EU INFORMATION AND POLICY SUPPORT SYSTEM FOR SUSTAINABLE SUPPLY OF EUROPE WITH ENERGY AND MINERAL RESOURCES - EuroGeoSource

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ABSTRACT

EuroGeoSource is a project that will provide 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 (Denmark, the Netherlands, Belgium, Portugal, Italy, Slovenia, Bulgaria, Romania, Hungary, Poland, Estonia). The project started in 2010 and will last for three years; it is co-funded by the European Union under the Competitiveness and Innovation Framework Programme (CIP), under the Policy Support Programme (PSP), Geographic Information Theme.

The main objective of the project is to develop an Internet-based Information and Policy Support System that can be used for the sustainable supply of energy and mineral resources in Europe. The web GIS-based system will make it possible to visualize and deliver spatial and attribute information regarding hydrocarbon and mineral resources in the EU member countries as well as data about depleted and prospect reservoirs and the transportation network ('midstream').

The system will include three main layers: 1) a central web GIS application, providing access and visualization of the spatial data sets; 2) data delivery services, including Web Map Service (WMS) and specialized web services for translation and delivery of spatial objects attributes; 3) a national database, storing spatial data sets and spatial object attributes.

The Slovenian mineral resources are mainly presented by geo-energy minerals (coal) and construction materials. The majority of the resources are used for domestic market, although different products produced from the minerals amount a significant part of the Slovenian export. Among them are natural stone products, bricks, cement, limestone, etc. Although Slovenia is a small country it has 230 mines sites, mainly related with surface exploitation. The large number of small surface excavations creates significant difficulties in their monitoring economic, environmental and land-use monitoring. Creation of the web GIS system, based on thematically harmonized and interoperable geo-energy and mineral deposits spatial data sets, coming from a wide range of sources, including local, national and potentially international (neighboring countries) levels, would significantly improve the accessibility, economic use and reuse of the information. It will improve economic sustainability of the mining sector, its environmental performance and would make the mining policy as an integral part of the national land-use policy.

The leader partner is Geological Survey of Netherland, Slovenian representative is Geological Survey of Slovenia. More information on website: http://www.eurogeosource.eu/

KEYWORDS

Geo-energy, GIS, Mineral resources, Policy Support System, Web Map Servic