Meeting Document 2

Updated Terms of Reference of the EMODnet Steering Committee and Technical Working Group

For information and discussion

The EMODnet Steering Committee and Technical Working Group operate following Terms of Reference which are regularly updated to reflect the evolving need and nature of EMODnet. The document provides the latest updates of both Terms of Reference for information and questions/clarifications.

EMODnet Steering Committee
Terms of Reference (ToR)

Revision history

- First draft October 2013

- Modified following the first EMODnet Steering Committee Meeting in December 2013

- Updated June 2015 to reflect: (i) progress of Central Portal development; (ii) addition of new Checkpoints; and (iii) removal of Ad Hoc User Group in view of expected user (advisory) group at higher level.

- Updated in March 2018 to reflect situation in EMODnet development phase III.

- Updated in March 2020 to reflect new development EMODnet next phase (IV)

Contents

1 Background and Rationale

EMODnet is a network of organisations working together to observe the sea, to make the marine data collected freely available and interoperable, to create seamless data layers across sea-basins and to distribute the data and data products through the internet. The primary aim of EMODnet is to unlock already existing but fragmented and hidden marine data and make them accessible for a wide range of users including private bodies, public authorities and researchers.

Seven thematic assembly groups have been created to cover data resources from diverse fields including hydrography, geology, physics, chemistry, biology, physical habitats and human activities. In addition, several sea-basin checkpoints were established to assess the observation capacity in the North Sea, the Mediterranean Sea areas, Baltic, Atlantic, Black Sea and the Arctic. The assessments have been completed but the outputs and products are still accessible via a series of regional EMODnet portals which will be integrated into the EMODnet Central Portal by August 2020. Finally, an EMODnet data ingestion services was created in 2016 with a dedicated portal to assist data holders with making available.

To strengthen the coherence and functionality for users, DG MARE called for the development of a common portal, labelled 'EMODnet Central Portal', to act as an overarching information hub and to provide an entry point delivering access to data, metadata and data products held by EMODnet thematic portals. The website, which is available at https://www.emodnet.eu, contains detailed information and links to the different thematic portals and provides an overview of the European Marine Observation and Data Network and its partner institutes, including information about the sea basin checkpoints. It also makes use of social media (Facebook, Twitter, and LinkedIn) to announce news and disseminate information.

The Flemish Government, through the Flanders Marine Institute, is supporting the European Marine Observation and Data Network (EMODnet) by offering technical and scientific support to (1) construct, host and operate the EMODnet Central Portal data services to visualise and provide access to the thematic data being assembled and data products being build and managed in the individual thematic EMODnet projects and to (2) organize user services to facilitate and increase access and usage of the EMODnet Central Portal. The EMODnet Central Portal website (content) and visual appearance is managed by the EMODnet Secretariat.

The requirements for the functioning of the EMODnet Central Portal evolve over time and are determined by the high-level vision targets set by DG MARE and EASME. The aim is to develop a more coherent, effective, efficient and fit for purpose EMODnet. **The Steering Committee aims to thoroughly review and discuss the governance and technical developments planned for the network, to allow the managing and contracting authorities to adopt the optimum decisions towards achieving the high level objectives of EMODnet.**

In early 2020 DG MARE and EASME decided to move to the next phase of EMODnet following an integrated approach, aimed to increase EMODnet's data access facilitation, interoperability and user-friendliness. This will entail a single point of access for all EMODnet data and data-products, through the Central portal. In this approach the thematic lots will continue their independent work in detecting, aggregating and harmonising data relevant to their thematic expertise, they will retain their servers but they will also ensure that their application programming interfaces are integrated efficiently in the Central portal and will participate in the management of content of the central portal.

2   Steering Committee Objectives

The EMODnet Steering Committee main objectives are to

- Provide opinion/advice for the development of the integrated EMODnet Central Portal;

- Exchange information on the progress of the various EMODnet projects and initiatives, in particular with regards to the development of a centralised approach regarding access and interoperability of data and data products from the thematic lots to the Central portal and the opportunities and challenges that this will entail;

- Streamline the interactions between the thematic assembly groups and the Secretariat and to discuss matters of relevance to improve the coherence of the various EMODnet projects;

- Discuss and provide high level opinion/advice related to the governance of EMODnet and strategic matters to be implemented by the Central Portal and thematic assembly groups;

- Assess developments in the marine observation and data landscape which may affect EMODnet and interactions with other marine data initiatives.

