



EMODnet



European Marine
Observation and
Data Network

EMODnet Thematic Lot n° 5 - Chemistry

EASME/EMFF/2020/3.1.11/Lot 5/SI2.846161

Start date of the project: 03/10/2021 (24 months)

Centralisation Phase

Quarterly Progress Report (3rd)

Reporting Period: 01/04/2022 – 30/06/2022



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1. Highlights in this quarter

[List progress for each of the tasks specified in Section 1.4.1 of the Tender Specifications; provide an explanation for any tasks in which progress has not been noted. Provide in the table a list of all Milestones and Deliverables as from the technical workplan in numerical order, the date due and status. Max 2 pages]

Task 1: Maintain and improve a common method of access to data held in repositories

During the reporting period, we noted a further increase in the data held by EMODnet data centres and delivered in the data portal. This is also the result of the actions put in place to prepare the data harvest planned to be closed at the end of June for eutrophication and end of July for contaminants. During the period, we organised a series of meetings involving all data centres, presenting status and progress with populating new and updated data sets, and circulated bilateral messages to urge selected data providers, and overall messages to keep all up-to-date about the process. The network of NODCs continued to be involved in managing beach data and micro-litter data collected by Member States as part of MSFD monitoring activity.

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

Following the technical proposal, new data products are expected to be released at M12. During this quarter, we worked together with the Central Portal to rationalise the number of data products layers in view of the centralisation process. Contaminants layers were grouped per matrix while DIVA maps by sea regions were grouped by season.

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 has machine-to-machine services, developed as part of ENVRI-FAIR and Blue-Cloud projects.

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: Contribute data, data products and content to a central portal that allows users to find, view and download data and data products:

During the reporting period, OGS, MARIS, ULg, AWI and IFREMER participated to the meetings organised by the CP Team (VLIZ + EMODnet Secretariat) to prepare the static content, the dedicated services, and the metadata and data products to be migrated and centralised. The purpose of the narrative is to allow users to read about EMODnet Chemistry activity run during the five contracts (namely since 2009 till 2022), and to find, view and download all its data and data products. The CP product catalogue will describe all data products while the last versions will be visualised in the central map viewer.

As part of the centralisation process, we rationalised the number of layers to be made available in the viewer. The process is under finalisation.

Task 5: Contributing content to dedicated spaces in Central Portal:

During the reporting period, EMODnet Chemistry portal was kept up to date. In particular, the section ABOUT has been extended with new Guidelines (2 additions), Reports (2 additions) and Project Meetings (4 additions). Moreover, News (1 additions), Events and Presentations (2 additions), Use Cases (1 addition) and Publications

(3 additions) were updated in the PROMOTION section. Contents has also been regularly provided for the EMODnet news and use cases pages and for the monthly newsletters.

Task 6: Ensure the involvement of regional sea conventions:

In line with the ongoing dialogue with EC JRC, EMODnet Chemistry maintained support to the regional sea conventions carrying out a centralised reporting strategy for marine litter, based on a data management plan that is well defined, agreed and substantiated methodologically. In the reporting period, we participated to the TG ML (on line) contributing to the discussion.

In addition, we received by HELCOM a positive feedback on the dataset of beach litter monitoring data in their area for the period 2020 and 2021 released in April.

Task 7: Contribute to the implementation of EU legislation and broader initiatives for open data:

EMODnet Chemistry contributes to MSFD implementation by providing the data management hub for many kinds of marine litter data (beach, seafloor, floating microlitter and in the sediment). We established a close dialogue with the JRC and the D8/D9 Contaminants working group to evaluate MSFD reporting formats and how they fit with EMODnet Chemistry metadata schemas.

Interactions also continued with the Global Partnership on Marine Litter Digital Platform (GPML), to tune EMODnet Chemistry contribution to the global system.

Task 8: Monitor quality/performance and deal with user feedback:

Procedures are up and running, with the MSFD-region approach and extracting differences per data provider, per sea region, and #restricted;#unrestricted. Download metrics for the map viewer, DOI landing pages, CDI data service, the data products catalogue and webODV Data Explorer and Extractor are collected when users access them through EMODnet Chemistry portal. User activities are not recorded for EMODnet Chemistry products described and made available through the Central Portal.

Task 9: Maintain the existing thematic web portal for a maximum of six months from the start of the projects:

EMODnet Chemistry portal is maintained up to date as described under Task 5. The alignment with the Central Portal is ensured by the activities described in Task 4.

