



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 (5th)

Reporting Period: 01/10/2020 - 31/12/2020



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1. Highlights in this quarter

This report covers the fourth quarter of 2020. In the following, the highlights for the period October - December 2020 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:

- Raw chemistry data sets for eutrophication, ocean acidity, contaminants and marine macro litter are gathered from many data sources and are findable, accessible, interoperable and reusable thanks to the adoption by EMODnet Chemistry of the SeaDataNet Common Data Index (CDI) data discovery and access service. While marine litter data for beach litter and seafloor litter, also coming from different sources, are managed in two central databases, involving a lot of efforts for validation, classification, and metadata documenting. Due to the high heterogeneity of the source data, dedicated data formats have been developed and deployed, able to hold all needed metadata and data elements.

This period was very busy for all EMODnet data centres, that were contacted with requests for completing or amending the data available in the portal, following data aggregation and validation process, and were asked to provide new marine litter data, in line with the new data call launched by TG ML. The new data management proposal for handling seafloor litter images and videos is published.

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

- Aggregated data collections are produced for eutrophication, contaminants and marine litter. 6-year analysis are produced for selected eutrophication parameters, interpolated on a regular grid, while dedicated maps are produced for contaminants and marine litter at measurement points. The Map viewer shows all products, also interrogated in the catalogue service. For eutrophication, also maps are included displaying the distribution of data locations, and giving information on the number of observations related to a single parameter (e.g. water body pH map). By clicking on the dots representing the sampling stations, access is given to time series or vertical profiles. In the reporting period, the ODV tool for data handling was updated following the needs of the Regional Leaders, who were busy in the handling, aggregation and validation of the new eutrophication collections. Moreover, OGS was busy in **uploading and validating new beach litter datasets** provided by EMODnet Chemistry partners, supported by MARIS and IFREMER. The release of the updated data collections for all groups of parameters is expected in early 2021.

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

- Machine-to-machine connections to data and data products are upgraded following the [Technical Guidance for the implementation of INSPIRE View Services](#). EMODnet Chemistry products catalogue provides the INSPIRE metadata fields requested for enabling machine-to-machine connections, by including information on OGS services and data URL. The [INSPIRE validator tool](#) is used for validating the service. All MetadataURL point to standard XML and to a human readable text. In the reporting period, EMODnet Chemistry, as a member of the Marine Strategy Framework Directive (MSFD), Common Implementation Strategy (CIS) Technical Group on Marine Data (TG DATA), presented the progress with developing an INSPIRE Transformation service for SeaDataNet – EMODnet Chemistry.

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

- The EMODnet Chemistry portal has been reviewed and restyled following the observations received from EMODnet Secretariat. Now, the section ABOUT is completely updated and rewritten. The section DATA ACCESS provides quick and easy access to the harmonized and validated data collections, while measurement data, as delivered by the originators, are available through a Data Discovery and Access service. The section DATA PRODUCTS, enriched with clear descriptions of all available results, allows the user to browse, visualise and download data products. News and events are continuously updated (ten additions for the period) and distributed with all promotion materials. During the reporting period, **webODV Data Explorer and Extractor** was successfully released in its trial version enabling the user to explore, subset, visualize, and extract eutrophication data sets. The launch of this versatile interface to the EMODnet Chemistry harmonised and aggregated data collections was announced with a press release, accompanied by an online tutorial and a complete set of operative explanatory manuals. This service now provides a low threshold for any user to browse, to visualise, and to make subsets in different export formats of the data collections and is as such a major step forward for further uptake of the EMODnet Chemistry data products.

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 the end of the year, **several meetings** were held remotely with all the portals' coordinators, holding the 13th EMODnet Steering Committee and the 9th Technical Working Group, with the MSFD Technical Group on Marine Litter, with Mercator for the ongoing collaboration on the SDG14 module and the MSFD portfolio.

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

- After the participation in the G20 Workshop on harmonized monitoring and data compilation of marine plastic litter organised by the Ministry of the Environment, Japan (MOEJ), during this reporting period EMODnet Chemistry was promoted in a number of **international informative events**, as reported in detail in the section 4, confirming its international relationships. 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. OGS has developed a new web service that collects download metrics for the map viewer and the DOI landing page for the indicators. During this quarter, also the data products catalogue and webODV Data Explorer and Extractor started using this new web service.

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.

