



Upgrade Black Sea SCENE

News Spot No. 2

The project

Upgrade Black Sea Scene (www.blackseascene.net) is a three year project supported by the European Union under the Seventh Framework Program (FP7). It provides mostly information about metadata. Metadata is commonly defined as *data that describes other data or information about the meaning of other data*. The metadata services, mostly catalogues, are aimed to make Black Sea scientific information and data easier traceable by scientists and the general public. In the project, most partners are identified as data centers or holders of various data. Because of varying formats and quality one of the biggest challenges is common communication standards and technologies ensuring data centers interoperability.

The networking and exchange between national and regional institutes holding marine data is of great importance for a wide range of scientific, management and other purposes. Hence the significance of the promotion of a coherent scientific research infrastructure of 51 networking partners, holders of marine data from the Black Sea countries and the EU. This metadata infrastructure is best known as the BlackSeaScene.net (www.blackseascene.net), currently supported by the FP7 project Upgrade Black Sea Scene.

Research Infrastructure

The Upgrade Black Sea Scene is aimed at developing the research infrastructure of marine environmental institutes and organizations from the Black Sea countries. Upgrade Black Sea SCENE builds upon the successful experience of its predecessor Black Sea SCENE building and extending the existing research infrastructure with an additional 19 marine environmental institutes/organizations from the 6 Black Sea countries. Implementing FP6 RI SeaDataNet project standards regarding common communication standards and adapted technologies will ensure the data centers interoperability (<http://www.seadatanet.org/>). Main output will be on-line access to in-situ and remote sensing data, meta-data and products.

Further to that, the project aims to improve and harmonize the marine data management practices in the region, and expand the coverage of the data infrastructure. Furthermore, it will enhance the exchange of scientific knowledge, and regional cooperation of institutes for environmental problems and better protection, rehabilitation and sustainable development of the Black Sea ecosystem.

Objectives

Among the principal objectives of the project are:

- to implement common communication standards and adapted technologies to ensure the interoperability of data centers around the Black Sea;
- to network the existing and new Black Sea data centers, active in data collection, and provide integrated databases of standardized quality online;
- to realize and improve online access to in situ and remote sensing data, metadata and products;
- to adopt standardized methodologies for data quality checking to ensure the quality, compatibility and coherence of the data generated and issued by many different sources.

A substantial amount of data is already available through the Black Sea Common Data Index version 1 (CDI V1) data access service which contains currently more than 90 000 individual



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entries. In the coming months additional data centers from the network will further populate the CDI metadatabase and other institutes will be encouraged to participate. The data services are aimed to make Black Sea scientific information and data more easily accessible for scientists and the general public in order to be better informed and prepared to approach issues related to the sea.

Services

The project metadata services are the following:

- 1) EDMED – Marine and Environmental Dataset catalogue;
- 2) Data Quality Control – DQC methods overview and reference to support tools;
- 3) EDMERP – Marine and Environmental Project catalogue;
- 4) EDMO – Directory of Marine Organizations active in Black Sea region;
- 5) CSR – Directory of Marine Research Cruises in the Black Sea;
- 6) Scientists – Directory of Marine Scientists active in Black Sea region;
- 7) Bibliography – Scientific Reports and Publications on the Black Sea;
- 8) Socio-economic Data on the Black Sea;
- 9) Black Sea data products – an overview of specific data products developed under SeaDataNet by Black Sea partners; and
- 10) Black Sea EDIOS (ASCABOS project) – an overview of the current operational oceanography in the Black Sea by the bordering countries.

The metadata services are available at the project website and are being upgraded in the 2009 – 2011 period. The Black Sea Scene Common Data Index is the project Data Access service. The Common Data Index (CDI) was initiated in the Sea-Search project. As part of SeaDataNet it is being further developed and extended in data coverage to all SeaDataNet data centers and it is now also used in the Black Sea satellite project (Upgrade) BlackSeaScene. Its primary objective is to give users a highly detailed insight in the availability and geographical spread of marine data across the different data centers and institutes across Europe. The CDI provides an index (metadatabase) to individual data sets. Furthermore it provides direct online data access or direct online requests for data access or file downloads.

Currently, the Black Sea CDI V1 metadatabase contains individual data entries from 4 Data Holding Centers from 4 of the countries around the Black Sea, covering a broad scope and range of data, held by these organizations (originators may be other institutes!). In the coming months additional data centers from the BlackSeaScene network will further populate the CDI metadatabase and other institutes in their countries will be encouraged to participate. Querying CDI: The CDI metadirectory can be queried and entries can be viewed by users. A versatile user interface, combining alphanumeric search criteria with a dynamic mapping tool, is available for users to specify their query requirements. For purposes of standardization and international exchange the ISO19115 metadata standard has been adopted.

For the full procedure of CDI V1 please check:

http://www.seadatanet.org/data_access/common_data_index_cdi.

Full documentation on the CDI format, MIKADO Tool and supporting lists can be found at: <http://www.seadatanet.org>

The project also holds general information about the Black Sea and the neighbouring countries. The page dedicated to project partners provides direct links with the European Database of Marine Organizations (EDMO). Population of the metadatabase with more individual entries the coming months will continue.