Status of the Milestones and Deliverables listed in the workplan

Milestone/Deliverable in numerical order	WP	Date due	Status (To do/ Delivered/ Delayed)	Date delivered	If Delayed: reason for delay and expected delivery date
MS2 EMODnet Chemistry content contributed to the central portal	1	M3-M24	Delivered		
D1.1 Quarterly concise progress reports	1	M3, M6, M9, M12, M15, M18, M21	Delivered	M3 January 2022, M6 April 2022	
D1.2 Annual Interim report	1	M12 (3 October 2022)			
D1.3 Final report	1	M24 (3 October 2023)			

D1.4 Handover plan for service continuity	1	M24			
D1.5i Consortium Agreement	1	M2 (December 2022)	Delivered		
D1.6i Short minutes/action list of project meetings	1	M1, M6, M12, M18, M23	Delivered	M1 SC November 2021, M6 PFG December 2021, M6 SC End March 2022	
D1.7 Providing content to the central portal	1	Continuously	Delivered		
MS3 Chemistry (eutrophication, contaminants and microlitter) CDI metadata and data sets available from the central portal	2	M6, M18	Delivered		
MS4 Marine litter data sets included in the EMODnet databases and available from the central portal	2	M12, M24	Delivered		
D2.1 List of major rivers with identified data sources	2	M3 (January 2022)	Delivered		
D2.2 Training activity for DC	2	M3 (January 2022)	Delivered		
D2.3i Data harvested for eutrophication, including rivers	2	M8, M17	Delivered		
D2.4i Data harvested for contaminants	2	M9, M20	Ongoing (M9 July 2022)		
D2.5i Data harvested for microlitter	2	M12 (3 October 2022)	Ongoing		
D2.6 Updates on marine litter guidelines	2	M6 (April 2022)	Delivered		
MS5 High resolution DIVA maps near major river mouths available from central portal	3	M14			
MS6 Dedicated maps for contaminants available from central portal	3	M16			
MS7 Pan-European maps for eutrophication available from central portal	3	M18			
MS8 Concentration maps of beach and seafloor litter available from central portal	3	M20			

D3.1 Validated pan-European collections for eutrophication, including rivers	3	M12, M21			
D3.2 Validated collections for contaminants	3	M13, M22			
D3.3 Validated collections for beach and seafloor litter	3	M19			
D3.4 Validated collections for microlitter	3	M17			
D3.5 High-resolution DIVA maps near river mouths	3	M16			
D3.6 New maps for contaminants	3	M15, M24			
D3.7 New pan-European DIVA maps for eutrophication	3	M14, M23			
D3.8 New maps for microlitter	3	M23			
D3.9 New maps for beach and seafloor litter	3	M23			
MS1 EMODnet Chemistry data and data products available from central portal	4	M6	Delivered		
D4.1 Standard machine- to-machine services delivered for common functionalities	4	M3	Ongoing		
D4.2 Dedicated machine- to-machine services and APIs adapted / delivered for special functionalities	4	M6	Ongoing		
D4.3 Upgraded databases for new litter types	4	M12	Ongoing		
D4.4 Improved services for eutrophication	4	M10	Ongoing		
D4.5 Improved services for marine litter	4	M10	Ongoing		
D4.6 Improved services for contaminants	4	M12			
D4.7 ODV Extractor with expanded plots and integrated in central portal	4	M18	Ongoing		
D4.8 Monitoring data about visits and usage	4	Continuously	Delivered		
D5.1 Operate Help-desk	5	Continuously	Delivered		
D5.2 Meetings of Board of MSFD experts	5	M6, M12, M18	Delayed		January 2023 (contaminants), February 2023 (eutrophication), September 2023 (litter) to be in line with the release of EMODnet Chemistry products (M14-15-16-23)

D5.3 International cooperation and interoperability	5	Continuously	Ongoing		
D5.4 Promotional material and up-to-date thematic space at central portal	5	Continuously	Ongoing		
D5.5 Presentations at relevant conferences	5	Regularly	Ongoing		

2. Identified issues: status and actions taken

[Provide an **overview of issues** identified by CINEA (Table A) - new as well as pending ones, 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 any issues and challenges identified by yourself.]

