



## **EMODNet Bathymetry - building and providing a high resolution digital bathymetry for European seas**

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Access to marine data is a key issue for the implementation of the EU Marine Strategy Framework Directive (MSFD). The EU communication 'Marine Knowledge 2020' underpins the importance of data availability and harmonising access to marine data from different sources. The European Marine Observation and Data Network (EMODnet) is a long term marine data initiative from the European Commission Directorate-General for Maritime Affairs and Fisheries (DG MARE) underpinning the Marine Knowledge 2020 strategy. EMODnet is a consortium of organisations assembling European marine data, data products and metadata from diverse sources in a uniform way. The main purpose of EMODnet is to unlock fragmented and hidden marine data resources and to make these available to individuals and organisations (public and private), and to facilitate investment in sustainable coastal and offshore activities through improved access to quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use.

The EMODnet data infrastructure is developed through a stepwise approach in three major phases. Currently EMODnet is in the 2nd phase of development with seven sub-portals in operation that provide access to marine data from the following themes: bathymetry, geology, physics, chemistry, biology, seabed habitats and human activities. EMODnet development is a dynamic process so new data, products and functionality are added regularly while portals are continuously improved to make the service more fit for purpose and user friendly with the help of users and stakeholders.

The EMODnet Bathymetry project develops and publishes Digital Terrain Models (DTM) for the European seas. These are produced from survey and aggregated data sets, that are indexed with metadata by adopting the SeaDataNet Common Data Index (CDI) data discovery and access service and the SeaDataNet Sextant data products catalogue service. The new EMODnet DTM will have a resolution of 1/8 arcminute \* 1/8 arcminute and will cover all European sea regions. Use is made of available and gathered surveys and already more than 10.000 surveys have been indexed by 24 European data providers and originating from more than 120 organisations. Also use is made of composite DTMs as generated and maintained by several data providers for their areas of interest. Already 44 composite DTMs are included in the Sextant data products catalogue. For areas without coverage use is made of the latest global DTM of GEBCO who is partner in the EMODnet Bathymetry project. In return GEBCO integrates the EMODnet DTM to achieve an enriched and better result. The catalogue services and the generated EMODnet can be queried and browsed at the dedicated EMODnet Bathymetry portal which also provides a versatile DTM viewing service with many relevant map layers and functions for retrieving. Activities are underway for further refinement following user feedback. The EMODnet DTM is publicly available for downloading in various formats.

The presentation will highlight key details of EMODnet Bathymetry project, its portal and views on the new EMODNet Digital Bathymetry for European seas as to be released early 2015.