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	Following MSFD TG ML interest, more focus was given to microplastics in sediments and seafloor images. Guidelines for seafloor litter images and videos is delivered. Guidelines for microplastics in sediments is expected for M15
D3.1: Release of validated collections for contaminants to EEA	WP3	M12	Delivered	-
D3.4: Release of validated collections for eutrophication to EEA	WP3	M12	Delivered	-

D3.8: First version concentration maps of marine and beach litter	WP3	M12	Delayed	More data than expected have been received by EMODnet Chemistry, confirming its role of European data portal for Marine Litter. Expected delivery date M18
D4.1: EMODnet Chemistry portal upgraded with extra functionalities	WP4	M6	Delivered	
D4.2: Upgraded databases for marine litter	WP4	M10	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)
D4.7: Monitoring data about visits and usage	WP4	Continuously	Done	
D5.1: Operate Help-desk	WP5	Continuously	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, we decided to produce and share a promotional newsletter
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 was produced for WebODV and a new one for the portal and the available products is under preparation
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	Delayed	More data than expected have been received by EMODnet Chemistry, confirming its role of European data portal for Marine Litter. Expected delivery date M18
MS4: Updated data collections for contaminants and eutrophication to EEA	WP3	M12	Delivered	
MS9: Implementation of the promotional plan	WP6	M6-M24	On-going	

2. Identified issues: status and actions taken

A. Priority issue(s) identified and communicated by EASME/ DG MARE/ SECRETARIAT				
Priority issue	Status (Pending/Resolved)	Action(s) taken / remaining actions planned	Date due	Date resolved
Make data easier to access, with interfaces, also fit for non-professionals, to visualise data	Resolved	webODV facilitates the discovery, sub-setting, visualisation and extraction of subsets in multiple formats, all in an easy way and fast	7/2020	11/2020
EMODnet - EU/USA privacy shield - live chat function	Resolved	Live chat eliminated from Chemistry portal	26/10/2020	3/11/2020

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
EMODnet Chemistry website metrics improvement	Resolved	Better definition of web sections and web pages to be monitored	11/2020	12/2020
Grafana graphics are not significant nor updated promptly	Pending. We asked for a more consistent definition of 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	Hopefully it will become resolved with the date of 01/2021.
Metrics from Grafana	Pending	Indicator 6 is not updated	1 st week of quarter	n/a

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

Overview of user feedback and/or requests received in this quarter							
Date	Organisation	Type of user feedback (e.g. technical, case study, etc.) and short description of the feedback received	Means of contact	Response time	Status of user query: resolved/pending	Measures taken to resolve the query	Status: if not (yet) resolved/pending, explain reason why and expected timeline
02/11	Ministry of Agriculture, Rural Development and Environment, Nicosia	question	contact form	1 day	resolved	Information provided	n/a
8/10	Sebastian Ehrhart, SYKE	Request to be included in the mailing list	Central Portal - Contact Form	1 day	resolved	Action in the mailing list	n/a
05/11	Student from Cardiff University, UK	question	contact form	2 hours	resolved	Information provided	n/a
26/11	MARE-EXT	Carlos asked for help in composing the GDPR/IDPR assessment.	e-mail	1 day	resolved	Information provided	n/a
28/12	Lennert Eskens, KU Leuven	Question on plastic bag	Central Portal - Contact Form	3 days	resolved	Information provided	n/a

4. Meetings/events held/attended & planned

A. Meetings/events organised and attended					
Date	Location	Type event (internal or external meeting, training/workshop)	Indicate if a ppt was given (yes/no + short description)	Meeting attended (A) / organised (O)	Short description and main results (# participants, agreements made, etc.)
9 October 2020	Online (headquarter Naples, SZN)	Workshop	The EMODnet initiative was brought as a key example to explain the importance of HQ data to support european policies and global environmental assessment.	A	<p>Title: The Italian HUB for the BLUEMED initiative Pilot “Towards a Healthy plastic-free Mediterranean Sea”</p> <p>Organizers: the BLUEMED GSO and CSA.</p> <p>Participants: Universities, CNR, ENEA, CONISMA, INGV, Bioplastic Association, NGO, OGS, ISPRA, SZN, CIHEAM.</p> <p>The R&I BlueMed Initiative fosters integration of knowledge and efforts of Mediterranean Countries to create new sustainable blue growth in the area</p>
12 October 2020	Online	Workshop	No	A	<p>Title: International Data Sharing Workshop for Non-UN IGOs, Global and Regional Organisations and Projects, NGOs and Private Sector.</p> <p>Organizers: the UNESCO Intergovernmental Oceanographic Commission (IOC) Project Office for the International Oceanographic Data and Information Exchange (IODE)</p> <p>Participants: NIOZ, UN/IOC (IWG-SODIS group, Ocean infoHub (OIH) group, ODISCat group</p>