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
Several JIRA tickets are open to prepare the centralisation	Ongoing	Interaction with Chemistry network to rationalise the content (static and data products)		
Chemistry - EMODnet Catalogue Tags (EM-533)	Pending	Preparing the list	26/04/22	n.a.
Chemistry - Web Services MetadataUrl and DataUrl fields (EM-84)	Resolved	Checked OGS GeoServer INSPIRE extension	n.a.	n.a.

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
Wrong uptime metrics in Grafana (EM-438)	Pending	A new ticket is open EM-599	14/01/22	n.a.
Insert new Q1-2022 Chemistry use cases to Grafana (EM-548)	Pending	A new ticket is open EM-599	14/03/22	n.a.
Non harvested data products from Chemistry CSW (EM-551)	Pending	To be handled if still relevant once the Central Portal GeoNetwork update goes live (thus pending ticket EM-44)	n.a.	n.a.

3. User feedback

[Provide a list of all user feedback received in the reporting period in chronological order. 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, 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	contact	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
14/4/2022	Kirsty Medalf researcher	Technical: support request to extract data	EMODnet Chemistry contact form	5 hours	Pending	Email exchange: OGS contacted ULiege and AWI, who proposed some possible solutions.	The researcher was offered a date for a virtual meeting but was on vacation and could not confirm her availability. Back to work, she contacted EMODnet Chemistry on 2/05/2022, as reported hereafter, and the issue was solved.
20/4/2022	UNESCO (Peter Pissierssens)	Global networking: What and how EMODnet Chemistry is	Mail to Alessandra Giorgetti (OGS)	1 month	Resolved	Email exchange: Provided the list of actions and the role played by EMODnet Chemistry	

		involved in UN Ocean Decade actions.					
25/4/2022	GEOMAR	Technical: GO2DAT-Hackathon (2-5 May 2022), request to share/provide access to EMODnet Chemistry O ₂ data base	Mail to Jan-Bart Calewaert and Kate Larkin (EMODnet Secretariat)	4 days	Resolved	Email exchange: Kate Larkin suggested to follow up with Alessandra Giorgetti, Conor Delaney and Tim Collart. A Giorgetti provided details on how to access the required data	
2/5/2022	Kirsty Medalf researcher	Technical: support request to extract data	EMODnet Chemistry contact form	5 hours	Resolved	Email exchange: R. Schlitzer fully explained what had caused the issue and suggested verifying the climatologies and contacting OGS or ULiege for any clarifications on the matter	
6/5/2022	UN Global Partnership on Marine Litter	Technical: support request to solve problems on wms get capabilities	Mail to Matteo Vinci (OGS)	2 hours	Resolved	Email exchange: M. Vinci forwarded the email to sextant@ifremer.fr , that fixed the problem	
5/6/2022	Irna Huisjes doing an undergraduate bachelor study called Coastal and Marine	Collaboration: internship request for 20 weeks starting from	emodnet+form@inogs.it	2 days	Resolved	Email response: Confirmed the availability to welcome her for an internship dealing with EMODnet Chemistry and maybe	

	Management in the Netherlands	September 2022				other projects, in which NODC-OGS is involved.	
9/6/2022	CNR	Technical: asking whether data available on SEANOE DOI service are available in the SeaDataNet and EMODnet infrastructures	Mail addresses of Frederic Merceur and Michele Fichaut of IFREMER	30 minutes	Resolved	Email response: Informed that the dataset has just been assigned to OGS data centre in EMODnet ingestion. OGS will upload the data into SeaDataNet and EMODnet Chemistry data infrastructures.	
20/6/2022	SOCIB	Technical: Info on how to upload biogeochemical data from fixed stations	Mail address of Chiara Altobelli of OGS	3 days	Resolved	Email response: Explained how to upload biogeochemical data from fixed stations	
22/6/2022	State Department of Agriculture, Environment and Rural Areas	Technical: confirmation request concerning data submission (beach litter data of 2020 and 2021 from the German Baltic Sea beaches of	Mail addresses of Matteo Vinci and Elena Partescano of OGS	3 hours	Resolved	Email response: Confirmed that data were well received, re-validated and uploaded into the database.	

