

Report on **Training Course on the Establishment of National OceanDataPortal nodes in the Black Sea region (ODINBlackSea) for Georgian and Turkish NODCs**  
21 - 23 December 2009, Istanbul, Turkey



Training Course for Georgian and Turkish NODCs was held on 21-23 December 2009 in Istanbul, Turkey. Trained took place in Black Sea Commission Office. Two trainers and six trainees from Georgia and Turkey were involved.

Trainers:

- Sergey Belov, *Russian National Oceanographic Data Centre (NODC) All-Russian Research Institute of Hydrometeorological Information - World Data Center (RIHMI-WDC)*;

- Sergey Sukhonosov, *Russian National Oceanographic Data Centre (NODC) All-Russian Research Institute of Hydrometeorological Information - World Data Center (RIHMI-WDC)*;

Trainees:

- Tornike Razmadze, *Tbilisi State University, Georgian DNA*

- Mr. Mustafa ILIKKAN, *Office of Navigation, Hydrography and Oceanography, Turkey*;

- Mr. Ozgur Zan, *Office of Navigation, Hydrography and Oceanography, Turkey*;

- Ms. Buket AKIN, *Office of Navigation, Hydrography and Oceanography, Turkey*;

- Ms. Ipek OSANMAZ, *Office of Navigation, Hydrography and Oceanography, Turkey*;

- Ms. Aybala GENCASLAN, *Office of Navigation, Hydrography and Oceanography, Turkey*;

Dr. Ahmet Kideys, the Executive Director of the BSC PS welcomed the participants of the training courses. In his opening Dr. Ahmet Kideys expressed his interest in close collaboration with IODE Ocean Data Portal project in the Black Sea region. He proposed to establish close collaboration between the MONINFO project and Ocean Data Portal. Dr. Ahmet Kideys invited Mr. Murat Elge, head of Head of Turkish NODC to address the participants and provide view on how this collaboration can be organized in future. Mr. Murat Elge participated in the training course on E2EDM technology(October 2007, Ostend) so he had a good understanding on both technical and practical side of Ocean Data Portal technology implication. Mr. Murat Elge invited the trainees from different departments of the Office of Navigation, Hydrography and Oceanography to force Turkish NODC join the ODP in the Black Sea region.

Before the training course data centres were asked to prepare information on data to be provided into the ODP as well as technical information about the potential hardware & software where the Data Provider software will be plugged. This information will be used to help organizations prevent potential technical problems while installing Data Provider and data source connection. Each participant had a laptop and Black Sea Commission provided a training room with required facilities like as projector and internet connection.

Training was separated on three days (see ANNEX I). First day was dedicated to the theoretical questions – ODP technology history and status, ODP software components and ODP metadata aspects. Second and third day were mostly practical, except small presentation by Sergey Sukhonosov on Light Data Provider functionality and capabilities. Practical tasks were splitted on Data Provider v.1.5 installation, complex setup and resource creation based on test data. Eight practical tasks were completed by trainees: resources construction from database, data files and object files, resource maintenance and support, metadata life-cycle and resource creation from the participant's data.

As a result of this training course – participants can personally make Data Provider software installation and setup, metadata registration from all supported sources – SQL-like database, structured data files (CSV, TSV, plain, etc.) and unstructured object data files. List of supported operational systems includes Windows, Linux/Unix. Participants received basic information on new Data Provider v.1.5 functionality – Light Data Provider. The Light Data Provider software (L-DP) is an extension of Data Provider functionality. Light Data Provider can integrate data from data centres unable to install Data Provider software for some reasons, but have published data and/or metadata to FTP or HTTP server. In general, the Data Provider (v 1.5):

- may be installed at and used from any ODP nodes (in case of LDP - IODE PO is recommended);
- supports several remote data sources with data catalogues
- support ISO 19115 profiles (CDI is already supported, WIS and MCP are under development);
- plain ASCII format and CSV (also using the file name if contains spatial and temporal data characteristics in it for metadata);
- provide connection to the data files located on FTP.

Due to the strict security policy inside Turkish NODC it was agreed that Turkish NODC will use Light Data Provider installed in the IODE PO, Ostende and will address to Office of Navigation, Hydrography and Oceanography question on possible Data Provider software installation inside the office infrastructure. It was primarily agreed that both Turkish NODC and Georgian DNA will provide some metadata and data via Data Provider into the Ocean Data Portal by the end of January.

In the closure Dr. Sergey Belov thanked Permanent Secretariat of the Commission on the Protection of the Black Sea against Pollution in the person of Dr. Ahmet Kideys and Mr. Volodymyr Myroshnychenko for the good hospitality and expressed his hope in more close collaboration between Ocean Data Portal and BSC projects. Dr. Sergey Belov also expressed his gratitude to the training course participants for a hard work during the training course.

## ANNEX I – AGENDA

### 1 **OPENING**

- 1.1 Welcome of Executive Director of the BSC PS Prof. Ahmet Kideys
- 1.2 Welcome of Head of Turkish NODC Mr. Murat Elge
- 1.3 Introduction of participants

### **DAY 1 - LECTURES AND DEMONSTRATION FOR ALL PARTICIPANTS**

- 2 Current status of distributed data system technologies and testing cases (introduction to the End to End (E2E) technical specification application domain, overview of existing approaches, perspectives)

### 3 **ODP Technology**

- 3.1 History
- 3.2 Technical specifications
- 3.3 Architecture

### 4 **ODP technology components**

- 4.1 Integration Server  
(hardware, software and network requirements, security issues, usage and maintenance)
- 4.2 Data Provider  
(hardware, software and network requirements, security issues, usage and maintenance)

### 5 **ODP Data Source design**

- 5.1 Metadata requirements
- 5.2 Data format requirements

### **DAY 2 – PRACTICAL WORK**

### 6 **Data Provider setup – software installation and configuration**

- 6.1 DP Installation on Windows OS and Linux OS – software installation, troubleshooting
- 6.2 DP Installation by participants
- 6.3 Resource construction and registration – basic functionality of Data Provider. Registration of all resource types (database, structured file, object file)

### **DAY 3 – PRACTICAL WORK (continue)**

- 6.4 Resource construction and registration (continue)
- 6.5 Maintenance of information resources

### 7 **Light Data Provider functionality**

- 7.1 L-DP overview, technical specifications, examples of information resources
- 7.2 Resource construction and registration by participants using L-DP functionality

### 8 **CLOSURE**