EuroGeoSource: EU Information and Policy Support System for Sustainable Supply of Europe with Energy and Mineral Resources



Jasna Šinigoj, Geological Survey of Slovenia Alexei Tchistiakov, Geological Survey of The Netherlands on behalf of EuroGeoSource Consortium

7th Session, Ad Hoc Group of Experts on Harmonization of Fossil Energy and Mineral Resources Terminology, Geneva, 29-30 October 2009

EuroGeoSource

- The ICT PSP Call information: Theme 6.2 Geographic information
- Type of the project: Pilot (Type B) stimulating the uptake of innovative ICT based services and products
- with a budget of 2.5 million EUR
- starts February 1, 2010
- ends January 31, 2013
- The project consortium consists of:
 - 11 EU Geological Surveys,
 - 1 University,
 - 2 commercial data added value companies

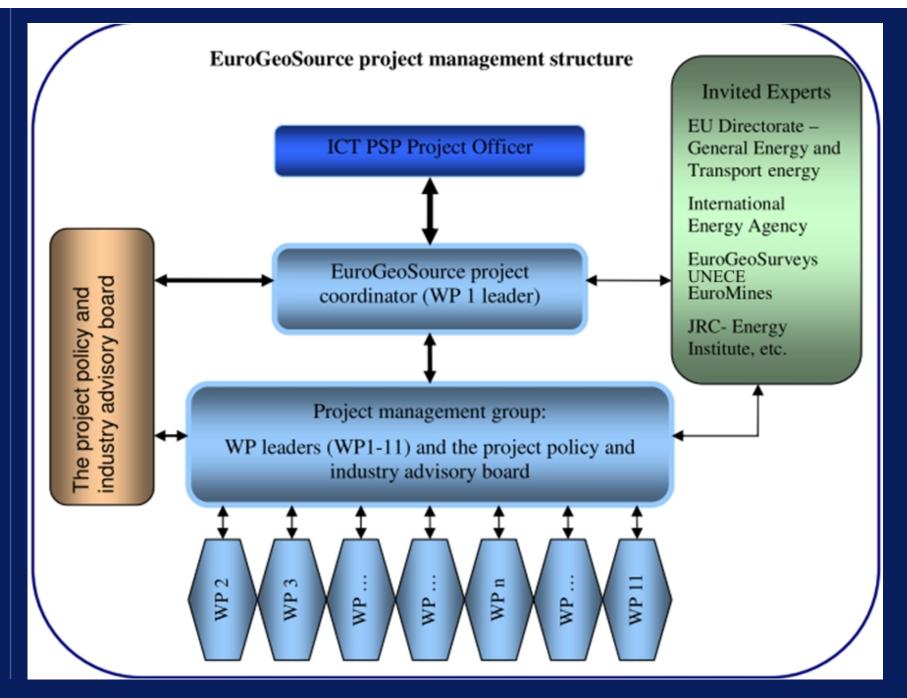


Project consortium

- Coordinator TNO Built Environment and Geoscience (TNO), The Netherlands
- 2. Geological Survey of Slovenia (GeoZS), Slovenia
- 3. Ministry of Environment and Water (MOEW) Directorate of Geology and Protection of Subsurfac,e Bulgaria
- 4. Geological Institute of Romania (IGR), Romania
- 5. Polish Geological Institute (PGI), Poland
- 6. Eesti Geoloogiakeskus OÜ / Geological Survey of Estonia (EGK), Estonia
- 7. Geological Institute of Hungary (MAFI), Hungary

Project consortium

- 8. Royal Belgian Institute of Natural Sciences (RBINS), Belgium
- 9. Instituto Nacional de Engenharia, Tecnologia e Inovação, I.P. (INETI), Portugal
- 10. Geological, Seismic and Soil Survey of Emilia-Romagna Region (SGSS), Italy
- 11. University of Zaragoza (UZ), Spain
- 12. Geological Survey of Denmark and Greenland (GEUS), Denmark
- 13. Geodan Software Development & Technology (Geodan), The Netherlands
- 14. GeoSpatiumLab s.l. (GSL), Spain