		Schleswig-Holstein)					
April to June 2022	HELCOM member states	Technical: regular requests for information to optimise the standardisation and validation of beach litter 2016-2021 data, according to the methodology followed by EMODnet Chemistry.	Mail addresses of Matteo Vinci (mainly)	a few hours	Resolved	Mail exchange: provided the information requested	

4. Meetings/events held/attended & planned

[List organisational meetings/events held/participated (incl. presentations, lectures, trainings, demonstrations, workshops, etc.) 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 in the quarter					
Date	Location	Type event (internal or external meeting; training/workshop)	Was a presentation given? (yes/no + short description)	Meeting attended (A) / organised (O)	Short description and main results (# participants, agreements made, etc.)
04/04/2022	online	Internal technical meeting	No	O	Meeting on microlitter vocabularies Participants: OGS and BODC. Explained the need of TG ML in reviewing microlitter vocabularies. First actions to agree on a few modification in H01, H03, H04 and H05 vocabs.
06/04/2022	online	Internal technical meeting	No	A	EMODnet CP meeting to discuss the integration of EMODnet Chemistry contents Participants: CP and EMODnet Chemistry Technical Teams Make steps toward to carry out the Centralization

27-28-29/04/2022	Trondheim (Norway)	External technical meeting	No	A	ICES Working Group on Marine Litter – sessions on Microlitters Participants: 15 Discussion on the revised format of micro-litter of ICES data center and possible alignment on EMODnet Chemistry format for microliter. Discussion also on automated harvest from ICES data center to EMODnet Chemistry.
29/4/2022	online	External meeting	Yes	A	Meeting organised by DG MARE to introducing MARE A1 Deputy Head of Unit
09/05/2022	online	External meeting	No	A	FAIR data solutions to support a global observing system of marine ecological time series Participants: members of the oceanographic, data science, and informatics communities Learning more about a new <u>EarthCube-funded Research Coordination Network for Marine Ecological Time Series (METS-RCN)</u> . It is funded by the National Science Foundation: an independent US government agency supporting research and education in non-medical fields of science and engineering. <u>METS-RCN</u> is tasked with building consensus on key components of a FAIR data model for METS.
09-10/05/2022	Sweden, Malmö	External	Yes	O	International Ocean Literacy Conference organised in Sweden, One Ocean – One Planet: Ocean Literacy Action 2022. Participants: ~25 attendees Organised a parallel session on Citizen Science and Ocean Literacy.

11/05/2022	Sweden, Malmö	External	No	O	National marine infrastructure and data mapping workshop. Participants: ~45 attendees
17-18 - 31/05/2022	online	External training and workshop	No	A	CMEMS Marine Data for the Mediterranean - training and workshop Participants: scientists, universities, researchers, national institutes, private companies, state authorities. Engaging with the marine communities of the Med Sea, and sharing its regional marine data products and knowledge.
19/05/2022	Sweden, Gothenburg	External	Yes	A	National Marine Citizen Science workshop. Participants: ~25 attendees. Presenting on national CS initiatives, cooperation and data flows
07/06/2022	Sweden, Norrköping	External	Yes	A	RV Svea open day for SMHI employees. General EMODnet presentation given
23, 27, 30/05/2022	online	Internal meeting	Yes 17 presentations from data providers MARIS overview of the status of the data submission per Region and type of data (Eutrophication, contaminants and marine litter)	O	EMODnet Chemistry regional meetings on data collections Participants: EMODnet Chemistry Steering Committee and most of the data providers (48 members of the EMODnet Chemistry network) Discussed the status of new/updated data submission and taken action to get as many data as possible within the deadline for first data collection (minutes available)
27/05/2022	online	External meeting	No	A	Meeting of the Ecosystem Approach Correspondence Group on Pollution Monitoring of UNEP/MAP

					Participants: circa 40 Involved all contracting parties of the Barcelona Convention: experts on pollution, chemists, scientists and data managers of INFO RAC
31/05/2022	online	External meeting	No	A	Correspondence Group on Marine litter Monitoring of UNEP/MAP Participants: Involved all contracting parties of the Barcelona Convention: experts on marine litter, scientists and data managers of INFO RAC
01/06/2022	online	Internal technical meeting	No	A	EMODnet CP meeting to discuss the integration of EMODnet Chemistry contents Participants: CP and EMODnet Chemistry Technical Teams Make steps toward to carry out the Centralization
09/06/2022	online	Internal technical meeting	Yes EMODnet Chemistry: priorities for P01 creation and selection guidelines	O	Meeting on vocabularies Participants: OGS, HCMR, IMR, IFREMER, ICES, SMHI, NIMRD, BODC. Explained why consistency and prioritisation is relevant to report information inside the P01. First actions to agree on guidelines for building new P01 and to manage new data. (minutes available)
10/06/2022	online	Internal technical meeting	No	O	Meeting to plan the next DIVA products Participants and main follow-ups in the minutes It was discussed what the user-driven expected changes and improvements in DIVA maps for eutrophication and how to manage them.
21/06/2022	online	External webinar	No	A	CMEMS marine data for policies Participants (around 50): Marine Policy stakeholders and open to anyone involved with marine policy

