



## Web catalog of oceanographic data using GeoNetwork

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Most of the data collected, analyzed and used by Bulgarian oceanographic data center (BgODC) from scientific cruises, argo floats, ferry boxes and real time operating systems are spatially oriented and need to be displayed on the map. The challenge is to make spatial information more accessible to users, decision makers and scientists. In order to meet this challenge, BgODC concentrate its efforts on improving dynamic and standardized access to their geospatial data as well as those from various related organizations and institutions. BgODC currently is implementing a project to create a geospatial portal for distributing metadata and search, exchange and harvesting spatial data. There are many open source software solutions able to create such spatial data infrastructure (SDI). Finally, the GeoNetwork open source is chosen, as it is already widespread. This software is free, effective and "cheap" solution for implementing SDI at organization level. It is platform independent and runs under many operating systems. Filling of the catalog goes through these practical steps:

- Managing and storing data reliably within MS SQL spatial data base;
- Registration of maps and data of various formats and sources in GeoServer (most popular open source geospatial server embedded with GeoNetwork) ;
- Filling added meta data and publishing geospatial data at the desktop of GeoNetwork.

GeoServer and GeoNetwork are based on Java so they require installing of a servlet engine like Tomcat. The experience gained from the use of GeoNetwork Open Source confirms that the catalog meets the requirements for data management and is flexible enough to customize. Building the catalog facilitates sustainable data exchange between end users. The catalog is a big step towards implementation of the INSPIRE directive due to availability of many features necessary for producing "INSPIRE compliant" metadata records. The catalog now contains all available GIS data provided by BgODC for Internet access. Searching data within the catalog is based upon geographic extent, theme type and free text search.