14 October 2020	online	External meeting	No	A	<p>Second webinar of the Sulitest Specialized Module on SDG 14 project</p> <p>Organizers: Sulitest NGO, Mercator Ocean International and UN DESA</p> <p>Participants: Sulitest, Mercator Ocean International, UN DESA, Kedge Business School, EMODnet Chemistry</p> <p>The working group passes through the questions of the theme 1: why is the ocean important? For Web3 Sulitest and Mercator Ocean International will propose a limited number of questions per theme strictly related to SDG 14 targets</p>
19 October 2020	online	Internal meeting	Yes, Second chemistry data harvesting for eutrophication and contaminants and present status of data and metadata population	O	<p>4th Phase 1st regional leaders video conference on the 2nd harvest for eutrophication and contaminants</p> <p>Organizers: OGS/MARIS</p> <p>Participants: EMODnet Chemistry Regional Leaders and Partners.</p>
20-21 October 2020	On line	External meeting	Yes, EMODnet Presentation "EMODnet: your gateway to marine data in Europe, and beyond "	A	<p>Title: EATIP-Copernicus Marine-EMODnet workshop on Marine data to support aquaculture in the North Atlantic</p> <p>Organizers: DG MARE, DG DEFIS, EATiP, Mercator Ocean International</p> <p>Participants: DG MARE, DG DEFIS, EATiP, Mercator Ocean International, EMODnet</p> <p>This event explored opportunities and applications for marine environmental Open Access Data to support the aquaculture sector in the North Atlantic region.</p>
22 October 2020	Online	Internal meeting	No	O	<p>Discussing technical progress and launch of WebODV extractor and later integration with the viewer service</p> <p>Participants: OGS, MARIS, AWI, and ULg</p>

29 October 2020	online, host by NIMRD, Constanta	External meeting	Yes, EMODnet Chemistry portal was presented, along with SeaDataCloud and EMODnet Ingestion, as one of the main European Initiatives where RoNODC is participating.	A	Celebration Of 50 Years of NIMRD Establishment and International Black Sea Day
5-6 November 2020	On line	External meeting	Yes, EMODnet – a network of NODCs	A	Title: Implementing the roadmap towards the ocean oxygen data platform Organizers: LEGOS, Uliege Participants: National Oceanographic Data Centers (NODCs), Regional hubs and Government Data Analytics Centers (GDACs)
9-10/12-13 November 2020	On line	Internal meeting	Yes, progress activities	A	EMODnet Steering Committee and Technical Working Group
12 November 2020	On line	External meeting	Yes, Progress with developing an INSPIRE Transformation service for SeaDataNet – EMODnet Chemistry	A	9th MSFD TG DATA meeting Organizers: MSFD TG DATA Participants: EEA, DG ENV, ISPRA, EU MSP TG, HELCOM, DG MARE, Biblomantica, MARIS, INFO/RAC, ICES, OSPAR. Presented relevant initiatives for the group, analysis of the reported information on MSFD Article 19(3), and discussed the tasks about data standards.
24-25 November 2020	On line	Workshop	Yes, EMODnet Chemistry Online Data Extraction, Visualization and Analysis with webODV	A	9th MonGOOS workshop Title: New ocean observation approaches for a blue Mediterranean Sea: physical and biogeochemical systems, data and model assimilation