					Learning more about the Copernicus Marine products and successful user case stories; improving the dialogue with scientists and other experts dealing with the implementation of EU marine and maritime policies; Making Copernicus Marine more fruitful for EU Directives.
27/06/2022-01/07/2022	Portugal, Lisbon	Conference	Yes (SMHI)	A	UN Ocean Conference
28-29-30/06/2022	online	External technical meeting	No	A	TG ML Participants: TG ML and invited experts on marine litter and data management Open discussion on the status of marine litter monitoring and data management at EU level
28 June 2022	online	External meeting	No	O	SciNMeet meeting to form Task team 6: data sharing Participants: UNEP/MAP, OGS, IMS-METU Participated in a high level team as the team facilitator and EMODnet expert, aimed at carrying out the action SciNMeet in the framework of the UN Ocean Decade.
29/06/2022	Portugal, Lisbon	Conference	Yes (Kate Larkin, EMODnet Secretariat, see the programme)	A	UN Ocean Conference Side Event: Marine Data Interoperability Participants: 128 in person registrations with a further 158 registrations for remote connection EMODnet Chemistry was presented as an example of EU regional interoperability with global impact.
SUM				O	Total # of meetings organised = 7
SUM				A	Total # of meetings attended = 14

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
04/07/2022	online	Internal technical meeting	O	First meeting to discuss the 1st data harvesting for eutrophication and contaminants
Summer2022	online	Internal technical meeting	O	Meeting to discuss vocabulary for ocean acidification
18-23 sept 2022	online	7th International Marine Debris Conference (7IMDC)	A	Co-author of the paper Coastline Litter in Europe - Data for policy
End of August/beginning September	online	Internal technical meeting	O	Second meeting on the first data harvesting for eutrophication and contaminants (to get validated data collections ready for M12-M13)
October 2022	online	Internal technical meeting	O	First meeting to discuss the result of data harvesting for marine litter (delivering if validated collections for beach and seafloor litter by M19, end April 2023)
End Sept/Beginning October 2022	online	Internal technical meeting	O	3rd Steering Committee (M12)

5. Communication assets

[List all the relevant communication and dissemination products and assets you have developed in the reporting period (e.g. brochures, videos, press releases, newsletters, blogs) and are planning to do. At the bottom of the table, provide a summary from the actions on Twitter from (e.g. Twitter Analytics: number of Tweets and followers of Twitter account).]

A. Communication products developed				
Date	Communication material	Short description (of the material, title, ...) of the asset	Main results	Name of event (if applicable)
01/04/2022	Chemistry portal web contents	EMODnet Chemistry portal project meeting section : 5th Phase Steering Committee meeting, 30-31 March 2022	Informed the partnership and users on the main topic discussed during a specific internal meeting and the resulting agreements	
12/04/2022	EMODnet CP web news article	EMODnet Chemistry at the Master in Sustainable Blue Growth	Provided an informative on the latest news/events	
29/04/2022	EMODnet newsletter	EMOD-network pledges to #MakeEUBlue!	Provided an informative on the latest news/events on a monthly basis	
29/04/2022	EMODnet newsletter	EMODnet Chemistry at the Master in Sustainable Blue Growth	Provided an informative on the latest news/events on a monthly basis	
22/04/2022	Chemistry portal web contents	EMODnet Chemistry portal reports to EU section : 5th Phase: 2022Q1 Trimonthly Report, Jan-March	Made the EMODnet Chemistry documentation for the EC open and transparent	
29/04/2022	EMODnet CP web news article	EMOD-network pledges to #MakeEUBlue!	Provided an informative on the latest news/events	
11/05/2022	Chemistry portal web contents	EMODnet Chemistry portal guidelines section : Guidelines and forms for gathering marine litter data: beach and seafloor trawlings. Version 7, 2022	Made the new guidelines easily and freely available	

