



3D Geological modelling – towards a European level infrastructure

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The joint European Geological Surveys are preparing the ground for a “European Geological Data Infrastructure” (EGDI), under the framework of the FP7-project EGDI-Scope. This scoping study, started in June 2012, for a pan-European e-Infrastructure is based on the successes of earlier joint projects including ‘OneGeology-Europe’ and aims to provide the backbone for serving interoperable, geological data currently held by European Geological Surveys. Also data from past, ongoing and future European projects will be incorporated. The scope will include an investigation of the functional and technical requirements for serving 3D geological models and will look to research the potential for providing a framework to integrate models at different scales, and form a structure for enabling the development of new and innovative model delivery mechanisms.

The EGDI-scope project encourages pan-European inter-disciplinary collaboration between all European Geological Surveys. It aims to enhance emerging web based technologies that will facilitate the delivery of geological data to user communities involved in European policy making and international industry, but also to geoscientific research communities and the general public. Therefore, stakeholder input and communication is imperative to the success, as is the collaboration with all the Geological Surveys of Europe. The most important functional and technical requirements for delivery of such information at pan-European level will be derived from exchanges with relevant European stakeholder representatives and providers of geological data. For handling and delivering 3D geological model data the project will need to address a number of strategic issues:

- Which are the most important issues and queries for the relevant stakeholders, requiring 3D geological models? How can this be translated to functional requirements for development and design of an integrated European application?
- How to handle the very large differences in quality and scales with regard to 3D geological modelling in different European countries and regions, within a harmonized European framework?
- How to handle the differences in model concepts and perceptions, especially with regard to the leading developers of 3D geological models within Europe?
- How to handle differences between participating countries concerning relevant legal issues, governance, and funding models?

With a primary focus on these issues, the EGDI-Scope study will provide a number of possible scenarios for delivery of 3D geological models and information within an integrated European application, including the most relevant technical, legal and organizational consequences.