# EMODnet Secretariat progress update – January 2016

This update is largely based on the bi-monthly reports of the thematic lots covering the months November-December 2015 supplemented with updates from the Secretariat.

# Current progress highlights

## Main highlights

- Two new habitat maps from surveys for the Atlantic were incorporated in **EMODnet Seabed Habitats** by the Spanish Institute of Oceanography (IEO).

- **EMODnet Coastal Mapping** launched its website [2] on 23 December, providing a general description of the project as well as access to a first compilation of datasets.

- In the last two months **EMODnet Biology** has published 21 new datasets on its portal.

- The number of platforms providing data (both real time and historical data) as well as the total number of datasets made available by **EMODnet Physics portal** continued to increase steadily (3% and 6% with respect to the previous period).

- Websites for all the **new EMODnet sea-basin Checkpoints** (Artic [3], Atlantic [4], Baltic [5] and Black Sea [6]) are now up and running.

- EMODnet thematic and regional project coordinators met at the 5th EMODnet Steering Committee Meeting (9-10, Brussels) following **meetings with INSPIRE and MSFD experts** to consider how to serve more data useful for MSFD, promote INSPIRE compliancy and develop more useful products and services.

## Specific progress and achievements of thematic lots

- **EMODnet Bathymetry** participated actively in the INSPIRE-EMODnet Technical Meeting held in Brussels on 7-8 December 2015. The thematic lot made plans to verify the INSPIRE compliance of its services using the INSPIRE Geoportal Metadata Validator [7]. In a further step it will also look into achieving INSPIRE compliance at data model level with the support of the Joint Research Centre/INSPIRE team. Work has also progressed on setting up a test Web Coverage Service (WCS) for the EMODnet Digital Terrain Model (DTM) which will allow the user to draw polygons for

downloading subsets of the DTM. This will be reviewed and further developed in the coming period.

- **EMODnet Geology** has upgraded its portal with new functionalities to improve the user experience. This new version will be available in February 2016. Project outputs will be accessible as before, but it will also be possible to browse products by type of resource or topic of interest, with enhanced filtering possibilities using keywords. Users will be able not only to visualize the maps, but also to download them via Web Map Services (WMS) as well as downloading the associated metadata. It now also includes a form for users to provide feedback.

- Two new habitat maps from surveys for the Atlantic were incorporated in **EMODnet Seabed Habitats** by the Spanish Institute of Oceanography (IEO). During the process, IEO was in contact with Joint Nature Conservation Council (JNCC), curator of the webGIS, who assisted with the instructions/guidelines for submission. The process ran smoothly and can be considered as a successful test of usefulness of the guidelines. In addition, a new layer for light penetration in marine water will also be made freely available shortly. This follows a modification in an algorithm used by the European Spatial Agency to perform atmospheric corrections and subsequent re-processing of data to obtain an homogeneous map for the whole of Europe.

- One of the highlights in this period for **EMODnet Chemistry** was the EMODnet Information Day in Rome (25th November), organized by the Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) together with the Instituto Nazionale de Geophysica e Volcanologia (INGV) and some other EMODnet Italian partners (Cogea and ETT) and with the endorsement of Institute for Environmental Protection and Research (ISPRA), the Italian Ministry of Environment and DG MARE. Some steps were also taken in order to sign a Memorandum of Understanding with the Black Sea Commission now awaiting final approval.

- In the last two months **EMODnet Biology** has published 21 new datasets on its portal. It also published its guidelines on the mobilization of historical data and received the last historical dataset (benthos and zooplankton from NW Black Sea) rescued and digitized through the archaeology grants programme. Collaboration with EMODnet Seabed Habitats has intensified and a teleconference was held aiming at improving the calibration of seabed habitat products with biological ground truth data. The two thematic lots also discussed the possibility of joining forces to push for a European benthic survey.

- The **EMODnet Physics** portal has been updated and now provides access to new sea level and ice cover products, thanks to the collaboration with Permanent Service for Mean Sea Level (PSMSL) and the Copernicus Marine Environmental Monitoring Service (CMEMS) respectively. EMODnet Physics has very beneficial synergies but also potential overlaps with CMEMS. To make sure that both initiatives are well coordinated, a meeting with Mercator (appointed to implement CMEMS) was held in December 2015. EMODnet Physics was also present in the WP7 H2020 AtlantOS meeting. EMODnet physics is considered one of the key partners to give services both to data users and to data providers (networks) in the framework of AtlantOS project.