16/05/2022	EMODnet CP web news article	Marine Strategy Framework Directive: up-to-date marine litter data from EMODnet Chemistry	Provided an informative on the latest news/events	
18/05/2022	Chemistry portal web contents	EMODnet Chemistry portal guidelines section : List of major rivers with identified data sources. Version 0, May 2022	Made the new guidelines easily and freely available	
20/05/2022	Chemistry portal web contents	EMODnet Chemistry portal events section : European Maritime Day, 19-20 May, 2022	Periodically information on the main events attended	
31/05/2022	EMODnet newsletter	Marine Strategy Framework Directive: up-to-date marine litter data from EMODnet Chemistry	Provided an informative on the latest news/events on a monthly basis	
01/06/2022	Chemistry portal web contents	EMODnet Chemistry portal project meeting section : 5th Phase Regional meetings on data population, 23-27-30 May 2022	Inform the partnership and users on the main topic discussed during a specific internal meeting and the resulting agreements	
07/06/2022	Post on OGS facebook account	20 years of the NODC: main projects and achievements.	19 likes 6 shares	Festival "Maredirefare" 2022, World days of the oceans.
07/06/2022	Mail to targeted OGS researchers on marine sciences	Reminding the Streaming interview with NODC on OGS youtube channel: celebrating 20 years of achievements and projects.	Informed 117 researchers	
08/06/2022	Streaming interview on OGS Youtube Channel	Streaming interview on OGS youtube channel 20 years of the NODC: main projects and achievements	50 participants	Festival "Maredirefare" 2022, World days of the oceans.
08/06/2022	Presentation (in Italian) for the Streaming interview on OGS Youtube Channel	Streaming interview on OGS youtube channel 20 years of the NODC: main projects and achievements	Explained through images the NODC history, its main achievements and projects	Festival "Maredirefare" 2022, World days of the oceans.
08/06/2022	YouTube video	Video of the abovementioned streaming interview on OGS youtube channel for the 20	112 views (updated as of June 23, 2022)	

		years of the NODC: main projects and achievements.		
08/06/2022	Post on OGS facebook account	20 years of the NODC: main projects and achievements	22 likes	Festival “Maredirefare” 2022, World days of the oceans.
08/06/2022	Post on OGS linkedIn	20 years of the NODC: main projects and achievements	9 likes	Festival “Maredirefare” 2022, World days of the oceans.
08/06/2022	Post on OGS linkedIn account	20 years of the NODC: main projects and achievements	8 likes	Festival “Maredirefare” 2022, World days of the oceans.
09/06/2022	Mail to targeted OGS researchers	Available YouTube video of the NODC 20 years: main projects and achievements.	Informed 117 researchers	
09/06/2022	OGS-NODC website contents	News (in IT and EN) on the abovementioned streaming interview on OGS youtube channel for the 20 years of the NODC: main projects and achievements. The news includes the presentation in IT and EN.	Increased the views of the YouTube video of the NODC streaming interview	
16/06/2022	EMODnet CP Use cases	EMODnet Chemistry datasets integrated in the Copernicus Marine Service In Situ Thematic Assembly Centre products	Promoted the latest use case and collaboration to increase the interoperability	
17/06/2022	Chemistry portal web contents	EMODnet Chemistry portal use cases : EMODnet Chemistry data collections for BGC variables included in Copernicus Marine Service products	Promoted the latest use case and collaboration to increase the interoperability	
June 2022	Mail to EMODnet Chemistry network	EMODnet Chemistry use case : EMODnet Chemistry data collections for BGC variables included in Copernicus Marine Service products.	Promoted the latest use case and collaboration to increase the interoperability	
10/06/2022	Chemistry portal web contents	EMODnet Chemistry portal project meeting section : 5th Phase meeting on vocabulary, 9 June 2022	Inform the partnership and users on the main topic discussed during a specific internal meeting and the resulting agreements	

