GEOTHERMAL ERA-NET: WP3: Towards a European Geothermal Database

SEVENTH FRAMEWORK PROGRAMME

WP3 status

Adele Manzella
Eugenio Trumpy
CNR

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WP3: Towards a European Geothermal Information Platform

Task 3.1 Preparation of the scientific and technical activity

- Preparation activities, including scientific and technical programme, two specialized workshop on European Geothermal Database, organization of addictional meeting

Task 3.2 State of the art and needs

- Questionnaire, data inventory, needs and gaps, State of the art report

Task 3.3 Preparation of a feasibility study

- Discussion on feasibility, INSPIRE inplication on EGIP, budget estimation, feasibility study

Task 3.4 Following-up the implementation

- The preliminary design will be used to prepare a **call for proposal** to implement the European Geothermal Information Platform through one or more **pilot area**(s)

Afternoon discussion

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Task 3.4 Following-up the implementation (from annex 1)

The preliminary design will be used to prepare a **call for proposal** to implement the European Geothermal platform through one or more **pilot area**(s).

The choice of the field, of the data, and the demonstration scenario

will be crucial to demonstrate the usefulness and the capabilities of the European geothermal database.

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WP3: Deliverable

N.	title	Person/ months	Nature	Dissemination level	Delivery Date
D3.1	Report on the state of the art and the needs in regarding geothermal data and existing tools	1	R	RE	April 2013
D3.2	Feasibility study for a European Geothermal Database	1	R	PU	February 2013
D3.3	Report on the implementation of the European Geothermal Database	1	R	RE	45 January 2016

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WP3: Milestones

N.	title	Delivery Date
8	Database workshop1: European Geothermal Database State of the art and needs	March 2013
9	Database workshop 2: European Geothermal Database Feasibility study	June2013

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Task 3.3 Feasibility Study
D3.2

Adele Manzella
Eugenio Trumpy
CNR
With hints from BRGM

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WP3 Way forward

D3.1

- ……
- 30 April 2013 final report

D3.2

- 31 October 2013 – First version
- 28 December 2013 – First version delivered to EC
- 24 February 2014 – Final version delivered to GEO ERA-NET partner
- 11 March 2014 – EC deadline for D3.2 submission

D3.3

- ……

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D3.2 Feasibility Study

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Towards a European Geothermal Database

Customers of EGIP

- potential international energy users, such as international operators and funding agencies interested in launching new geothermal projects

- any geothermal stakeholder and to respond to the increasing concerns of non-geothermal-sector stakeholders that geothermal applications are too confusing and difficult to manage

EGIP design

- distributed system:
  - ➢ each (national) data provider delivers its data according to a common standard data model and common services following INSPIRE directives (each EU country will have to be INSPIRE compliant within the next few years)

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EGIP ***Architecture*** overview (proposal)

« European products»

Catalogue service (CSW)

Common rules for:
1. Metadata (INSPIRE?)

2. Web Services:
- View
- Access (download)
- Process

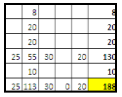
3. Common data model, used by services to deliver and process data

DB1 DB2 DB3 DB4

Metadata describing datasets and services

Metadata Catalogue

Each provider delivers a piece of the puzzle:

Which can be map  or data 

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For the services:
- View and access/download services are well specified in INSPIRE
- Process services have to be compliant with a general framework only

For the common data model to be used by the access, download and process services:
- to specify this data model : input from existing DB, and INSPIRE requirements
- Participation to Specification Working Groups for standardisation (INSPIRE and others)
- Development of vocabularies (code-lists)

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EGIP benefit

- Guaranteed data interoperability: retrieval, viewing and access of information from partners and other providers (via WMS, e.g. protected areas)
- Harmonized geothermal domain at a European level
- **Efficiency**, thanks to the non-multiplicity of data sources, the latter being directly related to national databases
- Guaranteed ownership: data belong to and stay in the country they are related to.
- Durability and maintainability
- Economically viable, requiring only coordination with respect to what each country would need to develop independently
- Productivity, by covering all published data in the long term.

