2nd EMODnet-Copernicus Marine Thematic Workshop on Coastal Issues

Date : 22 September 2022 14:00-17:15 CEST

Invited Participants:

- EMODnet: Secretariat, thematic and data ingestion Coordinators, technical experts & Seabasin Checkpoint Coordinators
- Copernicus Marine Service : Mercator Ocean International and Copernicus Marine Service INSTAC
- European Commission: DG MARE, DG DEFIS, CINEA

Main aims of the workshop: The meeting build on the <u>first joint workshop on coastal issues on 16 June</u> 2020. It aims to bring together EMODnet, Copernicus Marine, and inter-DG representation to discuss marine data and data products and information on Coastal behaviour. Objectives include assessing existing capabilities and emerging areas for collaboration across EMODnet themes and between EMODnet and Copernicus Marine, in particular with a regional focus, and defining concrete joint contributions to European (e.g. EU DTO, Green Deal) and global (UN Ocean Decade) initiatives/strategies.

Co-chairs: Kate Larkin (EMODnet Secretariat), Pierre-Yves Le Traon (Mercator Ocean international)

Platform: Physical meeting in Brussels with online platform hosted by EMODnet Secretariat via Zoom Webinar

Note: all presentations are to be made available on the EC Maritime Forum

The agenda and list of participants is given in the annex

Brief minutes, conclusions, main messages & topics for follow up

The meeting was co-Chaired by Pierre-Yves Le Traon (MOi) and Kate Larkin (EMODnet Secretariat).

Zoi Konstantinou (DG MARE) and Fabienne Jacq (DG DEFIS) opened the meeting and reaffirmed the importance for both DGs to continue the collaboration between EMODnet and Copernicus Marine. A coastal roadmap has been established to better serve member states and EU policies implementation. It exists across the different Copernicus services and collaboration with EMODnet is important. Further, DG DEFIS has recently asked to MOi to lead the Copernicus coastal thematic hub. It has been launched but on a best effort basis. It aims at creating a one-stop-shop for coastal zones using the WEkEO DIAS platform. It will start first with observations and products from the different Copernicus Services (marine, land, emergency...) and will also make links with EMODnet.

Copernicus Marine plans for coastal were presented by P.Y. Le Traon (see slides). They include:

- The development of new satellite products (bathymetry, waves, winds, sea level,...).
- Improving model river discharges (cooperation with Copernicus Emergency and Land Services and EMOdnet for in-situ data).
- Co-design/co-production with EU Member States for models and possibly integration of data in the marine portfolio.

Copernicus Marine coastal activities already started:

- Cross-cutting working group with MFCs and coastal models embedded in our MFCs
- National Marine Forum set up: direct discussion between MOi and Member States for the marine service to co-design and implement actions in the coastal area
- User Engagement: call for tender on coastal interfaces be launched this Fall
- Service evolution: 14 R&D projects selected and launched in July 2022 for 25 months, some covering specific objectives for the coastal marine.
- Horizon Europe Tier3 R&D: participation in various projects (Copernicus Evolution, DTO).
- Start of Copernicus Thematic Hub for coastal zone.

Kate Larkin and Conor Delaney presented an overview of EMODnet, evolution of services towards centralisation by the end of 2022 and coastal activities. EMODnet covers 7 thematic portals: human activities, physics, chemistry, biology, seabed habitats, geology, bathymetry. Centralisation is in finalisation and will deliver a common map viewer, central metadata catalogue, centralised static content and more. Individual thematic portals will be fully migrated and shut down by the end of 2022. For the coastal activities, focus is the European Coastal zone first. Key EMODnet coastal data/data products include:

- Coastal behaviours (EMODnet Geology)
- Riverine inputs (EMODnet Physics)
- Coastal polluants & marine liter (EMODnet Chemistry)
- Coastal blue economy operations, sittings and shipping/vessel transportation & Maritime Spatial Plans (EMODnet Human Activities)
- Coastal bathymetry (EMODnet Bathymetry)
- Sea level: Absolute and Relative Trends and Anomalies (EMODnet Physics)
- Coastal biodiversity (EMODnet Biology)
- Coastal Seafloor/Benthic Habitats (EMODnet Seabed Habitats)

Jan-Bart Calewaert updated participants on EMODnet for Global activities, including EMODnet's role as co-Chair of the UN Ocean Decade Data Coordination Group.