14/06/2022	Chemistry portal web contents	EMODnet Chemistry portal project meeting section : 5th Phase meeting to plan the new DIVA products, 10 June 2022	Inform the partnership and users on the main topic discussed during a specific internal meeting and the resulting agreements	
17/06/2022	Chemistry portal web contents	EMODnet Chemistry use case : EMODnet Chemistry data collections for BGC variables included in Copernicus Marine Service products	Promoted the latest use case and collaboration to increase the interoperability	
19/06/2022	Chemistry portal web contents	EMODnet Chemistry publications : Impact of Depuration Plants on Nutrient Levels in the North Adriatic Sea	Inform on the new scientific articles published also using EMODnet Chemistry data and/or products	
24/06/2022	Training session	Hands-on practice with EMODnet Chemistry webODV tool	Promoted the webODV explorer and extractor tool	SHAREMED training course (20-24 June 2022, Trieste - Italy)
25/06/2022	Scientific publication	EMODnet Chemistry publications : Spatio-temporal Variability of Microplastics in the Eastern Baltic Sea.	Inform on the new scientific articles published also using EMODnet Chemistry data and/or products	
27/06/2022	Chemistry portal web contents	EMODnet Chemistry portal events section - SHAREMED training course: hands-on practice with EMODnet Chemistry webODV tool	Inform on the main training and promotional activities held by the partnership	SHAREMED training course
27/06/2022	OGS website contents	News (in IT and EN): hands-on practice with EMODnet Chemistry webODV tool	Inform on the main NODC activities relating to different projects and their connections	SHAREMED training course
27/06/2022	Chemistry portal web contents	EMODnet Chemistry publications : Meta-Analysis of a New Georeferenced Database on Polycyclic Aromatic Hydrocarbons in Western and Central Mediterranean	Inform on the new scientific articles published also using EMODnet Chemistry data and/or products	
5/07/2022	EMODnet newsletter	EMODnet Chemistry Datasets provide high quality harmonised and integrated data to the Copernicus Marine Service Thematic Assembly Centre products	Promoted the latest use case and collaboration to increase the interoperability	

B. Planned communication products			
Date	Communication material	Short description (of the material, title, ...) and/or link to the asset	Main results expected
11-15/07/2022	Portugal, Azores	Workshop	2022 Marine Robotics Summer School. Presentation on European data flows and Data Management
July 2022	Chemistry portal web news	EMODnet Chemistry use case regarding SHAREMED project	Inform on the latest usage of EMODnet Chemistry data and data products
July 2022	Chemistry portal web contents	EMODnet Chemistry internal meeting on the 1st data harvesting for contaminants and eutrophication	Inform on the latest internal meeting
July 2022	Chemistry portal web contents	Publication of the second quarterly report to EU (Q2 2022)	Inform on the periodic upgrade delivered to the EC
23/09/2022	Conference for general public	As part of the Trieste Next - Science Festival (Trieste, Italy) OGS together with other national research institutes will show what Italian marine science experts are doing to unlock data and why it is so important to increase the resilience of the planet against devastating environmental changes.	Raise awareness on environmental issues and their relationship with open and quality-controlled data.
24/09/2022	Chemistry portal web contents	Trieste Next Conference for general public (row above)	Inform on the conference aimed at raising awareness on environmental issues and their relationship with open and quality-controlled data.
30/09/2022	Conference for general public	European Researchers' night 2022: presentation on ocean acidification	Raise awareness on environmental issues and their relationship with open and quality-controlled data.
30/09/2022	Event for high school students	European Researchers' night 2022: sulitest SDG14 QUIZ for Ocean Literacy	Increase the knowledge and raise awareness on environmental issues covered by the SDG14 of the UN 2030 Agenda
01/10/2022	Chemistry portal web contents	European Researchers' night 2022: sulitest SDG14 QUIZ for Ocean Literacy (row above)	Inform on the event Event for high school students held on 30/09/2022
01/10/2022	Chemistry portal web contents	European Researchers' night 2022: presentation on ocean acidification (see description of the related conference above)	Inform on the event aimed at raising awareness on environmental issues and their relationship with open and quality-controlled data.
September 2022		EUROqCHARM workshop	

[In Table A, list peer reviewed publications directly (co-)authored by consortium and project partners in the reporting period. In Table B, list all non-peer reviewed publications (co-)authored. In all cases, indicate the type of publication, provide the full reference incl. title, volume and issue etc., and whether the publication is open or closed access.]