					<p>Organizers: MonGOOS partnership</p> <p>Participants: CNR, Hassan II University (NIRF), IEO, PdE, NKUA, DUTH, ISPRA, SOCIB, CMCC, OGS, INSTM, LOV (Sorbonne University), IOLR, IMEDEA, INRH, FORTH, NIB, Thessaloniki University, ODYSSEA</p> <p>Presented the EMODnet Chemistry webODV data Explorer and Extractor service</p>
27 November 2020	Trieste, Italy	Interview for a dissemination event targeted to the general public	Yes, Marine pollution 101: knowing, preventing, reducing	A	<p>European Researchers' Night 2020</p> <p>Organizers: Science Centre Immaginario Scientifico, the scientific and interactive museum of Trieste (Italy)</p> <p>Participants: Alessandra Giorgetti, Chiara Altobelli</p> <p>SHARPER, SHARing Researchers' Passions for Evidences, is one of the 7 Italian projects aimed at realizing the European Researchers' Night 2020 to raise awareness on the relevance of research to make decisions in many different fields.</p>
30 November 2020	online	Internal meeting	No	O	<p>4th Phase 2nd regional leaders video conference on 2nd harvest for eutrophication and contaminants</p> <p>Organizers: OGS/MARIS</p> <p>Participants: EMODnet Chemistry Regional Leaders and Partners.</p>
1 December 2020	online	External meeting	Yes, one slide showing that the selected 24 questions cover all SDG targets and most of the key topics	A	<p>Title: third webinar of the Sulitest Specialized Module on SDG 14 project</p> <p>Organizers: Sulitest NGO, Mercator Ocean International and UN DESA</p> <p>Participants: Sulitest, Mercator Ocean International, UN DESA, Kedge Business School, EMODnet Chemistry</p>

					The working group past through the 24 questions selected by Sulitest and Mercator Ocean International to discuss whether: some key topics are still missing in each theme; some questions are not relevant or incorrect
3 December 2020	online	Internal meeting	No	O	Discussing technical expansion of WebODV Extractor service with contaminants Participants: OGS, MARIS, and AWI
8, 10 December 2020	online	Conference	No	A	Sustainable Ocean Meeting conference Title: Ocean Vision 2030: the Decade for Ocean Action
14 December 2020	online	External meeting	No	A	MSFD Technical Group on Marine Litter Organizers: DG ENV, EEA Participants: EU Member States, Invited experts
14 December 2020	online	External meeting	Yes, MSFD portfolio containing CMEMS & EMODnet products - Current proposal	A	EMODnet Chemistry, Mercator Ocean International meeting on the MSFD data products portfolio Organizers: Mercator Ocean International Participants: EMODnet Chemistry, Mercator Ocean International, EEA and DG ENV
21 December 2020	online	Internal meeting	No	O	Discussing progress with technical expansion of WebODV Extractor service with contaminants, considering graphics, search criteria, and export formats Participants: OGS, MARIS, and AWI
SUM				O	Total # of meetings organised = 5
SUM				A	Total # of meetings attended = 13

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
20 January 2021	online	External meeting	A	Sulitest SDG14 module 4th meeting
1 February 2021	online	Internal meeting	O	RLs meeting
2 February 2021	online	Internal meeting	O	Project Group meeting
12-14 April 2021	Amsterdam	International Conference on Marine Data and Information Systems	A	Disseminate EMODnet Chemistry results
19-30 April 2021		external meeting		EGU General Assembly 2021
TBD				Sulitest SDG14 module 5th meeting

5. Communication assets

A. Communication products				
Date	Communication material	Short description (of the material, title, ...) of the asset	Main results	Name of event at which material was disseminated (if applicable)
1 October 2020	Online Communication Portal - News section	The Italian HUB for the BLUEMED initiative Pilot "Towards a Healthy plastic-free Mediterranean Sea"	Let users and visitors aware on EMODnet Chemistry participation in the BLUEMED Workshop	
6 October 2020	Online Communication Portal - News section	International Data Sharing Workshop for Non-UN IGOs, Global and Regional Organisations and Projects, NGOs and Private Sector	Let users and visitors aware on EMODnet Chemistry involvement in global data sharing projects	
9 October 2020	PPT	EMODnet Chemistry platform - HQ data to support european policies and global assessment	Share EMODnet Chemistry expertise on marine plastic issue	BLUEMED Workshop "Towards a Healthy plastic-free Mediterranean Sea"
12 October 2020	Online Communication Portal - Events section	BlueMed web meeting focused on marine plastic litter	Let users and visitors aware on BLUEMED project and the role played by EMODnet Chemistry	
20 October 2020	Online Communication Portal - Events section	Sulitest Specialized Module on SDG 14 project: second meeting	Keep users informed on the progress of the Sulitest sdg14 module project	
21 October 2020	Online Communication Portal - News section	Marine data to support aquaculture in the North Atlantic	Let users and visitors aware on the relevance of EMODnet Chemistry data to support aquaculture	
21 October 2020	PPT	Marine data to support aquaculture in the North Atlantic. EMODnet, your gateway to marine data in Europe, and beyond	Share EMODnet Chemistry data management expertise	External meeting: Marine data to support aquaculture in the North Atlantic

