Evolution of Geological Mapping Agencies: from Identifying Problems to Finding Solutions

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Geological mapping agencies are organizations that specialize in the collection, analysis, and interpretation of geological data to create maps and models. They provide information about the geology of a region, including the distribution, composition, and structure of rocks, minerals, and other geological features. These informations are used for a wide range of purposes and by a broad set of stakeholders.
EuroGeoSurveys

37 Geological Surveys

10,000+ Workforce

Over 700+ million € annual turnover
EuroGeoSurveys Expert Groups

Hundreds of experts from the different National Geological Surveys are engaged in EGS’s Expert Groups, carrying out research that directly tackles today’s diverse societal challenges and helps to build a sustainable future for us all.
Subsurface Data in the News
FINANCIAL TIMES

EU sounds alarm on critical raw materials shortages

Europe’s groundwater — a key resource under pressure

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European Environment Agency

THE WORLD BANK

Bankability

Project Risk

Cost

Cumulative Cost

Risk

Pre-Survey
Exploration
Test Drilling
FS Planning
Drilling
Construction
Start-Up
Operation & Maintenance
There is a Critical Need of High Quality Subsurface Data!
GSEU: from Geological Data to Policy Support

Interoperable Geological Data

3D Geological Framework

Energy
Minerals
Ground water
Climate
Build environment

Impacts & Protection

Decision Support Information

Adding Value to Research & Innovation: from Science to Society
GSEU: Structure

Developing Harmonised Data & Information Service

Raw Materials
GeoEnergy Resources
Groundwater Resources
Coast and Sea
Geological Framework Setup

Developing Information Structure

European Geological Data Infrastructure (EGDI)

Stakeholder Engagement
Communication, Dissemination, Exploitation & Outreach
The National GS have collected large volumes of subsurface data for decades (some for centuries!). The Spatial Information Experts group gathered, digitised and harmonised the various data held by the Geological Surveys of Europe and deliver them through EGDI.

EGDI holds more than 800 data layers of data, and a database of 3D models.

In the GSEU project, EGDI will be taken to a new level by transforming the current data infrastructure into a knowledge infrastructure, supporting the delivery of knowledge to policy makers and other stakeholders.

https://www.europe-geology.eu/
EGS and GSEU can play a key role in helping to address the challenges facing the mining industry in Europe:

- **Geological Data Management**: by providing advice and support on data collection, standardization, and management, better-informed decisions based on high-quality and reliable data can be made.
- **Geoscience Research & Innovation**: by developing more accurate geological models.
- **Policy Advice and Regulation**: EGS and GSEU can provide advice and support to governments and other stakeholders on policies and regulations related to the mining industry (e.g., advice on sustainable mining practices, environmental regulations, and social responsibility standards).
• Re-evaluation of European potential in primary onshore and offshore CRMs and mining wastes
• Development of the use of the UNFC classification system in mineral resources databases
• Creation of an International Center of Excellence on Sustainable Resources Management
• Added value knowledge (databases, maps of metallogenic potential, mineral prospectivity maps, etc.) that will be freely accessed via the EGDI platform.
COOPERATION IS OUR STRENGTH AND FUTURE

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