Integrated data management of several regional projects

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The projects

In recent years, Bulgarian Oceanographic Institue(IO-BAS) participated in a series of projects funded by program BG02 "Integrated management of marine and inland waters" financed by the Financial mechanism of the European economic Area (EEA FM) 2019-2014. The aims of these projects were: deploying moored real time monitoring stations; installation of ferry boxes on four ships; collecting samples for priority substances and specific pollutants from water, sediments and biota; creation of tools for assessment of the marine environment through the application of new technologies and best practices to tackle the lack of marine data in two main areas of interest: detection and classification of marine litter in coastal areas, regular monitoring of marine eutrophication of surface waters; filling the gaps of data in preparation of the next assessment of the state of the marine environment, targets and indicators; developing proposals for improved monitoring programs. Data management for the following projects had to be provided - "Improved Maritime Waters Monitoring (IMAMO)", "MARine Litter, Eutrophication and Noise assessment tools (MARLEN)", "Development of the Marine Environment and the IMProvement of monitoring programs developed under MSFD (ISMEIMP)".

The data management

The data management (fig.1) of these projects was assigned to the Bulgarian oceanographic data center (BgODC). The BgOdc had to: handle the real time data coming from AAnderaa real time collector; manage and store data reliably within MS SQL spatial data base; improve and maintenance of BgOdc websites; carry out the real time data QC/QA procedures; registrate maps and data of various formats and sources in GeoServer (most popular open source geospatial server) with combination with GeoNetwork catalog; collate oceanographic data, archive and store them and maximize their utilisation; ensure the availability of high quality oceanographic data for a wide group of users using side kiosks; promote data exchange on national and international level; implement pathways to forward submitted data to the appropriate data repository in the European infrastructures that are driving the EMODnet thematic portal; publicate data on the information kiosks through WEB services to ensure security. All of these changes have greatly



Fig.1 Management flow

increased the performance of the BgODC data center operations in collecting and processing oceanographic data. All SeaDataNet technology and software tools have been used.

The presentation will demonstrate all activities during the management flow.