It is underlined that any final decision regarding governance and technical developments of EMODnet will be undertake from the DG MARE and EASME, as funding and contracting authorities of the tender respectively.

3   Steering Committee Composition

The Steering Committee is composed of:

(i)   Coordinators of the thematic EMODnet portals;

(ii)   Members of the EMODnet Secretariat;

(iii)   Representatives from DG MARE

(iv)   Representatives from EASME.

Coordinators of the EMODnet thematic lots are invited to attend meetings as Members of the SC. However, coordinators may bring one additional member of their team to contribute to operational and technical discussions if necessary or may nominate a replacement in case it is not possible to attend the meeting.

Ad Hoc experts or stakeholders may be invited by the Secretariat or DG MARE to attend meetings upon request from the Steering Committee if contributing to the objectives of the Meeting.

4   Roles and responsibilities

DG MARE convenes and chairs the Steering Committee meetings. To this end, the EMODnet Secretariat shall assist in drawing up an agenda based on the work plan and additional points raised by the SC and DG MARE to be circulated well in advance of the Meeting. The agenda shall be adopted by the group at the start of the meeting. The Secretariat, with help of the relevant SC Members, will circulate SC Meeting Documents in advance of the Meetings and provide Meeting Minutes within one month after the Meeting. The Secretariat will follow up on the agreed actions, i.e. verify whether actions have been completed by those responsible in the timing foreseen, and report to DG MARE accordingly.

The Coordinators of the thematic EMODnet lots, including the Ingestion portal, as well as the Head of the Secretariat, as contractors of the EMODnet related tenders are members of the Steering Committee, responsible for providing high-level opinions/advice to achieve the SC objectives listed above. As far as possible, the coordinators shall adopt their opinions, advice and/or reports by a consensus. Voting should be avoided but in the event of a vote, the consensus is obtained by a simple majority of the

members. Only one vote per official member will be taken into account. Minority opinions will be documented. Any final decision will be taken by DG MARE and EASME, after receiving the aforementioned advice while the consensus achieved by the Coordinators, is not limiting for the decisions to be adopted by the funding and contracting authorities. DG MARE and EASME may choose to expand and enrich the membership of the Steering Committee at any point, to receive advice/opinion from other EC services or external stakeholders. Invited experts and representatives of relevant organisations including European Commission DGs and services (e.g. DG ENV, EEA, JRC, …) may participate in the discussions and formulate advice where relevant.

5   Ad Hoc Working Groups

With consent of DG MARE and the EMODnet Secretariat, the Steering Committee may establish ad hoc working groups for specific support activities, in particular related to the development of the Central Portal. Ad hoc working groups will operate on the basis of a terms of reference defined by the SC, report to the SC and shall be disbanded as soon as they have fulfilled their terms of reference. The Secretariat will act as an observers to these working groups, but the organization and running of the meetings will be the responsibility of the most appropriate organization to be appointed by the SC.

At the first EMODnet SC meeting (December 2013) an EMODnet Ad Hoc Technical Working Group was created to support technical implementation of the Central Portal and provide advice on how to address technical challenges. This Working Group met two times before the onset of Phase III and is composed of technical experts from the thematic (and checkpoint) portals. The meetings are convened and chaired by the EMODnet Secretariat (since September 2017 as part of PHASE III) in close collaboration with the Central Portal developers (VLIZ). Any final decisions regarding EMODnet technical developments will be taken by DG MARE and EASME, advised but not limited by the proposals of the Technical Working Group.

