

EMODnet Indicators

Indicators to monitor and evaluate the progress of the EMODnet thematic lots

The EMODnet Secretariat is tasked as per tender MARE/2012/15 to monitor and evaluate the progress of the EMODnet thematic lots (MARE/2012/10). In addition to technical portal testing and user evaluations, indicators will be used for this purpose. The selection of appropriate indicators should be based on a careful assessment and identification of relevant performance questions. The Secretariat proposed the following performance questions relating to input, output and impact for each portal:

Performance questions

- a) How much data has been made available through the portal to date?
- b) What organisations have supplied data to the portal to date?
- c) How much data has been downloaded from the portal to date?
- d) What organisations have downloaded data from the portal to date?
- e) What progress has EMODnet made towards becoming the portal of choice for marine users?

Based on these performance questions, the Secretariat proposed a number of indicators and an associated bi-monthly reporting template (see Annex I) to be used by the thematic portals as part of their reporting obligations. The Secretariat requested feedback from MODEG as to the appropriateness of these indicators and the proposed reporting format and frequency (i.e. their inclusion into the bi-monthly reports prepared by each of the thematic lots) as part of the MODEG meeting held in Brussels on 21-22nd October 2013. The indicators were generally supported by MODEG provided the underlying metrics are tailored to the needs and possibilities of the different portals. Additional indicators were added post meeting on request from DG MARE.

Proposed indicators

1) Volume of data made available through the portal, using different metrics for each type of data and setting minimum data standards where appropriate e.g. bathymetry at a scale of at least one to one million. Two-month reporting intervals.

This will allow us to assess whether there is a strong flow of data into each of the portals and whether there are problems in accessing particular data sets (e.g. restrictions on use). It will also show variation of data submission with time from which we may be able to deduce whether the portals are becoming established as trusted repositories. A major issue with this fundamental question is what to measure. On some metrics e.g. number of data entries, the answer could be very large numbers, but these may have little meaning (e.g. point sources of bathymetry). Another method would be to look at numbers of data packages e.g. a complete set of

environmental data for an offshore installation. This issue will need to be discussed in detail with MODEG and portal managers.

Comments: Due to the different manners that volume of data can be quantified, it is proposed that each thematic assembly group defines and proposes their intended metric on which they will then report accordingly.

2) Organisations supplying each type of data – based on (formal) sharing agreements and broken down into country and organisation type e.g. government, industry, science. Two month reporting intervals.

This will allow us to assess who are the main contributors for each data type. It will allow the portals to target specific organisations that hold data if they have not contributed e.g. a particular Government department in one member state if other member states have provided similar data. It will also identify if some regions are more active than others in supplying data.

Comment: If data is delivered through consortium, if possible identify to the lowest level of contributor. This should also include submissions of 'non' partners of the lots.

3) Organisations that have been approached to supply data with no result, including type of data sought and reason why it has not been supplied.

It is likely that many organisations hold data that has not yet been contributed to an EMODnet portal. It will therefore be useful to view the lists of those who have been asked but have not responded. Have all portals exhausted all potential suppliers? Have all portals followed up a negative response and at least obtained a reason? Although this will be qualitative data it will provide much information about logjams such as confidentiality issues, commercial interests, lack of knowledge or interest in EMODnet. Information will feed into the videos and online demonstration where it can be used to stress particular points.

Comment: This is not an indicator to create a 'blacklist' but to identify and develop synergies and mobilize the EMODnet themes networks to 'unlock' different sectors.

4) Volume of each data type downloaded from each portal per two-month period and in total

This indicator should identify the usefulness of the data being made available differentiating between standard observations and data products. It will be interesting to see which data sets are downloaded the most and whether any are rarely used. We may be able to combine this data with the feedback comments from the portals to see if there are issues such as ease of access, quality of data etc.

5) Organisations that have downloaded each data type per two-month period and in total

Here we should be able to see who is using the portals. Has the word spread to all sectors including Government, industry and science and are there clear gaps either regionally (e.g. by sea basin) or by sector where we will need to target dissemination activities? This could include the amount of EMODnet data imported by users such as the Common Information Sharing

Environment (CISE). Are there other reasons for any gaps in usage such as ease of access, quality of data etc?

6) Using user statistics to determine the main pages utilised and to identify data products being used per two-month period.

Here we should be able to see how long the user spent on the website (residence time) and on which page the user quits their visit, or how they navigated the site. This may distinguish serious users from more casual visitors. It may also show that some areas of the sites remain opaque to users or are less valuable. In some cases it may also indicate that data was not there or not sufficient when a user reaches the end of a navigation route but does not download data. The chemistry portal has shown an example (<http://gher-diva.phys.ulg.ac.be/emodnet/>) where the user defines what data is being sought.

