

EUROGEOSOURCE – A EUROPEAN UNION INFORMATION AND POLICY SUPPORT SYSTEM FOR SUSTAINABLE SUPPLY OF EUROPE WITH ENERGY AND MINERAL RESOURCES

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The INSPIRE Directive (Infrastructure for Spatial Information in the European Community) 2007/2/EC issued a set of recommendations regarding the administration of the spatial databases in the countries members of the European Union, on the purpose of an effective environmental protection. This implies the achievement of the interoperability and harmonisation of spatial data sets and services from member countries.

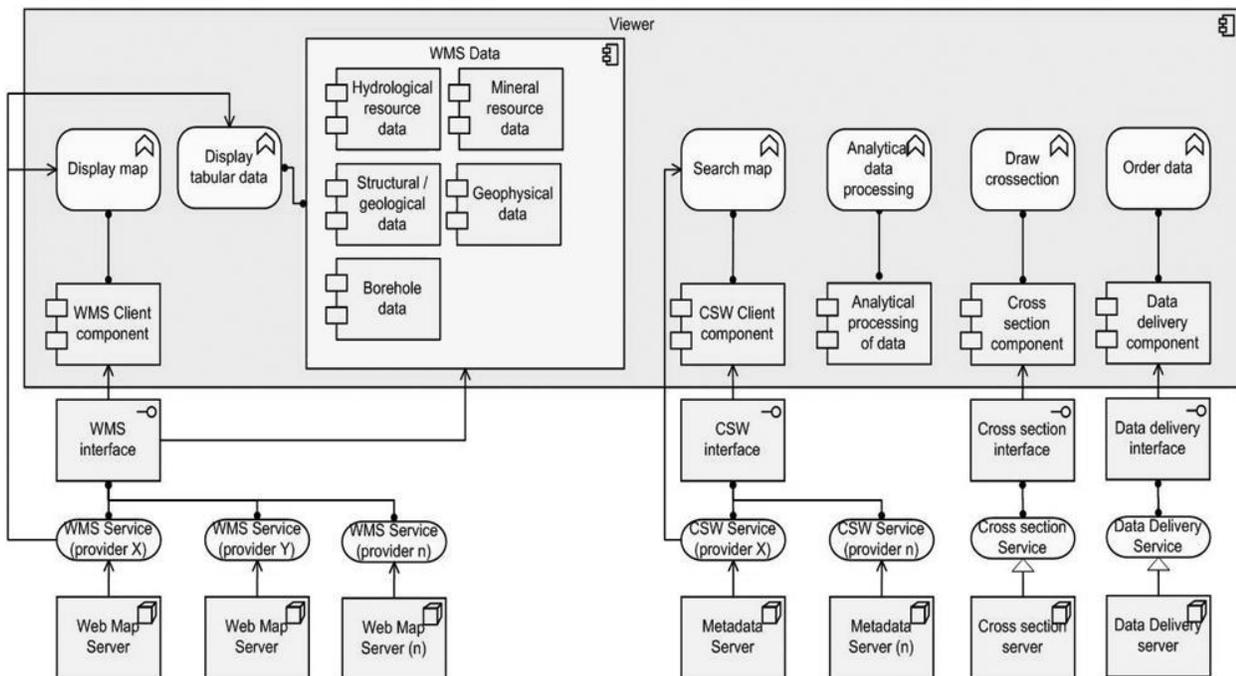


Fig. 1. Conceptual architecture of the EuroGeoSource system.
CSW = catalog service-web; WMS = web map service

There are themes of the INSPIRE Directive, which refer to geology, energy resources and mineral resources. These themes are addressed to by the EuroGeoSource project, co-financed by the European Union under the Information Communication Technologies Policy Support Programme (ICT PSP), part of the Competitiveness and Innovation Framework Programme (CIP). The main objective of the EuroGeoSource project is to develop the EU information and policy support system for a sustainable supply of Europe with energy and mineral resources. This implies the harmonisation of the data formats and classification between the participant countries.