26 October 2020	Online Communication Portal – project meetings section	4th Phase Regional Leaders videoconference: 19 October 2020	Keep users and visitors up to date with the initiative progress	
26 October 2020	PPT	Second chemistry data harvesting for eutrophication and contaminants and present status of data and metadata population	Discuss and coordinate the 2nd harvest for eutrophication and contaminants	4th Phase 1st regional leaders video conference on the 2nd harvest for eutrophication and contaminants
28 October 2020	Online Communication Portal – Use case section	EMODnet Chemistry infrastructure: the pillar of the HarmonIA visualization tools	Keep users and visitors up to date with the initiative progress	
29 October 2020	Online Communication Portal – Reports to EU section	4th Phase: 2020Q3 Trimonthly Report, July-September	Share with EMODnet Chemistry members and all users the most relevant outcomes of the past 3 months	
29 October 2020	PPT	EMODnet Chemistry portal was presented, along with SeaDataCloud and EMODnet Ingestion, as some of the main European Initiatives to which RoNODC is participating.		Celebration Of 50 Years of NIMRD Establishment and International Black Sea Day
30 October 2020	Online Communication Portal – Use case section	The first EU ML quantitative Threshold value by using EMODnet Chemistry data	Keep users and visitors of the Portal up to date with the initiative progress	
5 November 2020	Online Communication Portal – Reports to EU section	4th Phase: Interim Report, October 2019 - October 2020	Share with EMODnet Chemistry members and all users the most relevant outcomes of the 1 st year of the 4 th phase	
6 November 2020	Online Communication Portal - News section	Implementing the roadmap towards the ocean oxygen data platform	Keep users and visitors informed on the next events	
9 November 2020	Online Communication Portal - News section	EMODnet Steering Committee and Technical Working Group	Keep users and visitors informed on the upcoming events	

9 November 2020	Online Communication Portal - News section	EMOD-PACE project and upcoming meetings	Keep users and visitors informed on the next events	
9 November 2020	Online Communication Portal - Events section	Implementing the roadmap towards the ocean oxygen data platform	Let users and visitors aware on the EMODnet Chemistry contribution to the ocean oxygen data platform	
9 November 2020	PPT	EMODnet - a network of NODCs	Share EMODnet Chemistry data management expertise	External meeting: Implementing the roadmap towards the ocean oxygen data platform
10 November 2020	Online Communication Portal - Guidelines section	Marine Litter Data-Flow	Explain users how to easily collect and harmonize marine litter data following the EMODnet Chemistry methodology and tools	
10 November 2020	Online Communication Portal - News section	9th MSFD TG DATA meeting	Keep users and visitors informed on the upcoming events	
10 November 2020	PPT	Progress with developing an INSPIRE Transformation service for SeaDataNet - EMODnet Chemistry	Contribute to the MSFD monitorings	9th MSFD TG DATA meeting
10 November 2020	Online Communication Portal - News section	How to submit marine litter data?	Disseminate the new guidelines on the marine litter data flow	
13 November 2020	Online Communication Portal - Events section	The first step of the Horizon 2020 EUROqCHARM project	Let users and visitors aware on the EMODnet Chemistry contribution to the EUROqCHARM project and its relevance	
16 November 2020	Online Communication Portal - Events section	EMODnet: November 2020 Steering Committee and Technical Working Group	Keep users and visitors up to date with the initiative progress	
19 November 2020	Online Communication Portal - News section	EMOD-PACE WP2 Chemistry group meeting	Keep users and visitors informed on the upcoming events	
19 November 2020	PPT	EU-China Data harmonization	Share EMODnet Chemistry data management expertise	EMOD-PACE WP2 Chemistry group meeting

