

EurOBIS as biogeographic data system for the European Marine Observation and Data Network (EMODnet)

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One of the key-actions of the new integrated maritime policy of the European Commission is the creation of a sustainable European Marine Observation and Data Network (EMODNet) in order to assemble fragmented and inaccessible marine data into interoperable, contiguous and publicly available data streams for European maritime basins. The Marine Knowledge 2020 consultation indicated the need to bring together marine data from different sources with the aim of helping industry, public authorities and researchers to find the data and make more effective use of them by developing new products and services and improving our understanding of how the seas behave. The Ocean Biogeographic Information System (OBIS) seeks to absorb, integrate, and assess isolated datasets and to make these data freely available and easily accessible. The system aims at stimulating research about our oceans to generate new hypotheses concerning evolutionary processes, species distributions, and roles of organisms in marine systems on a global scale.

As both initiatives have partly overlapping motivation and objectives, the European Ocean Biogeographic Information System – EurOBIS – was used as the data engine for the biological component of the EMODnet system. This methodology has multiple advantages: i) the technology developed within the framework of EurOBIS could be reused for the development of the EMODnet biology dataportal and vice versa, ii) data collected within the framework of EMODnet biology is directly accessible for users of the EurOBIS database and vice versa, iii) the user communities of both initiatives merge, increasing the overall impact of the system and iv) the overall strategy is cost efficient avoiding duplication of effort.

All data go through a number of quality control procedures before they are made available online, assuring a minimum level of quality necessary to put the data to good use. At this moment EurOBIS also invests in the development of relevant analysis tools and applications that can run on the EurOBIS data system, while EMODnet biology develops new data products and services illustrating the temporal and geographic variability of occurrences and abundances of European marine protected and indicator species of high relevance for environmental directives and legislations. At this moment the database contains 16,316,107 distribution records from 414 datasets or data providers of which 14,105,475 records are quality controlled. Data are available at <http://bio.emodnet.eu/portal> at www.eurobis.org and at www.iobis.org.