



European Marine Observation and Data Network (EMODnet) for Geology – A sea-bed substrate map for European marine areas

Ulla Alanen (1), Anu Kaskela (1), Aarno Kotilainen (1), Alan Stevenson (2), and EMODnet-Geology 2 Partners (3)

(1) Geological Survey of Finland (GTK), Espoo, Finland (aarno.kotilainen@gtk.fi), (2) British Geological Survey (BGS), Edinburgh, U.K., (3) EMODnet-Geology 2

The European Union's (EU) Marine Strategy Framework Directive aims to achieve good environmental status of the EU's marine waters by 2020. In order to imply effective management of the broad marine areas spatial datasets covering all European marine areas are needed. In response the European Commission has adopted the European Marine Observation and Data Network (EMODnet) to assemble fragmented marine data products into publicly available datasets covering broad areas.

The marine departments of the geological surveys of Europe (through the Association of European Geological Surveys – Euro GeoSurveys) took an initiative and launched the first EMODnet –Geology project (2009-2012) to compile and harmonize information from the Baltic Sea, Greater North Sea and Celtic Sea at the scale of 1:1 000 000 (<http://www.emodnet-geology.eu/>). The second phase of the EMODnet -Geology project started in 2013 with an expanded sea area. The 36 members from 31 countries will compile marine geological information at a scale of 1:250,000 from all European sea areas (e.g. the White Sea, Barents Sea, the Iberian Coast, and the Mediterranean Sea within EU waters).

The project includes collecting and harmonizing the first sea-bed substrate map for the European Seas. The data will be essential not only for geologists but also for others interested in marine sediments like marine managers and habitat mappers. A 1:250,000 GIS layer on sea-bed substrates will be delivered in the OneGeology-Europe portal, replacing and upgrading the existing 1:1 million map layer from the previous phase. A confidence assessment will be applied to all areas to identify the information that underpins the geological interpretations.