23 November 2020	Online Communication Portal - News section	4th Phase 2 nd regional leaders video conference on 2nd harvest for eutrophication and contaminants	Keep users and visitors informed on the upcoming events	
23 November 2020	Online Communication Portal - News section	Third webinar of the Sulitest Specialized Module on SDG 14 project	Keep users and visitors informed on the upcoming events	
23 November 2020	PPT	one slide showing that the selected 24 questions cover all SDG targets and most of the key topics	Contribute to the realization of the sulitest sdg14 module	Third webinar of the Sulitest Specialized Module on SDG 14 project
23 November 2020	PPT	Presented the EMODnet Chemistry webODV data Explorer and Extractor service	Show the new ODV tool to the scientific community attending the meeting	9th MonGOOS workshop
24 November 2020	Online Communication Portal - News section	Explore and extract data with the new webODV tool	Keep users up to date with the latest tool available	
24 November 2020	Video	Explore and extract data with the new webODV tool	Explain users how the new ODV tool works	EMODnet central portal, mail to data experts and scientific community
24 November 2020	Manual	Explore and extract data with the new webODV tool	Explain users how the new ODV tool works	EMODnet central portal, mail to data experts and scientific community
24 November 2020	Press release	Explore and extract data with the new webODV tool	Inform the scientific community about the new ODV tool	EMODnet central portal, mail to data experts and scientific community
24 November 2020	EMODnet newsdigest	Explore and extract data with the new webODV tool	Inform EMODnet users about the new ODV tool	
24 November 2020	Online Communication Portal - News section	European Researchers' Night 2020	Raise people awareness and disseminate information	
24 November 2020	Online Communication Portal - Video section	webODV tool for online data Exploration and Extraction	Keep users and visitors informed on the next events	

24 November 2020	Online Communication Portal - Guidelines section	User Manual for the aggregated data Explorer and Extractor	Make available the hot to document that explains the the new ODV tool	
26 November 2020	Online Communication Portal - Events section	The webODV data Explorer and Extractor tool presented at the MonGOOS workshop	Let users and visitors informed on MonGOOS workshop outcomes	
2 December 2020	Online Communication Portal - Events section	EMOD-PACE on line meeting on water quality: 23 November 2020	Provide users with details on WP2 EMOD-PACE meeting	
3 December 2020	Online Communication Portal - Events section	Sulitest Module on SDG 14 project: third meeting	Provide users with details on the third meeting devoted to the Sulitest Module on SDG 14 project	
3 December 2020	Online Communication Portal - Media section	Science Centre Immaginario Scientifico: European Researchers' Night 2020	Raise people awareness and disseminate information	
3 December 2020	Online Communication Portal - News section	Synergies between EMODnet Chemistry and EUROqCHARM project. Kick off meeting of EUROqCHARM project (EUROpean quality Controlled Harmonization Assuring Reproducible Monitoring and assessment of plastic pollution)	Keep users and visitors informed on the next events	
4 December 2020	Online Communication Portal - News section	Sustainable Ocean Meeting conference Title: Ocean Vision 2030: the Decade for Ocean Action	Keep users and visitors informed on the next events	
9 December 2020	Online Communication Portal - News section	SHAREMED: first capitalization workshop	Keep users and visitors informed on the next events	
11 December 2020	Online Communication Portal - project meetings section	4th Phase 2 nd Regional Leaders videoconference: 30 November 2020	Keep users and visitors up to date with the initiative	
11 December 2020	Online Communication Portal - Events section	EMOD-PACE WP 2 plenary meeting and WP2 Leaders and EU meeting	Provide users with details on WP 2 plenary meeting and WP2 Leaders and EU meeting	

11 December 2020	PPT	EMOD-PACE aims, work plan and 2 December WP2 meeting follow up	Share EMODnet Chemistry data management expertise	EMOD-PACE WP 2 Leaders and EU meeting
11 December 2020	Online Communication Portal - News section	MSFD Technical Group on Marine Litter	Keep users and visitors informed on the next events	
11 December 2020	Online Communication Portal - News section	The latest scientific article about EMODnet Chemistry	Keep users and visitors informed on the latest publications	
14 December 2020	Online Communication Portal - News section	EMODnet Chemistry, Mercator Ocean International meeting on the MSFD data products portfolio	Keep users and visitors informed on the next events	
14 December 2020	PPT	MSFD portfolio containing CMEMS & EMODnet products - Current proposal	Show the EMODnet Chemistry proposal for the MSFD data products portfolio	EMODnet Chemistry, Mercator Ocean International meeting on the MSFD data products portfolio
15 December 2020	Online Communication Portal - News section	EUROqCHARM project: the first General Assembly	Keep users and visitors informed on the next events	
15 December 2020	Online Communication Portal - Publications section	Frontiers: Aggregated and Validated Datasets for the European Seas: The Contribution of EMODnet Chemistry	Make available the latest publications	
SUM				Total # of on line communications =40
SUM				Total # of presentations = 11

