



Seabed substrates and sedimentation rates of the European Seas - EMODnet-Geology2

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

(1) Geological Survey of Finland, Espoo, Finland (anu.kaskela@gtk.fi), (2) British Geological Survey, United Kingdom, (3) EMODnet

Seas and oceans are important for us. However, increased human activities in marine and coastal areas have altered marine ecosystems worldwide. To ensure sustainable use of marine resources and health of the seas, improved management is needed.

The European Union's (EU) Marine Strategy Framework Directive targets to achieve Good Environmental Status (GES) of the EU's marine waters by 2020. However, it has been acknowledged that the poor access to data on the marine environment was a handicap to government decision-making, a barrier to scientific understanding and a break on the economy. The effective management of the broad marine areas requires spatial datasets covering all European marine areas. As a consequence the European Commission adopted the European Marine Observation and Data Network (EMODnet) in 2009 to combine dispersed marine data into publicly available datasets covering broad areas.

The second phase of the EMODnet -Geology project started in 2013 and it will run for 3 years. The partnership includes 36 marine organizations from 30 countries. The partners, mainly from the marine departments of the geological surveys of Europe (through the Association of European Geological Surveys – EuroGeoSurveys), aim to assemble marine geological information at a scale of 1:250,000 from all European sea areas (e.g. the White Sea, Baltic Sea, Barents Sea, the Iberian Coast, and the Mediterranean Sea within EU waters). In comparison to the urEMODnet project (2009-2012) the data will be more detailed and aim to cover much larger area.

The project includes collecting and harmonizing the first seabed substrate map for the European Seas, as well as data/map showing sedimentation rates at the seabed. 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 seabed substrates will be delivered in the portal, in addition to the existing 1:1 million map layer from the previous phase that will be updated with data from the new sea areas. A confidence assessment will be applied to all areas to identify the information that underpins the geological interpretations.

Further information about the EMODnet-Geology 2 project is available on the portal (<http://www.emodnet-geology.eu/>).