



*Second annual meeting*

# Interoperability with IODE Ocean Data Portal



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# IODE Ocean Data Portal

- IODE ODP is a infrastructure for integration and access to data and services of IODE NODCs network, other IOC programmes and other systems
- Data&services – ocean and marine meteo operational and delay-mode data and product. Possibility to cover any domain if dictionary exists
- ODP Tool Kit and interoperability arrangements basing on ISO and OGC standards
- Global, Regional, Specialized and National nodes
- IODE session, SG for ODP, Partnership center
- Partnership Centre was officially opened on 10 September 2013 in Obninsk (Russian NODC)





# Goals

- Conformed interoperability rules and tools for interchange of metadata&data managed by the ODP and SDN to provide publishing of the data into the ODP/SDN distributed data systems avoiding duplication of IODE data centres effort;
- manage common codes and dictionaries
- Coordinated mechanisms and procedures for authorization and authentication of the end-users

# Solutions

- Arrange mapping and transformation between the SDN CDI V2 metadata XML format into the ODP metadata XML format. This must also include a mapping between common vocabularies and other libraries such as EDMO and EDMERP;
- Develop methods for assuring that the ODP/SDN portals always have the latest set of metadata from the other portal, taking into account new entries as well as updates of existing entries and deletions of existing entries. This includes arrangement at ODP/SDN portals for generating the latest set of metadata in agreed format (SDN or ODP), for exchanging between SDN and ODP;

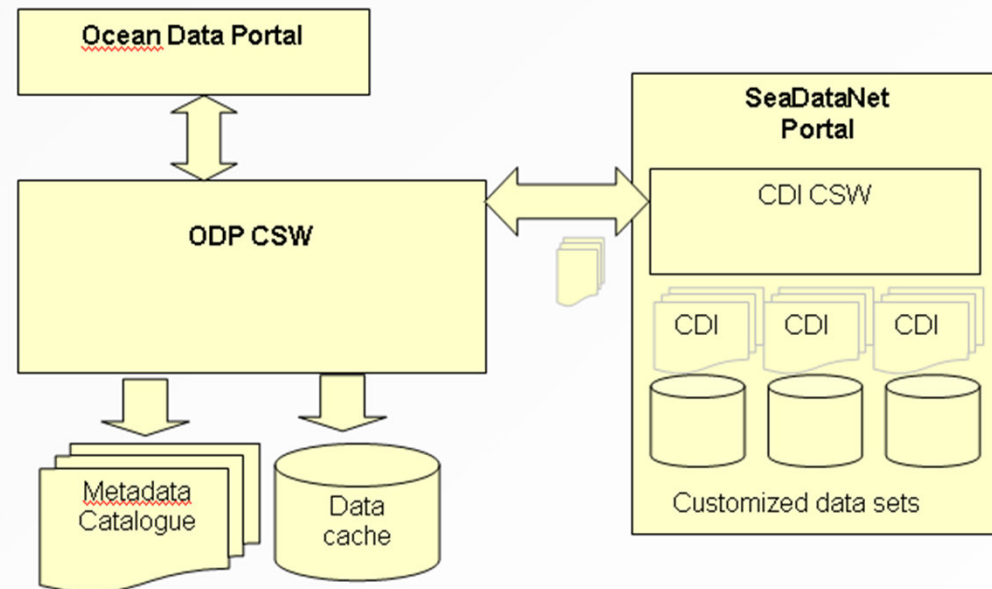


# Solutions

- Create services for retrieving metadata from the ODP and SDN I (e.g. CSW, SRU).
- Exchange of aggregated metadata records from the SDN portal to the ODP portal, thereby reducing the number of metadata records to several thousands. For realizing an exchange with INSPIRE, MARIS has been working on an aggregation by discipline (= Common Vocabulary P081) and data centre (= EDMO code).

# Implemented solutions

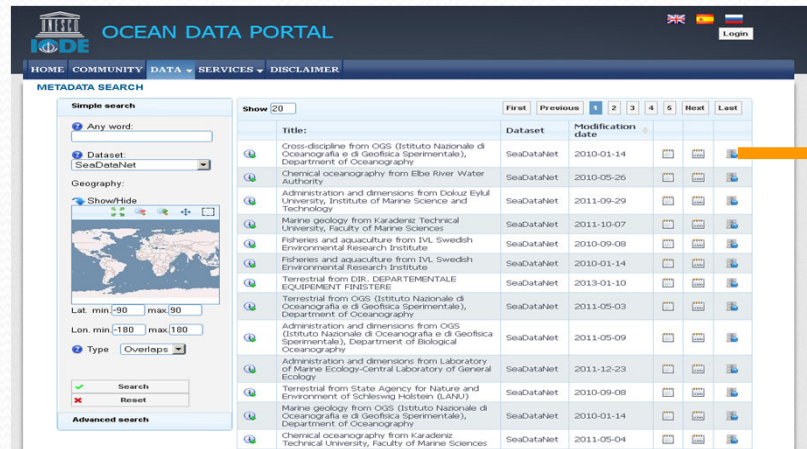
- ODP is publishing required metadata in ISO 19139 format into the ODP CSW service.
- Upon update metadata is transmitted into the CSW on event-driven model and constant basis.
- Metadata records have an adequate URL to data (cached NetCDF or object file).



- ODP harvesting services periodically ingests metadata from SDN CS-W and automatically import it into the catalogues.
- Upon initial arrival SDN metadata is checked for the data URL. If this check was successful, metadata will be identified as ready for publishing on ODP. Further metadata updates from SDN CS-W will be automatically published on the ODP Portal.



# Implemented solutions



- ODP CS-W service is online and available via <http://nodc.meteo.ru:8080/geonetwork/srv/en/csw>
- Number of ISO 19139 ODP metadata records are available for harvesting (via CSW, OAI-PMH, SRU);
- 542 SDN aggregated metadata records accompanied with URLs pointing to the portal are available at <http://odp.oceandataportal.net/odp/portal/odp-theme/data/relatedprojects>

# Future Tasks

- Transition to implement “phase 2” of the interoperability between SDN and IODE ODP
  - Direct access to agreed datasets;
  - Direct access to aggregated metadata catalogues (by data centre, by regions, by disciplines);
  - Discussion on prerequisites for the implementation of the “phase 3” interoperability process



