



MISIS "MSFD Guiding Improvements in the Black Sea Integrated Monitoring System"



PRESS RELEASE

BLACK SEA MULTIDISCIPLINARY / SCIENTIFIC JOINT CRUISE

Between, July 22nd to 31st this year, a multidisciplinary scientific expedition takes place in the marine waters of Romania, Bulgaria and Turkey. The cruise is organized within the MISIS Project – “MSFD guiding Improvements in the Black Sea Integrated Monitoring”. The aim of the expedition is to test a new integrated monitoring program that meets the requirements of the Marine Strategy Framework Directive. More than 800 samples will be collected from 17 stations, located in areas with depths of 23-1,094m, and up to a distance of 115 Nm offshore.

For the coastal countries, the Black Sea is a precious heritage that must be protected, preserved and, where possible, restored after decades of serious disturbances caused by various pressures, especially anthropogenic, which resulted in significant loss of the sea’s biological resources. Policy and institutional framework for the community action in the field of marine environmental protection was established by the European Parliament and its Council Directive No. 56, known as the Framework-Directive "Marine Strategy" (MSFD), issued in 2008. Herewith, Article 1 of the Directive establishes “a framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest”.

From the Black Sea regional point of view, the coastal countries do not yet have a common understanding of what “good ecological status” means. They also need to harmonize monitoring systems and assessments, programmes of measures, the process of identification and designation of marine protected areas, etc. Responding to some of the needs identified, the MISIS project was developed in 2011, involving two EU member states - Romania and Bulgaria, and Turkey, under the pre-accession period. One of the project’s work packages is dedicated to review and testing of monitoring programmes so that they meet the requirements of MSFD, both in the laboratory and field techniques, organizing joint cruises as well.

During the 10 days cruise, the MISIS Joint Expedition will be attended by 24 scientists (physicists, chemists, biologists) of five research institutes - the National Institute for Marine Research and Development "Grigore Antipa" and GeoEcoMar Institute from Constanta, Romania, Institute of Oceanology from Varna, Bulgaria (IO -BAS), Sinop Fishery University and TUBITAK Research Center, from Turkey. The expedition will take place onboard the Research Vessel “AKADEMIC”, which belongs to IO-BAS. The Research Vessel provides several modern laboratories and equipment for collecting samples and performing analyzes on board.

Samples of water, sediment and biota will be collected for analyzing physical parameters (such as pressure, temperature, salinity, transparency), chemical parameters (such as hydrogen sulfide, chlorophyll, nitrate, nitrite, ammonium, total nitrogen, total phosphorus and phosphate, silicate) and biological (such as phytoplankton, zooplankton, zoobenthos, ichthyoplankton). A special category of



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chemical samples are those for the detection of heavy metals and persistent organic pollutants in water, sediments and marine organisms, where intercalibration exercise will be conducted by the participating institutions.

A parameter that is not yet included in the regional Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) and national monitoring programmes is the marine litter (ML), as floating in the water, but also deposited on the sea-bed. The MISIS expedition will test the methodologies of collecting and quantifying ML, that were proposed to the EU-member states by the ML Task Group of the EC.

A major expected outcome of the MISIS Joint Expedition is that following the conducted sampling and tests the participating institutions will advance the revision of national monitoring programmes into a unitary cost-effectively monitoring of the Black Sea in line with the MSFD requirements.

Marine Strategy Framework Directive (MSFD) adopted in July 2008 aims at achieving or maintaining a Good Environmental Status by 2020 at the latest. The main objective of the MSFD is to put in place measures to reach or maintain Good Environmental Status (GES) in Europe's seas, using the ecosystem approach.

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