Comments: Filter out any internal/contractor traffic.

7) List of what the downloaded data has been used for (divided into categories e.g. Government planning, pollution assessment and (commercial) environmental assessment, etc)

This will be qualitative data but it should be very useful in proving the value of EMODnet and identifying which sector is benefiting the most. It may indicate that some sectors are not familiar with the portals and this should focus part of the dissemination. It may need to be followed up with questionnaires about how the data could be made more useful e.g. if we believe a certain sector should be using the data but they have a low level of access.

Comment: This can be through feedback on the website or requests for collaboration on case studies. User feedback forms on the thematic lots and follow procedures will need to be standardized.

8) List of organisations that have downloaded data from more than one portal in a given space of time e.g. 2 weeks (assumed to be for a single project).

More sophisticated users may wish to download more than one data type and from more than one portal so as to combine data sets e.g. adding biology data to habitat maps and overlaying chemical pollution data. Knowing who is doing this should allow targeting of information to where it is needed most.

Comment: This will in first instance be an aggregation of the information provided (indicator #5) by the thematic lots.

9) Interoperability of data of different types and from different portals

The take up of data from the portals and degree of added value gained when different data sets are combined will partly depend on the interoperability of that data. We can run tests on this and ask for user feedback. This will be essential information for guiding the development of the EMODnet entry portal.

Comment: The user case studies development as part of the entry portal and the sea basin checkpoint challenges will contribute towards this measurement

10) Monitoring level of interaction with member states national processes for data stewardship (e.g. MEDIN, IFREMER-Sextant, MaDINA)

One of the key aims of EMODnet is for it to play a central role in the Marine Strategy Framework Directive and the Europe 2020 goals. Under Article 19 of the Marine Strategy Framework Directive, there is a requirement for Member States to provide access to data resulting from the assessments and monitoring.

Comment: Presentations or papers presented at MODEG meetings relating to cross linkage with EMODnet and external and internal process will form part of this indicator.

DG MARE proposed indicators

11) Management Budget Overview

This is to provide insight into the actual spending of overheads and costs in relation to the budget allocations initially requested for different work packages. To be reported on six monthly basis.

12) EMODnet Citations (academic journals, scientific press, mainstream media, websites)

This is to track material found in the public domain at national, regional and international level. This will provide an indication of the nature and extent of references attributed to EMODnet. It will be a combined effort between the secretariat and the thematic lots to collate this information. To be reported on an annual basis. Please note that if you are aware of an upcoming time critical / notable event this can be reported as part of the bi-monthly report.

Reporting format and frequency of Indicators

The Secretariat proposes to include **indicators 1-6 (possibly 7)** as part of the bi-monthly reporting of the thematic assembly groups (see proposed template Appendix 1) as they overlap with the current requirements of reporting by the thematic lots as per tender MARE/2012/10. In addition to providing progress it would standardize the bi-monthly reports across the thematic lots.

With reference to **indicators 7 & 8 & 9 & 10** the Secretariat proposes that these are reported on as part of the Steering Committee entry portal program of work as they relate to interoperability, case studies and data products and interaction with the Marine Strategy Framework Directive.

The indicators **11 & 12** will be reported on an annual basis.

Annex I Proposed Bi-monthly report template parameters

All submission should include a cover page indicating the thematic lot and the time period the submitted bi-monthly report covers.

Proposed items in report:

- 1) Meetings held
- 2) Work package/task updates (as per their task outlined in tender)
- 3) Difficulties encountered (technical, data provision)
- 4) User statistics
 - a. Monthly page views (*This relates to indicator 6*)
 - b. Most popular page (*This relates to indicator 6*)
 - c. Number of data/data products downloaded (*This relates to indicator 4*)
 - d. Types of user downloading where know (public, private, research) (*indicator 5 and possibly indicator 7*)
- 5) Data statistics
 - a. Databases connected to the system (*this relates to indicator 1*)
 - b. Data records in total and available for download without restriction of re-uses (*this relates to indicator 1*)
 - c. Providers (*this relates to indicator 2 & 3*) (*Propose to include data providers which are not partner stakeholders*)
- 6) User feedback received /Presentation given/Case studies

Annex II Proposed Reporting timetable

Bi-monthly reporting in the standardized template will be expected from 2014 onwards, to be received by the secretariat at the close of business on the following days.

1. Reporting period Jan-Feb 2014 : **3th March**
2. Reporting period March-April 2014: **5th May**
3. Reporting period May-June 2014: **7th July**
4. Reporting period July-August 2014: **1st Sept**
5. Reporting period September-October 2014: **3th November**
6. Reporting period November-December 2014: **5th Jan 2015**