Presentations given by the different EMODnet thematic lots and wider experts, as well as the Copernicus Marine INSITU TAC and Copernicus Marine plans for coastal gave rise to the following list of actions:

- 1- Organise a follow up meeting between EMODnet <u>Chemistry</u> and Copernicus Marine INSITU TAC. The first meeting was considered very fruitful.
- 2- Organise a meeting between Copernicus Marine coordination and EMODnet <u>Bathymetry</u> project coordinator. Copernicus Marine aims at developing a global bathymetry product from S2 data, first static, then a dynamic version. An interaction is much needed between Copernicus Marine and EMODnet bathymetry to discuss the details and the synergies between the different approaches. See also the different user requirements/analyses/surveys on bathymetry that have also recently been published (Copernicus Marine, EMODnet Checkpoints) (e.g. <u>https://www.frontiersin.org/articles/10.3389/fmars.2021.740830/full</u>).
- 3- Organise a meeting with Copernicus Land, Marine coordination and EMODnet <u>Geology</u> project coordinators for coastline monitoring activities shared between the two groups.

In addition, the following gaps were identified. These have not been acted upon but will need to be discussed again during EMODnet & Copernicus Marine regular coordination meetings:

1- Citizen science data: the activity needs to be structured as data are currently not quality controlled. A data structure as to be set up to better answers user needs for qualified data.

- 2- Rivers: there are different initiatives in different Copernicus Services (Marine, Emergency, Land) and in EMODnet Physics. Those activities need to be well aligned.
- 3- Sea level: products already exist in Copernicus Marine INSITU TAC and through EMODnet physics. A new reprocessed product is planned in Copernicus Marine catalogue in November 2022. A good understanding of the different initiatives, the different processing steps applied is necessary. These activities need also to be well aligned to ease the user experience.

EC DG Defis is organising a Copernicus biodiversity and coastal ecosystems workshop on 11-12 October 2022, to which the EC DG MARE and EMODnet Biology and Seabed Habitats have also been invited.

Next regular coordination meeting between EMODnet and Copernicus Marine is scheduled end November 2022 during which all actions and gaps identified above will be discussed as well as actions from the Copernicus Coastal Ecosystem workshop (Copernicus Biodiversity in Coastal Ecosystems Workshop | Copernicus).

Annex – Agenda

Welcome, scope of the meeting and updates from the EC (Zoi Konstantinou, DG MARE; Fabienne Jacq, DG DEFIS) - 5'

Brief overview/summary of the actions and decisions taken at the 2020 coastal workshop (30/09/2020)

Copernicus Marine Service (Pierre-Yves Le Traon, MOi, others tbc) – 10'

- o Status
- Coastal extension of marine service
- o Copernicus Coastal thematic hub

European Marine Observation and Data Network (EMODnet) (Kate Larkin / Conor Delaney / Jan-Bart Calewaert, EMODnet Secretariat) – 10'

- o Overview/Status on EMODnet centralization
- Update on EMODnet data and data products related to coastal area

Thematic dialogues to align EU service activities (short presentations & discussion) (EMODnet Coordinators; Copernicus Marine Service, All) – 30'

- Gathering in situ marine environmental data
 - Chemistry
 - Geology
 - Physics
 - Bathymetry
- Structured discussion: Rivers (EMODnet Physics, Chemistry; Copernicus Marine Service, Copernicus Land Service, Copernicus Emergency Management Service, All) – 20'
 - River run-off and sediment loss
 - Contaminants
 - River models
- Structured discussion: Coastal dynamics (EMODnet Bathymetry, Geology; Copernicus Marine Service, Copernicus Land Service, All) – 20'

- Mapping and dynamic bathymetry: In situ and satellite-derived
- Shoreline position
- Coastal erosion

Comfort break – 10'

Continued: Thematic dialogues to align EU service activities (short presentations & discussion) (EMODnet Coordinators; Copernicus Marine Service, All) – 25'

- o Gathering in situ marine environmental data
 - Biology
 - Seabed Habitats
- Coastal Human Activities /Coastal Management (EMODnet Human Activities; Copernicus Marine Service)

Structured Discussion (All) - 25' to identify:

- o Complementarities and interoperability of both initiatives for coastal behaviour information;
- Other areas for collaboration (e.g. using EMODnet data and data products for Copernicus Marine Service modelling efforts at a regional level; Copernicus Marine Service outputs to validate EMODnet data products etc.);
- Collaboration/connection with other EU initiatives e.g., ICES, JPI-Oceans;
- Supporting EU Green Deal, Digital Twin Ocean and supporting EU policies, as MSFD and MSP.

