



CzechGEO/EPOS

Section of Geological and Geophysical Databases

Dana Čápková et al.



Main activities

- Geological and geophysical data – inventory, evaluation, consolidation and harmonization
- Access using the up-to-date technology
- Compliance to the relevant international standards (ISO, INSPIRE) and support of the European infrastructures (EPOS, EGDI, GeoERA)



Inventory

- of existing geological, geophysical and other relevant data maintained by CGS and other CzechGeo/EPOS participants (structured and unstructured data, paper documents and primary documentation)



Evaluation

- Evaluation of relevance to:
 - INSPIRE (Directive 2007/2/ES of the European Parliament)
 - EPOS (the European Plate Observing System)
 - EGDI (European Geological Data Infrastructure)
 - Support of the geoscience research



Consolidation

- Phases:
 - Analysis
 - Data consolidation (optimised data management, data model, central code lists, processing schema, data validation, standards applied)
 - Incorporation to CGS-DRI and other systems
 - Secured storage, backup and access



Standardized access

- Procedures to establish an effective access to already incorporated data sources
 - Metadata (ISO compliant provision of information on data resources)
 - Web services (discovery, view, download)
 - Web applications (metadata catalogue, map applications, database applications)



International relevance

- INSPIRE
- EPOS
- EGDI
- GeoERA





EPOS

- the European Plate Observing System
- Implementation project H2020
- Since 2008 included to ESFRI (European Strategic Forum for Research Infrastructures)





EGDI (1)



- European Geological Data Infrastructure
- **Aim:** to be a sustainable platform for results of past and future European geoscientific projects and to enable access to European geoscientific data and services
- **Strategy:** to provide interoperable, harmonized geoscience information based on national knowledge and data



EGDI (2)



- is proposed to serve as a source of geological information from European geological surveys to other platforms as the European Plate Observing System (EPOS)
- Based on European and international standards (CGI, OGC, INSPIRE)
- CGS involved in core team (metadata catalogue)



GeoERA (1)

- **Aim:** Establishing the European Geological Surveys Research Area to deliver a Geological Service for Europe
- **Mission:** 48 national and regional Geological Survey Organisations from 33 European countries have joined forces to develop an ERA-NET Co-Fund Action





GeoERA (2)

- **Research topics:**
 - Geo-Energy
 - Groundwater
 - Raw Materials
 - Information Platform
- Information Platform (GeoERA IP) is proposed as an extension of the EGDI to support the geoscientific work in the GeoERA projects





CzechGeo/EPOS Workshops 2017

- Metadata for 3D geological models
 - 22-23 February 2017, 11 participants from 5 countries
- INSPIRE geophysical data specification
 - 8-9 June 2017, 11 participants from 4 countries
- Metadata of geological and geophysical data resources in the CR and INSPIRE Directive
 - 20 September 2017, 11 participants from 4 organizations CzechGeo/EPOS



CzechGeo/EPOS – results 2017

- Inventory of data from CzechGeo/EPOS participants (version 1)
- Ongoing consolidation of geological and geophysical data of CGS
- Evaluation of data relevant to the INSPIRE data specifications
- Improving access to geological and geophysical data of CGS (web services, applications)



CzechGeo – next steps

Geophysical data of other participants of CzechGeo/EPOS infrastructure:

- Finalization of data inventory
- Publication of metadata
- Evaluation of data regarding their relevance to INSPIRE
- Provision of metadata/services for INSPIRE, EGDI (EPOS)



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Thank you for your attention!

dana.capova@geology.cz