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UP-GRADE BS-SCENE: Up-Grade Black Sea Scientific Network

The Black Sea is one of the world's most remarkable seas. It is almost completely cut off from the oceans but is up to 2 212 metres deep. What dark secrets lurk beneath it? - A wealth of biological diversity and a maze of scientific wonders for marine biologists, environmentalists, conservationists, oceanographers and hydro-meteorological experts for a start. Volumes of environmental and socio-economic data have already been gathered by Black Sea institutions. Thanks to the Black Sea SCENE project, 25 partners from countries bordering on the Black Sea – Ukraine, Russia, Turkey, Romania, Bulgaria, Georgia – together with seven partners from EU Member States and one Associated State have set up a network of research institutes, universities and non-governmental organisations (NGOs) from the region, featuring a virtual data infrastructure to facilitate access to information on the Black Sea. The project UP-GRADE BS SCENE aims to continue the work in this area.

● INTO THE DEEP

Strategically placed between the EU, candidate countries and neighbours, the Black Sea region constitutes an axis of increasing geopolitical importance for Europe. With its vast marine, energy and other natural resources, unique ecosystems and diverse interests ranging from shipping to tourism and fisheries to oil pipelines, nowhere is regional cooperation busier or more diverse. But the area is heavily populated and seriously polluted, so nowhere is regional environmental cooperation as necessary.

Eutrophication due to excessive loads of nutrients from the rivers running into it - like the Danube, Dnieper and Don - and directly from the six coastal countries, has led to radical changes in the ecosystem over the last 50 years. This has had a major transboundary impact on biological diversity and human use of the sea.

● FEEDING INTO GLOBAL CHANGE AND ECOSYSTEM RESEARCH

The Black Sea SCENE research infrastructure stimulated scientific cooperation, exchange of knowledge and expertise, and strengthened the regional capacity and performance of marine environmental data and information management. It also underpinned harmonisation with European marine data quality control/assessment procedures and adoption of international meta-data standards and data-management practices, providing improved data and information delivery services for the Black Sea region at a European level.

UP-GRADE BS SCENE has multiple objectives: it is working to extend the existing research infrastructure with 19 marine environmental institutes/organisations from the six Black Sea countries. In total, 51 partners are involved, of which 43 are located in Black Sea countries. This should improve and harmonise the marine data management practices in the

While there is already a good institutional framework for regional environmental cooperation in the Black Sea-Danube area, what is needed is better coordination of all the various initiatives and this is where the Black Sea SCENE project – the predecessor of UP-GRADE BS-SCENE – is helping. It has established a Black Sea Scientific Network of leading environmental and socio-economic research institutes, universities and NGOs from the countries around the Black Sea. In addition, a distributed virtual data and information infrastructure has been developed, populated and maintained by these organisations aiming at improving the identification, access, exchange, quality indication and use of their data and information about the Black Sea.

region, and expand the coverage of the data infrastructure. Furthermore, there should be enhanced exchange of scientific knowledge, and regional cooperation of institutes for environmental problems and better protection, rehabilitation and sustainable development of the Black Sea ecosystem.

The project also aims to implement the results of the joint research activities of the FP6 SeaDataNet project – specifically common communication standards and adapted technologies to ensure the datacenters interoperability.

Networking is another priority, in particular the existing and new Black Sea data centres, active in data collection, and providing integrated databases of standardised quality online. The project aims to realise and improve online access to in-situ and remote sensing data, meta-data and products, and to adopt standardised methodologies for data quality checking

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to ensure the quality, compatibility and coherence of the data issuing from so many sources.

Transnational access activities will provide online access to national and international marine environmental and socio-economic data and information services from the data institutes within the Black Sea region. The services to be provided include public access to a range of meta-directories, regulated access to the distributed Black Sea datasets, public access to data-viewing services, and regulated access to Black Sea partner's scientific documents, reports and other scientific services.



Project acronym: UP-GRADE BS-SCENE

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EU project officer: Anna-Maria Johansson

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Partners:

Mariene Informatie Service Maris BV (NL)
International Bureau for Environmental Studies (BE)
Instytut Meteorologii i Gospodarki Wodnej (PL)
Marine Sampling Holland BV (NL)
Fieldfare International Ecological Development PLC (UK)
Marine Hydrophysical Institute - Ukrainian National Academy of Sciences (UA)
Ukrainian Scientific and Research Institute of Ecological Problems (UA)
Odessa National I.I. Mechnikov University (UA)
M V Lomonosov Moscow State University (RU)
P.P. Shirshov Institute of Oceanology of Russian Academy of Sciences (RU)
Institute of Limnology - Russian Academy of Sciences (RU)
Space Research Institute of Russian Academy of Sciences (RU)
All-Russian Research Institute of Hydrometeorological Information-World Data Centre (RU)
Middle East Technical University (TR)
Sinop University*Sinop Fisheries Faculty SNU FF (TR)
Karadeniz Teknik Universitesi (TR)
Institute of Oceanology - Bulgarian Academy of Sciences (BG)
Technical University of Varna (BG)
Institute of Fishing Resources (BG)
National Institute for Marine Research and Development (RO)
National Institute of Marine Geology and Geoecology (RO)
Ivane Javakhishvili Tbilisi State University (GE)
The Centre for Monitoring and Prognostication of the Ministry of Environment Protection and Natural Resources of Georgia (GE)
Mikheil Nodia Institute of Geophysics (GE)



Black Sea NGO Network (BG)

A.o. Kovalevskiy Institute of Biology of Southern Seas (UA)

Hellenic Centre for Marine Research (EL)

Gosudarstvennoe Uchrezhdenie Gosudarstvenniy

Okeanograficheskiy Institut-state Oceanographic Institute SO (RU)

Institute of Hydrometeorology (GE)

Gamma Ltd (GE)

Institute of Water Management (GE)

Taurida v.i. Vernadsky National University (UA)

Institute of Geological Sciences National Academy of Sciences of Ukraine (UA)

Ukrainian Scientific Research Hydrometeorological Institute - Marine Branch (UA)

Southern Scientific Research Institute of Marine Fisheries and Oceanography (UA)

Institut Geoeologii Rossiyskoy Akademii Nauk (RU)

Research Centre Dynamics of the Nearshore Zone (RU)

University of Mining and Geology "Saint Ivan Rilski" (BG)

Central Laboratory of General Ecology

- Zentralna Laboratoriya Po Obschta Ekologiya (BG)

National Institute of Meteorology and Hydrology of the Bulgarian Academy of Sciences (BG)

Danube Delta Biosphere Reserve Authority (RO)

Dokuz Eylul Universitesi (TR)

Istanbul University (TR)

Ankara Universitesi (TR)

Balkan Environmental Association (EL)

Permanent Secretariat of the Commission on the Protection Of the Blacksea Against Pollution (TR)

United Nations Educational, Scientific and Cultural Organization - UNESCO (BE)

Ukrainian Scientific Centre of Ecology of the Sea (UA)

Danube Hydrometeorological Observatory of State

Hydrometeorological Service of Ministry of Ukraine of Emergencies and Affairs of Population Protection from the Consequences of Chornobyl Catastrophe (UA)

University of Cyprus (CY)

Coordinator: Dick M.A. Schaap, Marine Information Service MARIS B.V., the Netherlands, dick@maris.nl

Project webpage: www.blackseascene.net



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