



Key updates and forward look EMODnet Chemistry

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The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund and its predecessor, Regulation (EU) No. 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.

EMODnet Chemistry: project progress

- EMODnet Chemistry 5 contract started on 03/10/2021 (now M13)
- Submitted the first interim report showing good progress in all Tasks

TASK	DESCRIPTION	WORK	
		PLAN	
Task 1	Maintain and improve a common method of access to data held in repositories	WP2	<
Task 2	Construct products from one or more data sources that provide users with information	WP3	•
	about the distribution and quality of parameters in time and space		
Task 3	Develop procedures for machine-to-machine connections to data and data products	WP4	•
Task 4	Contribute data, data products and content to a central portal that allows users to find,		
	view and download data and data products:		
Task 5	Contributing content to dedicated spaces in Central Portal	WP1	
Task 6	Ensure the involvement of regional sea conventions	WP5	
Task 7	Contribute to the implementation of EU legislation and broader initiatives for open data		
Task 8	Monitor quality/performance and deal with user feedback		
Task 9	Maintain the existing thematic web portal for a maximum of six months from the start of	WP1	
	the projects		



Project Progress

EM	DDnet Chemistry - planning																					
WP	ACTIVITY DESCRIPTION					YE	AR 1	l								١	ίΕΑ	R 2				
	TIME FRAME	1	2	3	4 5	5 6	5 7	8	9 -	10 1	1 1	2 13	3 14	15	16	17	18	19 2	20	21	22 2	3 24
1	Project Management																					
1.1	Project coordination																					
	Project Steering Group and Full Group Meetings									Τ												
	Quarterly, Interim and Final Reports to EU																					
1.2	Collaboration with EMODnet community										Τ	T		T					Τ			
1.3	Maintenance of content on thematic and central portals																					
1.4	Making arrangements for handover and service continuity										Τ											
2	Chemistry data collection and metadata compilation and arranging common access						T	Π		T	Τ	T	T	T					T			
2.1	Review guidelines and Training Activity																					
2.2	Chemistry data gathering and metadata population																					
	Focus on eutrophication data																					
	Focus on contaminants data																					
	Focus on micro litter data																					
2.3	Formulating formats and vocabularies for marine litter and data gathering																					
2.4	Nutrients loads from major rivers																					
3	Generation of data products, including collections										Τ	Τ							Τ			
3.1	Generating harmonised, aggregated and validated data collections										Τ											
	Focus on eutrophication data collections																					
	Focus on contaminants data collections																					
	Focus on micro litter data collections										Τ								Τ			
	Focus on beach and seafloor litter collections										Τ											
3.2	Generating DIVA maps of eutrophication										Τ											
3.3	Higher resolution maps at river mouths																					
3.4	Tuning data collection and dedicated maps on contaminants										Τ								Т			
3.5	Generating validated data collections and maps of marine litter									Т	Т	Т										
4	Technical development for interoperability, services and tools										Τ											
4.1	Transforming the functionality of existing portal services into machine-to-machine services and contributing to their deployment in Central portal																					
4.2	Further developing the EMODnet marine litter database									İ	İ											
4.3	Improving the advanced viewing services																					
4.4	Streamline gneration and publishing of contaminants maps										Τ	Τ										
4.5	Operation and monitoring of well functioning of services and gathering KPI																					
5	Uptake, outreach and interaction																					
5.1	Maintain and operate a Help service																					
5.2	Interaction and regular dialogue with MSFD stakeholders																					
5.3	Maintain international cooperation and interoperability									1	8	8										



Pr	oject Progress																								
WP	ACTIVITY DESCRIPTION		YEAR 1									YEAR 2													
	TIME FRAME	1	2	3	4	5	6	7	7 8	8	9 10) 11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Progress on data and geographic coverage – October 2022

• Steady increase in the datasets supplied by the network of 66 data centers mobilized by EMODnet Chemistry; further enriching or amending data and metadata already available