- Main activities within the **EMODnet Human Activities** lot included the drafting of guidelines for data updating and transmission. These guidelines aim to harmonize the various dataset schemas used in EMODnet Human Activities, as well as to streamline the updating of thematic datasets. In addition to this, considerable progress has been made in the implementation of a SEO (Search Engine Optimization) strategy in order to improve the visibility of the portal. As part of the strategy, tags were added to all main pages and dataset description pages. The SEO also included building a sitemap and submitting it to Google Search Console to inform Google and other search engines about the organization of the site content. This enables more intelligent crawling of the site and an improvement of the number of visits.

- **EMODnet Coastal Mapping** launched its [website](#) [2] on 23 December, providing a general description of the project as well as access to a first compilation of datasets. New ones will be incorporated as work progresses. One of the main outcomes of the project will be the delivery of an algorithm that can be used for a better planning of coastal mapping surveys. As part of the preparatory work to develop the algorithm, partners validated a questionnaire which will serve to gather and summarize the consortium expertise in the field. Finally, the consortium agreement was also signed in this period.

## EMODnet sea-basin checkpoints progress

Websites for all the new sea-basin checkpoints ([Artic](#) [3], [Atlantic](#) [4], [Baltic](#) [5] and [Black Sea](#) [6]) are now up and running. They have been designed based on the visual identity and common style elements from EMODnet and for the time being only contain basic information about the aims and scope of the projects. The websites will be populated with outputs from the challenges for each sea basin as the work progresses. In addition, the four new checkpoints reported progress on their literature survey task which should summarize previous studies on the adequacy of data in each sea basin. To exchange information and better understand their position in the range of EMODnet activities, the coordinators for the Atlantic, Baltic and Black Sea checkpoints joined the EMODnet Steering Committee (SC) meeting which took place in December 2016. At the same meeting, the Mediterranean and North Sea Checkpoints shared their insight and updated the Steering Committee about the progress achieved during the last 6 months of their respective projects.

# EMODnet data portals usage

Thematic portals regularly report their user statistics as part of the EMODnet progress indicators which allows them to track interest and identify areas for improvement. The below summary covers the two month period November-December 2015.

- The number of DTM downloads through **EMODNET Bathymetry** was slightly lower than in the previous bi-monthly period but it remains high (3874). Similarly, the viewing and downloading web services are intensively used, with 50 percent of the visitors coming from the US, Spain and Germany.

- Following the upgrading of **EMODnet Geology portal** it is expected that statistics concerning its usage will be available from March 2016 on and will be accounted for accordingly in future progress reports.

- Few changes were noted in the number of maps downloaded (451) and number of visitors (1109) to the **EMODnet Seabed Habitats** portal with respect to the previous period. Once again, most of the visitors (43%) indicated that they would be using the maps for research. The most popular product was the map corresponding to Phase 1 Predicted habitats - North Sea and Celtic Sea (downloaded 70 times).

- Steady progress was observed in the volume of data made available through the **EMODnet Chemistry** portal (from 777290 Common Data Indices to 785780). A total of 28 transactions were recorded from 10 different users downloading 118001 CDIs. Similar to previous periods, Black Sea products were the most demanded using WMS services. The most popular product downloaded directly was the 10-years running averages of Water body nitrate in the Mediterranean Sea.

- The **EMODnet Biology** portal received a total of 244 download requests as opposed to 195 in the previous period Users feedback indicate that the main purpose for downloading data from the portal is scientific, in many cases as part of PhD dissertations.

- The number of platforms providing data (both real time and historical data) as well as the total number of datasets made available by **EMODnet Physics portal** continued to increase steadily (3% and 6% with respect to the previous period). It is interesting to note that Italy is still the country requesting the most data downloads.

- The number of visits to **EMODnet Human Activities** and the type of products downloaded from the portal can change greatly with time. In this case, more than half of the users identified themselves as belonging to the "Environment sector" and one fourth of the downloads (23 out of 101) were related to ocean energy.

# Challenges to be addressed

With the exception of Coastal Mapping, the thematic portals did not report on any specific challenges encountered in this period. Coastal Mapping did mention two main difficulties, the first being the launch of the portal in a short timeframe (by the end of 2015). This was successfully accomplished. The second most critical issue relates to the production of the algorithm for coast survey planning, due in March 2016, as it depends heavily on inputs from almost the whole partnership in a very short time.

Other more specific challenges were identified and discussed during the EMODnet Steering Committee Meeting and are recorded in the meeting minutes.

# Recent meetings and events

- EMODNet Bathymetry and EMODnet Chemistry were presented together with SeaDataNet at the AGU 2015 Fall Conference – EarthCube Research Coordination Networks (RCN) meeting in San Francisco, USA (13 December 2015).

