



## **The Portal of the Geological Survey of Italy: an example of interoperability architecture and services**

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The Portal of Geological Survey of Italy in ISPRA (Institute for Environmental Protection and Research) is the geographic access to all the informations about geological and applied map datasets. This system is built as integrated architecture composed by an OGC/INSPIRE standard Metadata catalogue service (CSW 2.0.2.). According to the national law and to the INSPIRE European Directive we use a multi-profile standard. In the metadata catalogue all the services associated to web map services are archived as ISO-Core and as INSPIRE metadata, while the dataset metadata are directly archived in a special profile that satisfies both the Italian standard RNDT (National Inventory of the Territorial Data - DigitPA) and the INSPIRE Implementing Rule. Therefore specific test are performed using the validation tool (i.e. INSPIRE Geoportal website and RNDT website) on the XML format export files.

The web services are publishing with ArcGIS Server technologies in several format to be available to the users an suite of web services that are in the same time interoperable with the OGC Standard (WMS/WFS/WCS/KML) and able to fulfil an high cartographic standard in the geological symbols representation (i.e ArcGIS).

The portal, at the moment, allows the consultation in the same framework of a set of standard vocabulary using standard ontology (OWL and/or SKOS) for implementing in the next future the terms definition in the same content of the data visualization.

The geoportal of the Geological Survey of Italy, which is available at the URL (<http://sgi.isprambiente.it/geoportal>), is been re-designed to allow easy access to the digital informations contents of all the database and projects, in fact a specific section related to the projects is was been created in the left side of the home page.

Thanks to the new available technologies a viewer of several maps allows to different user's typology to access easily to the geological contents.

A specific Flex Viewer "GeoMapView" has been developed to dynamically viewing more than 15 datasets related to more than 300 layers delivered with specific geological simbology.

To maintain daily updating, a list of javascript viewer using google-map images as base-map with landslide and geological bedrock information drape on, are been created to common user and presented as highlights object on the home-page.

The Geoportal presents moreover an OGC/INSPIRE section that gives to the user a direct access to standard web services.

The real innovation of the Geoportal is the metadata-find widgets of the "GeoMapView". This tool is realised to integrate in the viewer the metadata discovering in the main international and national catalogues, to add and to view directly the available web services and, when it adopted the rule in this regard, to download data too.