6   Deliverables and Expected Impact

The main outputs and expected impact of the Steering Committee should be

- A draft inception report regarding the new EMODnet integrated approach towards a single point of access through the Central portal. This report will be published on-line in the Maritime Forum and will not be binding for DG MARE and EASME;

- High level opinions and advice on strategic matters to be implemented by the Central Portal team, Secretariat and thematic assembly groups, in particular towards the development of the integrated EMODnet Central Portal, as documented in meeting minutes and actions and/or specific reports issued by DGMARE/EASME;

- Evaluation of the progress and performance of the various EMODnet projects and initiatives, in particular with regards to the development of an integrated approach based on interoperability and common access of data and data products via the Central portal, as documented in meeting documents, minutes and/or specific reports issued by DGMARE/EASME;

- Fostering a collaborative framework and common understanding of the EMODnet Phase IV objectives, streamlining interactions and improving coherence between/amongst the thematic assembly groups, VLIZ and the Secretariat;

- Provide information on developments in the wider marine observation and data landscape (Europe and Global) which may affect EMODnet, providing advice on opportunities for interactions/collaborations with other marine data initiatives. This should lead to improved communication/collaboration with other initiatives, increasing the visibility of EMODnet and attracting more data providers and users.

7   Indicative timetable

There will be 2 Steering Committee meetings per year (one could be remote). Where possible, the meetings may be organised back to back with other relevant meetings or events, as for instance the Marine Knowledge Expert Group meetings.

The draft proposals related to the development of the integrated Central Portal will be detailed in action plan by the Technical Working Group and Central Portal development team.

Other tasks and deliverables by the Steering Committee will be detailed and managed as part of the Meeting Decisions and Actions.

EMODnet TWG
Terms of Reference (ToR)

- First version January 2018 reflecting situation in EMODnet development phase III.

- Updated in March 2018 following TWG Meeting

- Updated in September 2019 at the EMODnet Steering Committee and Technical Working Group (TWG)

- Updates March 2020 reflecting new developments and vision objectives

Contents

1 Background and Rationale

EMODnet is a network of organisations working together to observe the sea, to make the marine data collected freely available and interoperable, to create seamless data layers across sea-basins and to distribute the data and data products through the internet. The primary aim of EMODnet is to unlock already existing but fragmented and hidden marine data and make them accessible for a wide range of users including private bodies, public authorities and researchers.

Seven thematic assembly groups have been created to cover data resources from diverse fields including hydrography, geology, physics, chemistry, biology, physical habitats and human activities. In addition, several sea-basin checkpoints were established to assess the observation capacity in the North Sea, the Mediterranean Sea areas, Baltic, Atlantic, Black Sea and the Arctic. The assessments have been completed but the outputs and products are still accessible via a series of regional EMODnet portals which will be integrated into the EMODnet Central Portal by August 2020. Finally, an EMODnet data ingestion services was created in 2016 with a dedicated portal to assist data holders with making available.

To strengthen the coherence and functionality for users, DG MARE called for the development of a common portal, labelled 'EMODnet Central Portal', to act as an overarching information hub and to provide an entry point delivering access to data, metadata and data products held by EMODnet thematic portals. The website, which is available at https://www.emodnet.eu, contains detailed information and links to the different thematic portals and provides an overview of the European Marine Observation and Data Network and its partner institutes, including information about the sea basin checkpoints. It also makes use of social media (Facebook, Twitter, and LinkedIn) to announce news and disseminate information.

The Flemish Government, through the Flanders Marine Institute, is supporting the European Marine Observation and Data Network (EMODnet) by offering technical and scientific support to (1) construct, host and operate the EMODnet Central Portal data services to visualise and provide access to the thematic data being assembled and data products being build and managed in the individual thematic EMODnet projects and to (2) organize user services to facilitate and increase access and usage of the EMODnet Central Portal. The EMODnet Central Portal website (content) and visual appearance is managed by the EMODnet Secretariat.