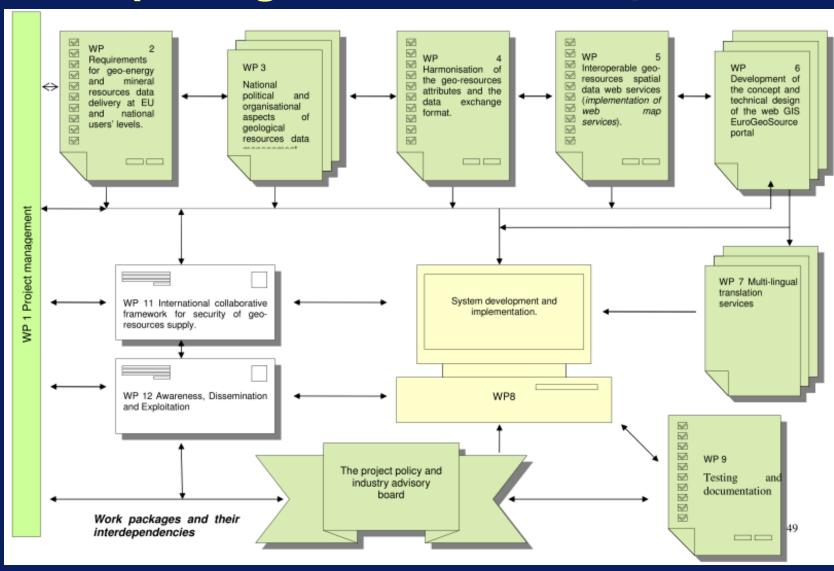
EuroGeoSource Advisory Board

- 1. United Nations Economic Commission for Europe, UN
- 2. Association of the Geological Surveys of Europe, (EuroGeoSurveys), International
- 3. The Institute for Energy of the Joint Research Center of the European Commission (JRC EI), EU
- 4. European Association of Mining Industries, International
- 5. Estonian Association of Mining Enterprise, Estonia
- 6. BULGARTRANSGAS: the Bulgarian national company for storing and transporting gas, Bulgaria

EuroGeoSource Advisory Board

- 7. Directorate for Energy of the Ministry of Economy of Slovenia, Slovenia
- 8. National Agency for Mineral resources of Romania, Romania
- 9. Hungarian Office for Mining and Geology, Hungary
- 10. British Geological Survey, The United Kingdom
- 11. IGN France International (IGN FI; a subsidiary of the French National Geographic Institute), France

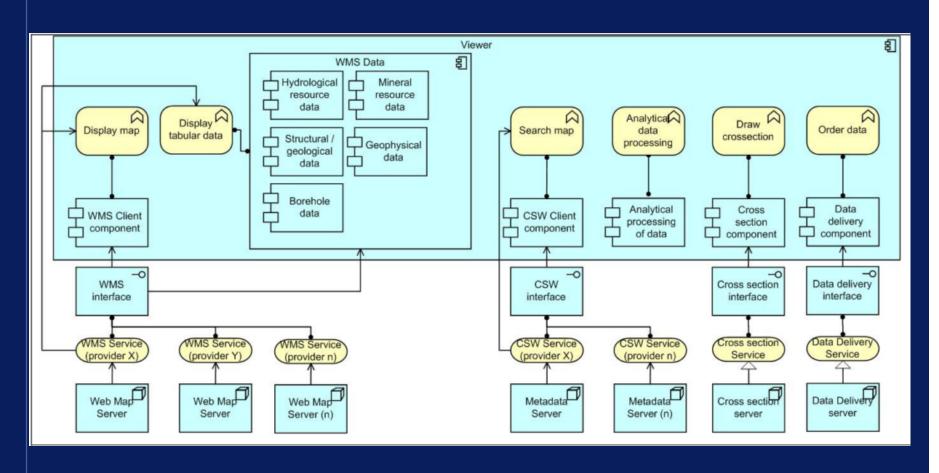
Work packages and their interdependencies



The project objectives

- The main objective of the project is to develop the EU Information and Policy Support System that can be used for Sustainable Supply of Europe with Energy and Mineral Resources.
- The Web GIS-based system will make it possible to visualize and deliver <u>spatial</u> and attribute information regarding the hydrocarbon and mineral resources in the EU member countries as well as data about depleted and prospect reservoirs and the transportation network ('midstream').

Conceptual archiecture of the EuroGeoSource system



The project objectives

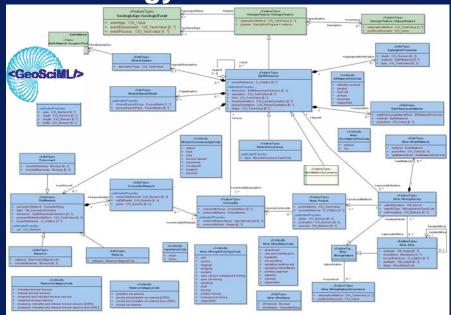
 Demonstrate the capacity to achieve a broad consensus amongst and beyond the project beneficiaries on methods and standards in the corresponding INSPIRE data schemes, involving all relevant stakeholders in the energy and mineral

resources domain.