- CDI records and data sets: June 2014: 661095; June 2016: 807959;
 Feb 2018: 939400; June 2020: 1010933;
 Apr 2021: 1051948;
 September 2021: 1122527;
 April 2022: 1147589;
 October 2022: 1191652.
- 66 Data Centres 32 Countries
- +550 Originators
- 1868 2022 years
- 90.5% unrestricted
- 9.5% to be negotiated

Increase 3,7 %
+ 44.063 CDI datasets
+ 20 originators



Marine litter data collection – synergy with EU MSFD TG ML

Beach	OSPAR-MCS, EEA MLW TG ML collection from Member States EMODnet partners and associates	40 countries 1369 beaches 9726 surveys	
Seafloor	ICES-DATRAS database, DeFishGear, EMODnet partners	23 countries 6304 surveys	
Floating microlitter	EMODnet partners Volvo Ocean Race Counts updated at 10/11/2021	8 countries 352 surveys	Increase 12 % beach and seafloor
Beach	OSPAR-MCS, EEA MLW EU Member States EMODnet partners and associates	40 countries 1392 beaches 11126 surveys	Increase 78 % for microlitter 1400 beach surveys 882 seafloor surveys
Seafloor	ICES-DATRAS database, DeFishGear, Medits EMODnet partners	25 countries7186 surveys	1268 microlitter CDIs
Microlitter	EMODnet partners EU Member States , Volvo Ocean Race, Oceaneye	9 countries 1620 CDIs	
	Counts updated at 2/09/2022		



Progress on the involvement of Regional Sea Conventions

- EMODnet Chemistry has continued to provide support to the RSCs by carrying out a centralised reporting strategy for marine litter
- HELCOM confirmed its interest to use EMODnet Chemistry for the HELCOM HOLAS III beach litter assessment
- Close interaction with OSPAR regarding the collection, harmonisation, and validation of beach litter datasets
- EMODnet Chemistry participated in CORMON meetings and planned contributions to the Quality Status Report (QSR2023)
- EMODnet Chemistry participated in the TG on Marine Litter, contributing to data standardization
- EMODnet Chemistry participated in the TG on Contaminants, which is considering adoption of EMODnet Chemistry as a EU data platform, just like TG on Marine Litter has done earlier. This will be further discussed. Links with other systems, such as the ICES database or IPChem, needs to be reinforced.



Contribution to the implementation of EU legislation and to broader initiatives

- EMODnet Chemistry contributes to the implementation of the **MSFD** by providing the data management hub for many kinds of data (marine litter + contaminants + eutrophication)
- EMODnet Chemistry participated in the G20 MoEJ International Expert Meeting on Marine Plastic Litter Monitoring Data Sharing Project
- EMODnet Chemistry engaged in the implementation of global data platforms supporting the sea-related objectives of the **UN's 2030 Agenda for Sustainable Development**:
 - the Global Partnership on Marine Litter Digital Platform and with the Community of Practice on Data Harmonization
 - the Global Ocean Acidification (SDG 14.1) federated system, together with SeaDataNet
 - the Global Ocean Oxygen Database and Atlas
 - the NOAA/NCEI World Ocean Atlas
 - 'SciNMeet the Regional programme The Mediterranean Sea We Need for the Future We Want'
- The cooperation with the Copernicus Marine Services (CMEMS) has been enhanced and made more operational. Copernicus started using EMODnet Chemistry data collections and a first joint data product portfolio for the MSFD was released



Forward look

- The **collaboration** with EU MSFD TG on Marine Litter required efforts to expand/adapt the system, but provides wider data coverage (beach, seafloor and now microlitter)
- Results of **feasibility study** for managing contaminants at EU MSFD TG on Contaminants
- Proposal for EMODnet to gather MSFD monitoring data at (pan-)European scale
- Request for availability and plans regarding Eutrophication data (and relation with EIONET, COPERNICUS, etc.)
- The SeaDataNet network of National Oceanographic Data Centers is essential for the gathering and
 processing of data. It needs strengthening to stay in sync with MSFD requirements, infrastructure
 developments, and to keep all nodes dedicated and up-to-date.
- **EMODnet Data Ingestion** crucial to involve external organizations willing to submit data



emodnet.ec.europa.eu

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