The requirements for the functioning of the EMODnet Central Portal evolve over time and are determined by the high-level vision targets set by DG MARE and EASME. The aim is to develop a more coherent, effective, efficient and fit for purpose EMODnet. **The Technical Working Group is an instrument to propose high-level technical advice on the optimum manner to achieve the goals of EMODnet based on sound technical solutions.**

In early 2020 DG MARE and EASME decided to move to the next phase of EMODnet following an integrated approach, aimed to increase EMODnet's data access facilitation, interoperability and user-friendliness. This will entail a single point of access for all EMODnet data and data-products, through the Central portal. In this approach the thematic lots will continue their independent work in detecting, aggregating and harmonising data relevant to their thematic expertise, they will retain their servers but they will also ensure that their application programming interfaces are integrated efficiently in the Central portal and will participate in the management of content of the central portal. **Proposing the technical framework, basic architecture, work plan and roadmap to achieve the new vision objectives will be at the core of the Technical Working Group's remit.** The TWG proposals will then be reviewed and potentially be adopted by DG MARE and EASME, while the funding and contracting authorities retain the right to ask for clarifications or specific changes, as well as to adopt different technical advice, should they deem it more efficient.

2   Remit and mandate of the Technical Working Group

With consent of DG MARE and EASME, as well as with advice from the EMODnet Secretariat, the Steering Committee may establish ad hoc working groups for specific support activities, in particular related to the development of the integrated Central Portal services. Ad hoc working groups operate on the basis of a Terms of Reference (ToR), report to the Steering Committee and are disbanded as soon as they have fulfilled their terms of reference. The Secretariat acts as facilitator to these working groups.

At the first EMODnet SC meeting (December 2013) an EMODnet Ad Hoc Technical Working Group was created to support the technical implementation of the Central Portal and provide advice on how to address technical challenges. This Working Group met two times before the onset of Phase III (2017) with contributions from technical experts from the thematic (and checkpoint) portals.

Considering the growing number and range of technical challenges and the evolving EMODnet landscape, in 2017 the Commission charged the Secretariat to expand the remit and pace of the TWG to address the identified technical bottlenecks and accelerate progress. Since September 2017, as part of PHASE III, the TWG meetings are convened and chaired by the EMODnet Secretariat in close collaboration with the Central Portal developers (VLIZ).

3   Technical Working Group Aim and Objectives

The EMODnet TWG provides a platform for the EMODnet IT managers and technical experts to discuss progress and challenges in developing their own data sharing and interoperability aspects as well as their contributions to the EMODnet Central Portal Data Services in the new, integrated phase of EMODnet. It should facilitate sharing of expertise, exploring opportunities for joint actions such as the development of common products and identifying examples of where EMODnet has contributed to developing best practice, e.g. in interoperability, so that important achievements can be communicated to relevant stakeholders.

Following the decision of DGMARE to move towards an integrated Central Portal service, the long term aim of the TWG is to guide the technical implementations to ensure that all EMODnet data and data products should be findable, visible and downloadable through the EMODnet Central portal. Individual thematic groups will maintain their service but not their web-sites.

The main objectives of the EMODnet Technical Working Group are to

- Contribute/propose developments towards fit for purpose EMODnet central portal data service (data product catalogue, map viewer and query tool) as well as proposing the technical framework, basic architecture, work plan and roadmap to achieve the new (EMODnet Phase IV) vision objectives;

- Discuss common technical challenges and develop solutions across different thematic lots and propose improvements and harmonisations of the technical interoperability of the thematic systems with other systems as well as between them;

- Propose technical interventions/features to improve the user experience of the Central Portal;

- Exchange information on the technical progress of the various EMODnet thematic assembly activities and central portal and work towards streamlined and automated progress and performance monitoring and reporting tools and processes;

- Streamline the interactions between the thematic assembly groups to share/transfer expertise among partners to build capacity;

- Develop long term strategy for further technical developments for EMODnet to always be at the cutting edge implementing state of the art technologies and provide advice to the Steering Committee on future requirements on the technical level;

-   Assess technical developments in the marine observation and data landscape beyond EMODnet which may affect EMODnet and interactions with other marine data initiatives.

It is underlined that any final decision regarding technical developments of EMODnet will be undertake from the DG MARE and EASME, as funding and contracting authorities of the tender respectively.

4   Technical Working Group Composition

The Technical Working Group is composed of:

(i)   Nominated IT developers, technical experts and/or coordinators of the central and thematic EMODnet projects;

(ii)   Members of the EMODnet Secretariat (Seascape Belgium, Trust-IT and if needed Bilbomatica);

(iii)   Representatives from DG MARE and EASME;

(iv)   Up to three external experts (invited to meetings with support for T&S)

Ad Hoc experts or external stakeholders may be invited by the Secretariat or DG MARE to attend meetings upon request from the Steering Committee and/or the Technical Working Group itself if contributing to the objectives of the Meeting.

