



SeaDataNet II - Second phase of developments for the pan-European infrastructure for marine and ocean data management

Dick M. A. Schaap (1) and Michele Fichaut (2)

(1) Marine Information Service MARIS. B.V, Voorburg, Netherlands (dick@maris.nl), (2) IFREMER, Brest, France (michele.fichaut@ifremer.fr)

The second phase of the project SeaDataNet started on October 2011 for another 4 years with the aim to upgrade the SeaDataNet infrastructure built during previous years. The numbers of the project are quite impressive: 59 institutions from 35 different countries are involved. In particular, 45 data centers are sharing human and financial resources in a common efforts to sustain an operationally robust and state-of-the-art Pan-European infrastructure for providing up-to-date and high quality access to ocean and marine metadata, data and data products.

The main objective of SeaDataNet II is to improve operations and to progress towards an efficient data management infrastructure able to handle the diversity and large volume of data collected via the Pan-European oceanographic fleet and the new observation systems, both in real-time and delayed mode. The infrastructure is based on a semi-distributed system that incorporates and enhance the existing NODCs network.

SeaDataNet aims at serving users from science, environmental management, policy making, and economical sectors. Better integrated data systems are vital for these users to achieve improved scientific research and results, to support marine environmental and integrated coastal zone management, to establish indicators of Good Environmental Status for sea basins, and to support offshore industry developments, shipping, fisheries, and other economic activities. The recent EU communication “MARINE KNOWLEDGE 2020 - marine data and observation for smart and sustainable growth” states that the creation of marine knowledge begins with observation of the seas and oceans.

In addition, directives, policies, science programmes require reporting of the state of the seas and oceans in an integrated pan-European manner: of particular note are INSPIRE, MSFD, WISE-Marine and GMES Marine Core Service. These underpin the importance of a well functioning marine and ocean data management infrastructure.

SeaDataNet is now one of the major players in informatics in oceanography and collaborative relationships have been created with other EU and non EU projects. In particular SeaDataNet has recognised roles in the continuous serving of common vocabularies, the provision of tools for data management, as well as giving access to metadata, data sets and data products of importance for society.

The SeaDataNet infrastructure comprises a network of interconnected data centres and a central SeaDataNet portal. The portal provides users not only background information about SeaDataNet and the various SeaDataNet standards and tools, but also a unified and transparent overview of the metadata and controlled access to the large collections of data sets, managed by the interconnected data centres.

The presentation will give information on present services of the SeaDataNet infrastructure and services, and highlight a number of key achievements in SeaDataNet II so far.