The information will be accessed through a data portal (Fig. 1), which allows the access by Internet to the aggregated geographical information on geo-energy (oil, gas, coal etc.) and mineral resources (metallic and non-metallic minerals, industrial minerals and construction materials: gravel, sand, ornamental stone etc.), coming from a wide range of sources in a significant coverage area of Europe (the countries participating to the EuroGeoSource project are indicated in Fig. 2).

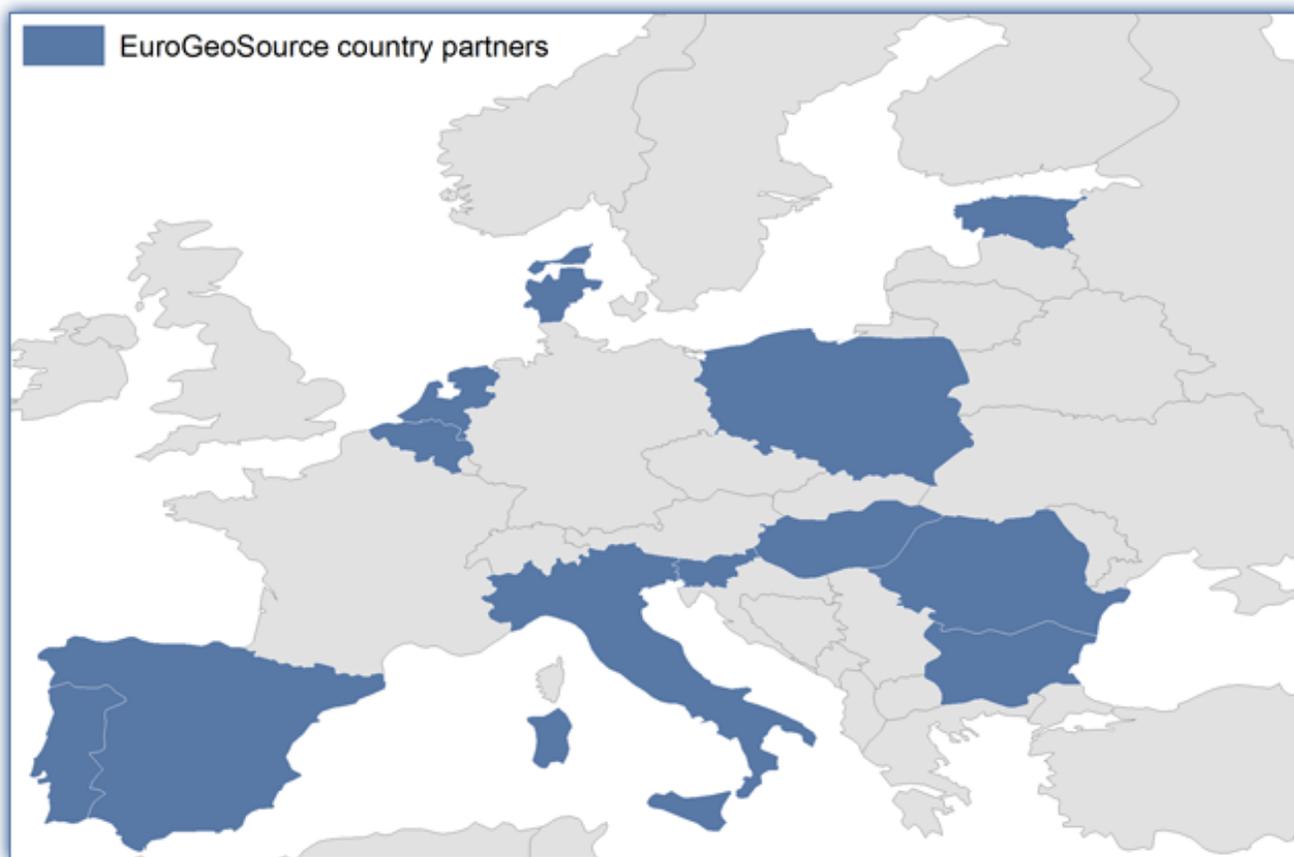


Fig. 2. Map of Europe with the countries that participate to the EuroGeoSource project