From 7-10 December 2015, a very intense series of events and meetings took place in Brussels:

- On 7th December, Jan-Bart Calewaert presented EMODnet at the [Conference on maritime spatial planning and marine environment](#) [8].

- An [INSPIRE-EMODnet](#) [9] Technical Meeting took place on 7-8 December 2015 which considered the practical and technical aspects of EMODnet delivering INSPIRE-compliant data services.

- The 3rd EMODnet-MSFD Coordination Meeting was also organised during the same week (8-9 December 2015, Brussels), chaired by David Connor, from DG Environment and attended by more than 20 people, including representatives of the Regional Sea Conventions. Most of the EMODnet thematic lots together with the sea-basin checkpoints were also represented in both meetings.

- Finally, the 5th EMODnet Steering Committee Meeting was held on the 9-10 December, in DG MARE premises in Brussels. It was the first time that the Black Sea, the Atlantic and the Baltic checkpoints attended a SC meeting. Thematic lots and sea-basin checkpoints reviewed the progress accomplished in the last semester within their respective projects. The main outputs and list of actions stemming from the previous INSPIRE and MSFD meetings were discussed by the SC Committee. Some time was also devoted to the evaluation of the results of the EMODnet conference and to discuss the main challenges in the coming year. The minutes of the SC Committee meeting are available on the Maritime Forum [here](#) [10].

# Upcoming EMODnet meetings and events

EMODnet will be present at the VLIZ Marine Scientist Day, Bruges, 12 February 2016. The Secretariat will give a pitch presentation about the EMODnet initiative and raise awareness amongst young scientists about the importance of contributing to it. The event will be also be attended by private companies in the marine realm.

Following the EMODnet information days organised in France (January 2015) and Italy (November 2015, see previous section), a similar event will be organised in Hamburg, Germany on the 18th February 2016.

Other important events in the pipeline are the EGU [11] (European Geophysical Union) Conference in Vienna on 17-22 April and the European Maritime Day [12] in Turku (Finland) on 18-19 May 2016.

# More information

More detailed information can be found on the EMODnet thematic and sea-basin checkpoint portals, also accessible through the EMODnet Central Portal [13].

## Thematic lot portals

- EMODnet Bathymetry - www.emodnet-bathymetry.eu &nbsp [14];
- EMODnet Geology - www.emodnet-geology.eu [15]
- EMODnet Seabed habitats - www.emodnet-seabedhabitats.eu [16]
- EMODnet Chemistry - www.emodnet-chemistry.eu [17]
- EMODnet Physics - www.emodnet-physics.eu [18]
- EMODnet Biology - www.emodnet-biology.eu [19]
- EMODnet Human Activities - www.emodnet-humanactivities.eu [20]
- EMODnet Coastal Mapping - www.emodnet-coastal-mapping.eu [21]


## Sea-basic checkpoint portals

- Mediterranean - www.emodnet-mediterranean.eu [22]
- Artic checkpoint – www.emodnet-arctic.eu&nbsp [23];
- Atlantic checkpoint - www.emodnet-atlantic.eu [24]
- Baltic checkpoint - www.emodnet-baltic.eu [25]
- Black Sea checkpoint - www.emodnet-blacksea.eu [26]

[4] http://www.emodnet-atlantic.eu/

[5] http://www.emodnet-baltic.eu/

[6] http://www.emodnet-blacksea.eu/

[7] http://inspire-geoportal.ec.europa.eu/validator2/

[8] http://ec.europa.eu/maritimeaffairs/events/2015/12/events_20151207_01_en.htm

[9] https://webgate.ec.europa.eu/maritimeforum/en/node/3871

[10] https://webgate.ec.europa.eu/maritimeforum/en/node/3886

[11] http://egu2016.eu/home.html

[12] http://ec.europa.eu/maritimeaffairs/maritimeday/en/home

[13] http://www.emodnet.eu/

[14] http://www.emodnet-bathymetry.eu &amp;nbsp

[15] http://www.emodnet-geology.eu

[16] http://www.emodnet-seabedhabitats.eu

[17] http://www.emodnet-chemistry.eu

[18] http://www.emodnet-physics.eu

[19] http://www.emodnet-biology.eu

[20] http://www.emodnet-humanactivities.eu

[21] http://www.emodnet-coastal-mapping.eu

[22] http://www.emodnet-mediterranean.eu

[23] http://www.emodnet-arctic.eu&amp;nbsp

[24] http://www.emodnet-atlantic.eu

[25] http://www.emodnet-baltic.eu

[26] http://www.emodnet-blacksea.eu