' (accessible mainly from the Catalogue). We see higher numbers of downloads from Asia in 'Data products – Map viewer' and 'Data products – Catalogue'"
6. Published use cases		New use case was published in the last week of the reported period. It was sent also to the Central Portal, but as of June, it wasn't published yet.
8.1. Technical monitoring		Excellent.
8.2. Portal user-friendliness (Visual harmonization score)		There is no change in the good harmonisation score.
9. Visibility & Analytics for web pages		Due to Matomo issue, there is no data for the first week of the reported period. Home page became the most visited page. There is a big increase. Also the products page is more visited compared to the previous period. Less need for the Help page.
10. Visibility & Analytics for web sections		Due to Matomo issue, there is no data for the first week of the reported period. Also in the web sections graph we see more traffic for Home and Products.
11. Average visit duration for web pages		Due to Matomo issue, there is no data for the first week of the reported period. Data web page continues to be the one with higher visit duration.

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.]