Global context: EU marine data services contribution (ongoing/future) to UN Ocean Decade - 15'

- o EMODnet (Jan-Bart Calewaert, co-hair UN OD Data Coordination Group)
- o Copernicus Marine Service (Enrique Alvarez, Coordinator DCC Ocean Prediction)
- Discussion (All)

A look forward to the Coastal Ecosystem workshop, October 2022 (Fabienne Jacq) – 5'

Final comments and considerations from participants (All participants) - 5'

Conclusions and next steps (Zoi Konstantinou, DGMARE; Fabienne Jacq, DG Defis) – 5'

Annex – List of Participants (to be updated)

*Remote / online participation

EU marine data service	Participant	Affiliation
representation/role		
Copernicus Marine Service	Pierre-Yves Le Traon	MOi
	Laurence Crosnier*	MOi
	Angelique Melet*	MOi
	Antonio Reppucci*	MOi
	Enrique Alvarez*	MOi
	Muriel Lux*	MOi
	Stephanie Guinehut*	MOi
	Fidi Adodo*	MOi
Copernicus Marine Service	Dominique Obaton*	Ifremer, France
INSTAC coordination	Stéphane Tarot*	Ifremer, France
Copernicus Marine Service	Joaquin Tintore	SOCIB, Spain
INSTAC – scientific expert		
EMODnet	Thierry Schmitt*	SHOM, France
HRSM/Bathymetry	Corine Lochet	SHOM, France
	Gael Morvan	SHOM, France
	George Spoelstra	GGSGC, EU
	Knut Hartmann	EOMAP, Germany
	Martin Verlaan*	Delatres, Netherlands
EMODnet Geology	Henry Vallius	GTK, Finland
	Uffe Larsen	GEUS, Denmark
	Bjarni Pjetursson	GEUS, Denmark
EMODnet Seabed Habitats	Mickäel Vasquez	Ifremer, France
	Helen Lillis*	JNCC, UK
	Helen Woods	JNCC, UK
	Graeme Duncan	JNCC, UK
EMODnet Chemistry	Alessandra Giorgetti	OGS, Italy
	Menashè Eliezer	OGS, Italy
	Erik Geletti	OGS, Italy
EMODnet Biology	Joana Beja	VLIZ, Belgium
EMODnet Physics	Antonio Novellino	ETT, Italy
	Patrick Gorringe	SMHI, Sweden
	Francisco Campuzano	COLABAtlantic, Portugal
EMODnet Human Activities	Alessandro Pititto	COGEA, Italy
	Luigi Falco	COGEA, Italy
EMODnet Data Ingestion	Sissy Iona	HCMR, Greece
	Angelo Lykiardopoulos	HCMR, Greece
EMODnet Central Portal	Joana Beja	VLIZ, Belgium
	Frederic Leclercq	VLIZ, Belgium
	Bart Vanhoorne	VLIZ, Belgium
EMODnet Sea-basin	Nadia Pinardi	UNIBO & CMCC
Checkpoints	Rita Lecci	СМСС
	Jun She*	DMI, Denmark
	Quillon Harpham	HR Wallingford
EMODnet Secretariat	Jan-Bart Calewaert	EMODnet Secretariat
	Kate Larkin	EMODnet Secretariat

	Conor Delaney	EMODnet Secretariat
	Tim Collart	EMODnet Secretariat
	Nathalie Tonné	EMODnet Secretariat
EC, DG MARE	Rémy Dénos	DG MARE A1 Deputy Head of Unit
	Zoi Konstantinou	DG MARE A1
	Grigore Rischitor	DG MARE A1
	Marcin Sadowski	DG MARE A1
	Chantal Vanhove	DG MARE A1
EC, DG DEFIS	Fabienne Jacq	DG DEFIS
CINEA	Juan Carlos Fernández Gomez	CINEA
	Fabrice Pourceau*	CINEA

Apologies (not present)

EU marine data service representation/role	Participant	Affiliation
EMODnet Bathymetry	Dick Schaap	MARIS, The Netherlands