5   Roles and Responsibilities

The EMODnet Secretariat convenes and chairs the Technical Working Group meetings. The Secretariat will prepare the meetings in close collaboration with Flanders Marine Institute (VLIZ), drawing up an agenda based on the Steering Committee work plan and instructions as well as additional points raised by DG MARE to be circulated well in advance of the Meeting. The agenda shall be adopted by the group at the start of the meeting.

The Secretariat, with help of the relevant members, will circulate Meeting Documents in advance of the Meetings and provide Meeting Minutes within one month after the Meeting. The Secretariat will follow up on the agreed actions, i.e. verify whether actions have been completed by those responsible in the timing foreseen, and report to DG MARE accordingly. Important achievements and recommendations from the SC meetings will be presented for information, feedback and implementation. The Secretariat may delegate the Chairing of the Meeting to DGMARE, VLIZ or another member of the group following a rotating scheme to share the work and involve the members in the activities in a more pro-active way.

The members of the TWG are expected to be pro-active and engaged as part of a community drive responsibility to achieve the objectives of the TWG and EMODnet vision targets as a whole. As far as possible, the members of the TWG shall adopt their opinions, advice and/or reports by a consensus. If no consensus is reached such advice will be provided based on a majority vote. Any final decision will be taken by DG MARE and EASME, after receiving the aforementioned advice while the consensus achieved by the participants is not limiting for the decisions to be adopted by the funding and contracting authorities.

Invited experts and representatives of relevant organisations including European Commission DGs and services (e.g. DG ENV, EEA, JRC, etc.) may participate in the discussions and formulate advice where relevant.

6   Work Plan, Deliverables and Expected Outputs

The main outputs and expected impact of the Technical Working Group should be

- A work plan developed and maintained by VLIZ with support from the EMODnet Secretariat Technical Coordinator and with contributions/input from all EMODnet projects is to establish common framework and understanding with key activities and deliverables related to the further development of the EMODnet Central Portal Data Services. The workplan will outlined mechanisms for implementation, technical framework, basic architecture and roadmap to achieve the new (EMODnet Phase IV) vision objectives;

- Specific additional tasks and deliverables of the E-TWG will be detailed and managed as part of the meeting decisions and actions recorded in the meeting minutes. The list of actions of TWG meetings together with the action plans of specific priority developments (e.g. query tool, thematic portal improvement plans) will serve as input for the work plan of the technical working group.

- For the EMODnet next phase developments, priority expected results include:

    - Development of fit for purpose and state of the art Central Portal Data Services (EMODnet products catalogue, map viewer, query tool, search and retrieve function - data broker etc.) allowing users to search and retrieve all EMODnet data resources;

    - Adoption of standards and solutions for interoperability issues to ensure functionality of the Central Portal Data Services, allowing users to search, combine, visualise, query and retrieve EMODnet data layers and datasets prepared by different thematic groups;

    - Ensure requirements for machine to machine communication and INSPIRE Compliance.

    - Development of clear and comprehensive documentation on access and use of EMODnet data and data products; Further development of an EMODnet hackathon package with contributions by the different lots on tools available to users (libraries, API's, …);

    - Mapping and harmonisation of various data policies in place by the different thematic groups and options for reducing restrictions reducing the open accessibility of all EMODnet data resources aligned with to the overarching EMODnet Data Policy;

7   Indicative Timetable

There will be two Technical Working Group Meetings per year (one could be remote). Where possible, the meetings may be organised back to back with other relevant meetings or events such as the EMODnet Steering Committee. The Secretariat will maintain contact with the TWG in between these meetings and may call for ad hoc meetings to specific important matters. All E-TWG members are also kindly invited to (remotely) connect/attend the short monthly EMODnet technical management meetings towards new integrated central portal developments organised by EMODnet Secretariat and VLIZ.

List of nominated - representatives:

EMODnet