The EuroGeoSource portal will facilitate an easier harmonisation between the offer and demand on the market of mineral/energy resources. The users of the portal can be data/service providers or beneficiaries from a large spectrum of socio-economic affiliations: EU institutions, governmental organisations, private investors, academic institutions, NGOs, etc. Any organisation implied in the research and beneficiation of the energy/mineral resources could, on the one hand, use the portal in order to provide information about own activity and offer of services and products and, on the other hand, get information about other data and metadata providers of the portal. The information of the EuroGeoSource portal will be protected in order to restrict the public access only to data offered by the owners free of charge (Fig. 3).

The use of the EuroGeoSource portal would include the following basic sequence of operations:

- (1) The user selects the language.
- (2) The user browses the list of maps and chooses the dataset of interest based on the associated metadata; the dataset of interest is added as a layer to the geo-data viewer.
- (3) The dataset layer is queried at desired degree of detail in the map viewer.
- (4) The user collects the data of interest either free of charge or upon a fee, depending on the provider's requirements.

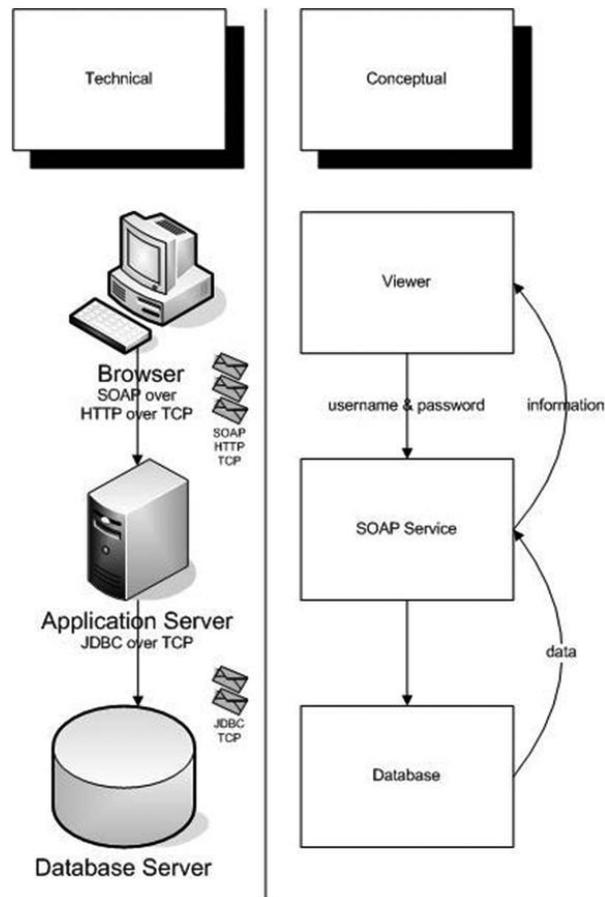


Fig. 3. EuroGeoSource technical and conceptual security scheme.

HTTP = hypertext transfer protocol; JDBC = Java database connectivity; SOAP = simple object access protocol; TCP = transmission control protocol.

Using the EuroGeoSource portal, investors will have an easier way of finding the information on the resources they need and on the Governmental institutions they have to address to, in order to get access to certain resources. The Governmental institutions in charge with the administration of the energy/mineral resources will be able to advertise their services to a broader segment of potential users. The regional and European organisations will have access to a larger and more homogeneous database on the energy/mineral resources in order to make socio-economic forecasts and development plans.

Information on the EuroGeoSource project can be found on the web page <http://www.eurogeosource.eu/>, created by the Geological Institute of Romania, the coordinator of the Workpackage 11 —Awareness, Dissemination and Exploitation of the project.

References:

European Parliament and of the Council of the European Union, (2007), Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).
<http://www.inspire-geportal.eu/index.cfm/pageid/241/documentid/468/doctype/0>