B. Planned communication products

Date	Communication material	Short description (of the material, title, ...) and/or link to the asset	Main results expected
January 2021	Video	Data access and service plus Map viewer tutorial	Promote the EMODnet Chemistry functionalities

Continuous	News	Update the portal with all news and events related to EMODnet Chemistry	Share information and raise interest

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)
11 December 2020	Frontiers	Aggregated and Validated Datasets for the European Seas: The Contribution of EMODnet Chemistry (doi.org/10.3389/fmars.2020.583657)	Alessandra Giorgetti, Marina Lipizer, Maria Eugenia Molina Jack, Neil Holdsworth, Hans Mose Jensen, Luminita Buga, George Sarbu, Athanasia Iona, Julie Gatti, Martin Larsen, Lotta Fyrberg, Ann Kristin Østrem and Reiner Schlitzer	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), Trieste, Italy International Council for the Exploration of the Sea (ICES), Copenhagen, Denmark National Institute for Marine Research and Development "Grigore Antipa", Constanța, Romania Hellenic Centre for Marine Research, Anavyssos, Greece French Research Institute for Exploitation of the Sea (IFREMER), Nantes, France Arhus University, Aarhus, Denmark Swedish Meteorological and Hydrological Institute, Norrköping, Sweden Institute of Marine Research, Bergen, Norway Alfred-Wegener-Institute, Bremerhaven, Germany

6. Monitoring indicators

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	Database queries done by MARIS.	For CDIs, further quality control activities have been ongoing in this quarter by Regional Coordinators validating regional data collections for eutrophication and contaminants and providing feedback to data providers for corrections. Several new data sets have been entered. Overall, this has resulted in a limited increase of data.
B) Usage of data in this quarter*	Database queries done by MARIS.	For CDIs, this quarter there are less requests for data files. However, number of users is larger compared to previous quarter: 29 versus 20.
2. Current status and coverage of total number of data products A) Volume and coverage of available data products	Manual from individual volumes and sub-themes (P36).	No new data products.
B) Usage of data products in this quarter*-	Database queries done by OGS based on metrics sent to the new web service Map visualisations are based on Matomo events sent by the Map Viewer.	There is a big increase in manual downloads except for contaminants. Also map visualisations trend is very positive, except for silicates. In this report we were able to report the total volume downloaded, and we see that the highest value belongs to Fertilisers.
3. Organisations supplying/approached to supply data and data products within this quarter	Database queries done by MARIS.	For CDIs, a lot of quality control activities have been ongoing in this quarter by data providers, following reports by Regional Coordinators and checks with OCTOPUS software.

4. Online 'Web' interfaces to access or view data	Simple information collating.	No changes in this period.
5. Statistics on information volunteered through download forms	Database queries done by OGS based on metrics sent to the new web service.	Data – CDI service: Higher number of users. We see a positive private companies interest: Business and Private company 13.79%, Reason: Research and review. Data products – Map viewer: A big increase in Business and Private company interest: 22.73%, Reason: Commercial/Industry. Data products (Aggregated Datasets) – WebODV Data Explorer and Extractor: New interface. Already quite popular. The metrics is for one month. We expect even higher numbers in the next report.
6. Published use cases	Grafana, based on data from Matomo.	Waiting for Grafana to be updated by TRUST-IT. Nevertheless, 2 new use cases were made available during this quarter
8.1. Technical monitoring	Grafana, based on monitoring script launched by TRUST-IT.	Excellent
8.2. Portal user-friendliness (Visual harmonization score)	Report by email from TRUST-IT.	The Harmonisation score is improved from 75 to 76 (Favicon)
9. Visibility & Analytics for web pages	Grafana, based on data from Matomo.	Steady increase in visits, probably due to posting of many news items and introduction of new WebODV Extractor service and associated press release together with EMODnet Secretariat.
10. Visibility & Analytics for web sections	Grafana, based on data from Matomo.	Steady increase. Lot of downloads of documents, which could include format guidelines for marine litter, related to activities of TG-ML, and downloads of the WebODV press release
11. Average visit duration for web pages	Grafana, based on data from Matomo.	Some increase in visit duration.

*NB: OGC web services do not provide usage information. Therefore, map visualisations and WMS/WFS requests as reported in Indicator 1 and 2 is not applicable. Map viewer as a web service client sends view events to Matomo, so only for products map visualisations metrics is available

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.]