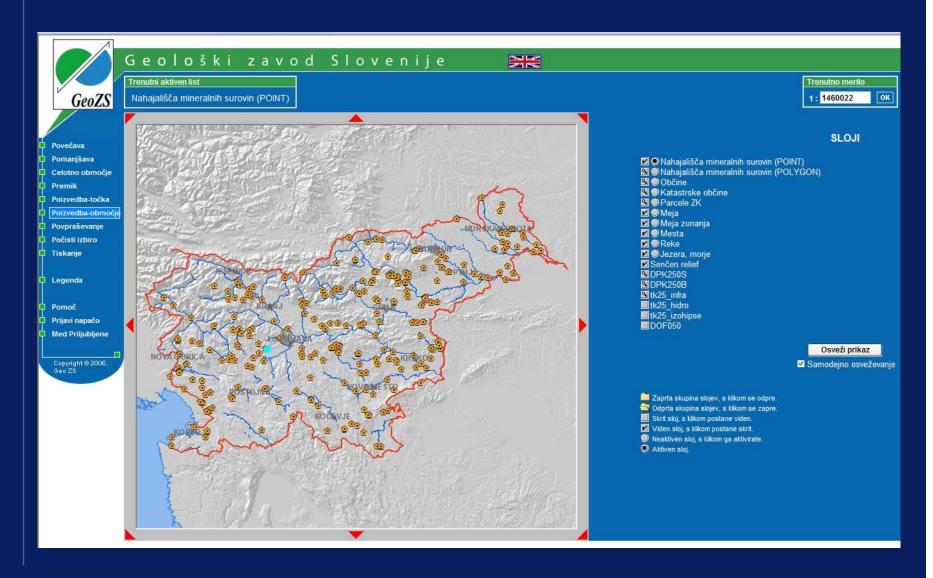


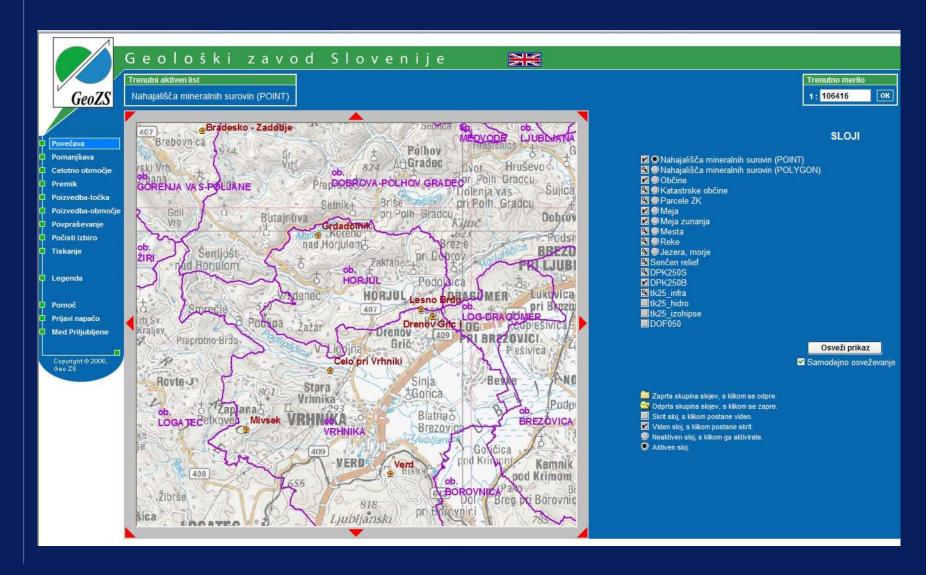
GeoSciML - EarthResourceML

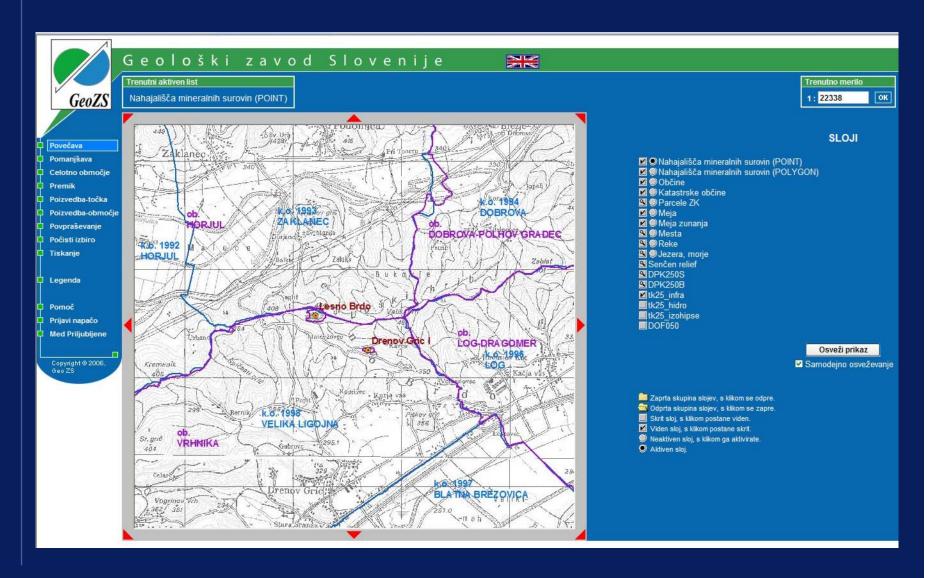
The project objectives

 Ensure users and their needs are at the centre of the approach by involving the pilot beneficiaries in the project as well as extensively interviewing the major players in the energy and mineral resources sectors of the EU economy, including the relevant directorates of the EC, national ministries, production and transportation companies

- The data sets that are planned for the project are primarily produced and collected and held by public bodies, namely by the participating geological surveys or the member state authorities.
- In total more than 100 data sets will be available for the project.
- The data sets include geographical information on the operational fields, depleted fields, potential underground gas storage reservoirs, geological prospects, and transportation network.









Cooperation with the UNECE

- United Nations Economic Commission for Europe (UNECE) - Ad Hoc Group of Experts on Harmonization of Fossil Energy and Mineral Resources Terminology
- Member of the project Advisory Board
- To promote cooperation with the United Nations Framework Classification for Fossil Energy and Mineral Resources
- to achieve a broad consensus amongst and beyond the project beneficiaries on methods and standards



Cooperation with the EU projects

- The Promine project Nano-particle products from new mineral resources in Europe.
 - FP7 NMP-2008-4.0-5
 - Innovative concepts and processes for strategic mineral supply and for new high added value mineral-based products
 - To develop pan-European GIS-based database containing the known and predicted metalliferous and non-metalliferous resources
 - http://promine.gtk.fi/
- The SARMa project Sustainable Aggregates Resource Management
 - The South East Europe Transnational Cooperation Programme
 - to develop a common approach to SARM and SSM across SEE
