Seabed substrates and sedimentation rates of the European Seas – EMODnet Geology

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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 is 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 Baltic Sea, the Barents Sea, the North 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 EMODnet Geology project includes collecting and harmonizing the first seabed substrate map for the European Seas, as well as data 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 an updated 1:1 million map layer from the previous phase (2009-2012). A confidence assessment will be applied to all areas to identify the information that underpins the geological interpretations.