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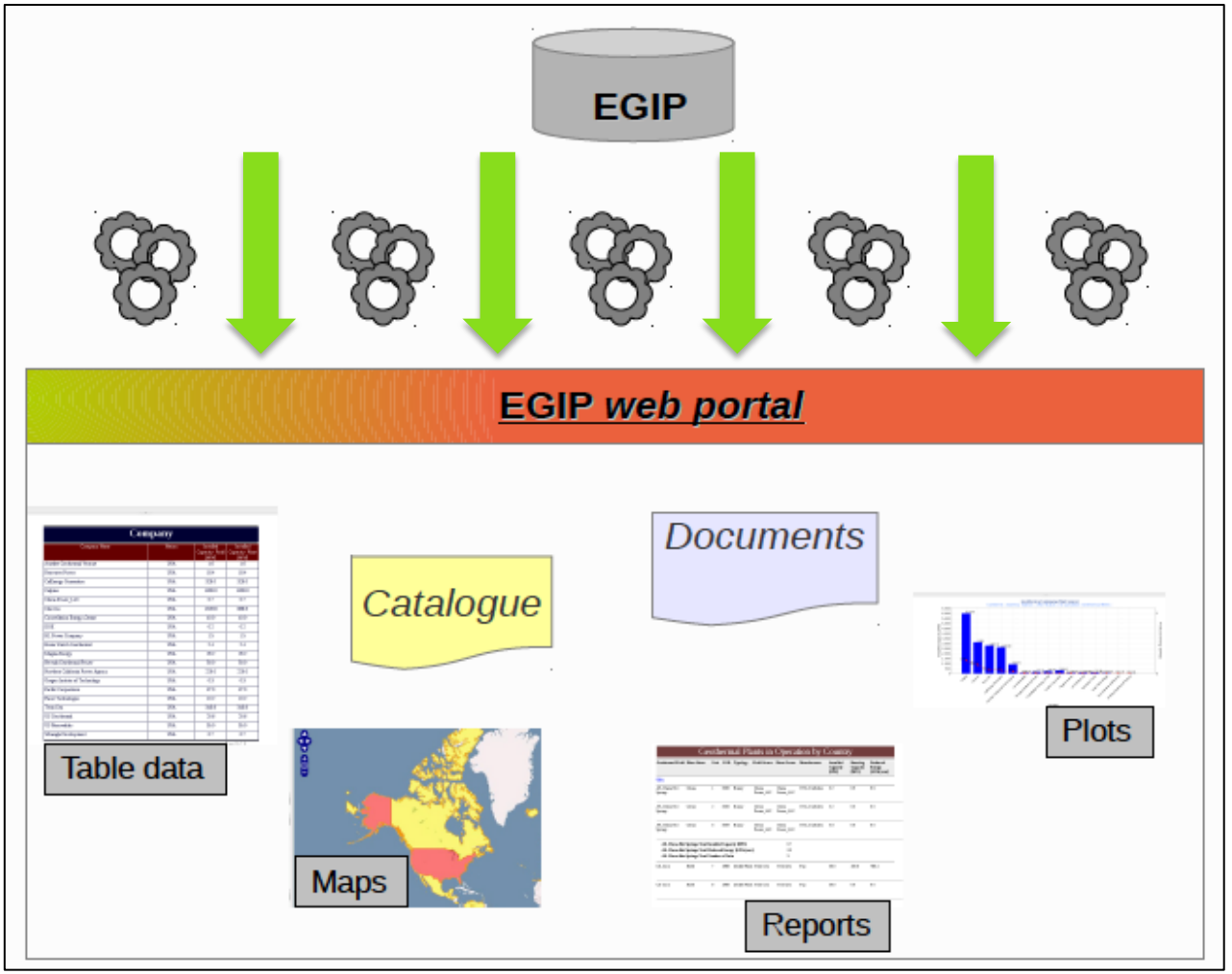
Towards a Geothermal European Information Platform EGIP – ***functionalities***

EGIP tools have to guarantee a 360° data browsing (e.g., browsing from a catalogue to a document, from a document to a tabled info or spatial data) and **allowing a deep survey into the geothermal knowledge**.



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Feasibility stage 1 Pilot implementation

Contents

WP3 questionnaire surveyed 42 different kind of geothermal information

Data	Structured	Sub-Section	Feasibility stage
Temperature maps at depth (Available depth?) 1 / 2 / 3 km	Y	Scientific and technical aspects	1
Surface heat flow measurements and map	Y	Scientific and technical aspects	1
Environmental impact laws	N	Social acceptance (including environmental issues)	1
Geothermal national roadmap	N	Research R&D	1
list of Education & Research institutes'*		Training and education	1
Rules of licencing (exploration/exploitation)	N	Regulatory aspects	1
Legal condition for grid access	N	Regulatory aspects	1
Insurance covering the geothermal project risks (e.g. deep drilling wells)?	N	support schemes	1
Royalities & taxes, support scheme (feed-in tariffs, grants, …)	N	support schemes	1
Industry list*	N	Deployment	1

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* Not included in the WP3 questionnaire

D3.2 Proposed timing

In line with the scheduling for the GEO ERA-NET project and with the actions defined in this work plan, the proposed milestones are:

- "Pilot implementation" proposal as joint activities - March 2014 [M23] – WP4 Task1
- "Pilot implementation" definition of possible schemas and barriers August 2014 [M26] – WP4 Task2
- Preparation for the **calls** from March 2014 to December 2014
- Implementation of the EGIP from January 2015 to January 2016
- Analysis of joint experiences in February 2016
- The report on "Pilot implementation" March 2016
- Proposal for future collaboration in developing "EGIP Further implementation" April 2016

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D3.2 Proposed timing

WP3 – towards EGIP	Year 2																															
	2013			2014													2015												2016			
	Oct	No	v De	c Jen	Feb	Ma	r Apr	Ma	y Jun	Jul	Ag	o Sep	Oct	No	v De	c Jen	Feb	Ma	r Apr	Ma	y Jun	Jul	Ag	o Sep	Oct	No	v De	c Jen	Feb	Ma	r Apr
"Pilot implementation" proposal as joint activities																																
"Pilot implementation" definition of possible schemas and barriers																																
Call preparation																																
Implementation of the EGIP																																
Analysis of experiences of joint activities																																
Report on implementation																																
Proposal for future collaboration in develop " EGIP further implementation"																																