 - develop a unified information infrastructure and common understanding of aggregates based on EU guidelines and directives
 - http://www.sarmaproject.eu

Cooperation with the EuroGeoSurveys

• EuroGeoSurveys is an organisation of <u>33 European</u> Geological Surveys. Statutory aims are to address the European issues, to promote contribution of geosciences to EU affairs, to assist EU to obtain technical advice and to provide a network between the geological surveys.



 EXPERT GROUPS: Geochemistry, Geohazards, Marine Geology, Mineral Resources, Soil, Spatial Information, Water

+ Provides science-based advice + Provides access to data, information and expertise + Participates to working groups + Formulates proposals National (PROACTIVITY) **BRUSSELS** Geological Survey OFFICE *EUROGEOSURVEYS European Geoscience for Society The Geological Surveys of Europe (REACTIVITY) + Informs on policy development and implementation + Transmit requests and enquiries

Expert Group MINERAL RESOURCES

Main goals:

- Establishing European Mineral Intelligence within the EGS members in the core,
- Coordination of EU projects related to minerals among all members of EGS.

Activities within:

- Raw Materials Initiative / EU minerals framework
- European Technological Platform Sustainable Mineral Resources
- Other Initiatives
- Chair of Expert Group / Contact: Slavko Solar (slavko.solar@geo-zs.si)

Contribution to EU policies

- Creation of the Trans European Energy Networks is integral part of the European Union's overall energy policy objectives, increasing competitiveness in gas markets, reinforcing security of supply, and protecting the environment (http://ec.europa.eu/energy/infrastructure/index_en.htm).
- The project will improve the European geo-resources data base to make it a tool for better EU policy and better access to the recourses.
- The project will map (document) the location of the known and potential EU geo-energy occurrence and quantify their economic value as reserves (proven) or resources (inferred) use and share the information to manage their sustainable use; etc.