A. (Co-)Authored peer-reviewed publications in the quarter					
Date of publication	Type of publication	Full reference	ISBN	DOI	Is it open access? Yes/No
03/05/2022	Guidelines	F. Galgani, A. Giorgetti, M. Le Moigne, A. Brosich, M. Vinci, M. Lipizer, M. E. Molina Jack, N. Holdsworth, R. Schlitzer, G. Hanke, G. Moncoiffe, D. Schaap, G. Giorgi, A. Addamo, M.D.M. Chaves Montero, A. Cociancich, 2021, Guidelines and forms for gathering marine litter data: beach and seafloor trawlings. Version 7, 03/05/2022, 65 pp., DOI: https://doi.org/10.6092/15c0d34c-a01a-4091-91ac7c4f561ab508		https://doi.org/10.6092/15c0d34c-a01a-4091-91ac7c4f561ab508	Yes
18/05/2022	Guidelines	M.E. Molina Jack, A. Novellino, A. Giorgetti, M. Lipizer, L. Buga, L. Fyrberg, J. Gatti, S. Iona, M.M. Larsen, A.K. Østrem, M. Tsompanou, K. Wesslander, 2022. List of major rivers with identified data sources. Version 0, 13/05/2022, 17 pp. DOI: https://doi.org/10.13120/de86fd11-3dcb-4bca-b35c-25d8fd93d5f3		https://doi.org/10.13120/de86fd11-3dcb-4bca-b35c-25d8fd93d5f3	Yes
23/05/2022	Scientific article	Mishra A, Lips I, Buhhalko N, Liblik T, Väli G and Lind K, Lips U (2022) Spatiotemporal Variability of Microplastics in the Eastern Baltic Sea. Front. Mar. Sci. 9:875984. doi: 10.3389/fmars.2022.875984		https://doi.org/10.3389/fmars.2022.875984	Yes
in review	Scientific article	Di Biagio, V., Salon, S., Feudale, L., and Cossarini, G.: Subsurface oxygen maximum in oligotrophic marine ecosystems: mapping the interaction between physical and biogeochemical processes, Biogeosciences Discuss. [preprint], https://doi.org/10.5194/bg-2022-70 , in review, 2022.		https://doi.org/10.5194/bg-2022-70	Yes

B. Other/non-peer reviewed types of publications (co-)authored in the quarter					
Date of publication	Type of publication	Full reference	ISBN	DOI	Is it open access? Yes/No
	e.g. paper; conference proceedings; book chapter; ...				

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

6. Monitoring indicators

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

Comments on the progress indicators in the indicators spreadsheet		
Progress indicator	Means of collecting figures	Comment
1. Current status and coverage of total available thematic data A) Volume and coverage of available data	CDI catalogue service	Several new data sets have been entered, resulting in a steady increase of data. Coming quarter more new data are expected as we are nearing a harvest deadline end June and end July 2022.
What is your opinion on the data coverage within EMODnet for your thematic?	Sea regions in CDI service have been reformulated to follow latest EEA regional polygons. Was considerable effort but now in place.	Data coverage is highly depending on parameter type. Only nutrients and dissolved gasses are covering coastal and open sea areas of all sea basins, in a quite homogeneous way (non-EU areas are still uncovered, for example in the southern Mediterranean Sea). The Chemicals by Region Matrix provides a rough overview: https://emodnet-chemistry.maris.nl/matrix
B) Usage of data in this quarter	CDI RSM shopping ledger service	For CDIs, this quarter the number of requests for CDI data files has reduced considerably but this reduction was compensated by the manual delivery of Beach Litter data to Helcom. The number of users remained constant to 16 (considering Helcom as a single user).
2. Current status and coverage of total number of data products A) Volume and coverage of available data products	Sextant Product Catalogue	No new products have been added in the reported period.

B) Usage of data products in this quarter	Download Tracking service for data products	There is a huge increase in manual downloads of contaminant datasets. However, there is a decrease in downloads for all other products. As for map views, there is an increase for silicate datasets, while most other products have a small decrease.
3. Internal and external organisations supplying/approached to supply data and data products within this quarter	CDI catalogue service	Many new data sets (ca 34000) have been entered by 30 regular data providers in response to coordinated effort for meeting the harvesting deadlines for eutrophication and contaminants data sets.
4. Online 'Web' interfaces to access or view data	N.A.	No changes in this period.
5. Statistics on information volunteered through download forms	CDI RSM shopping ledger service for users of CDI service	For CDIs, number of users this quarter is 8 compared to 15 previous quarter, while number of CDIs is considerably higher. All users from Europe.
6. Published use cases	Matomo	As reported in ticket EM-599, we don't have the stats for Q2.
8.1. Technical monitoring	Matomo – Grafana	As reported in ticket EM-599, we don't have the stats for Q2.
9. Visibility & Analytics for web pages	Matomo – Grafana	As reported in ticket EM-599, we don't have the stats for Q2.
10. Visibility & Analytics for web sections	Matomo – Grafana	As reported in ticket EM-599, we don't have the stats for Q2.
11. Average visit duration for web pages	Matomo – Grafana	As reported in ticket EM-599, we don't have the stats for Q2.

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

7. Annex: Other documentation attached

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