



ENGINE COORDINATION ACTION

Minutes of the Steering Committee meeting 15th Wednesday February 2006, Orléans (France)

Present

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CONTENT

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1. Feed back from the launching conference

The steering committee has analysed the organisation of the launching conference. The following positive aspects have been underline:

- A successful mobilisation of the geothermal community: 103 registered participants, participation of 29 partners of the ENGINE network, 46 presentations that can be downloaded from the website, <http://engine.brgm.fr>, 19 European countries represented. The audience has been very attentive and collaborative.
- A significant participation of 15 non-partners research institutes showing the interest of the initiative that broaden the network.
- A combination of presentations concerning the state of the art, synthesis and explorative concepts, among them it is worth pointing out the complete overview of all running projects in Europe that concerns both High Enthalpy and Enhanced Geothermal Systems.
- Several communications associating for the first time research institutes that until now never collaborated.
- A good connection with the other Framework Programme instruments involved in geothermal energy (Soulz, IGET, LOWBIN) that were invited to present their program and achievements.
- An association of young researchers, involved in Phd or freshly recruited, and senior engineers, for some of them pioneers of the deep geothermal resources exploration.
- A strong mobilisation of the French community with the support of the local and regional authorities and of the presidencies of the BRGM and ADEME.

Other “less positive” aspects have been discussed:

- The workpackage leaders regret that not enough time has been dedicated to the organisation of the work. It is necessary to plan more time for purely preparing documents, discussing and taking decision.
- Such work-organisation is very important as some partners may not have a clear vision of the work they have to perform in the framework of the co-ordination for the achievements of the deliverables.
- Although some research institutes collaborated for the first time to prepare this conference, a lack of federation has been felt on some approaches. This is clearly one major issue to which the ENGINE project must provide significant improvements.
- Strengthening of the networking is likely, especially concerning drilling and stimulation of reservoirs. It has been recognized that, taking into account the variety of contexts of the geothermal reservoir, access to the knowledge of some other large geothermal field worldwide is a major issue for the success of the co-ordination action.

2. Organisation of the workpackages

Following meetings and discussions, the workpackage leaders have summarized the debated matters and defined the priorities for the coming months.

WP2. The Information and Dissemination System of the Co-ordination Action

Following the description of the work of ENGINE, the WP2 main goals are

- to provide help for the ENGINE meetings organization,
- to publish the results of the ENGINE community,
- to make a state of the art of training and education activities related to geothermal energy,
- to disseminate the information to the rest of the world.

These goals are / will be achieved by defining the publication policy of ENGINE coordination action and by providing a Website to materialize the Information and Dissemination System. More information about the ENGINE Website is available upper in the Website section of this newsletter. The first results of the publication policy are the ENGINE newsletters started last January and the meetings material deliverables (Website, book of abstracts, cd, etc.)

The ENGINE partners involved in the WP2 are BRGM (France), UOR (University of Oradea, Romania), GFZ (GeoForschungsZentrumPostdam, Germany), IGGL (Geologijos Ir Geografijos Institutas, Lithuania), GEUS (Geological Survey of Denmark and Greenland, Denmark), GEOWATT AG (Switzerland) and IGG (Istituto di Geoscienze e Georisorse, Italy).

Preliminary works of WP2 have been presented during the ENGINE Launching Conference (BRGM, Orléans, 12-15 February 2006) :

- The WP2 organization, goals, tools and first deliveries (P. Calcagno, BRGM, slides).
- A commented review of the geothermal training courses in Europe (M. Rosca, UOR, slides and paper).
- A compilation of the ways of dissemination by the other geothermal communities (A. Manzella, IGG, slides and paper).

WP2 special meetings also took place during the Launching Conference. They were dedicated to the consolidation of the coordination action back bone: the organization of the workshops using the ENGINE Website. As workpackage leaders are in charge of the organization of the workshops, a basic INDICO training was provided to use this tool dedicated to the meetings management. In order to support WP leaders in their Information Action role, WP2 delegates have been / will be nominated for each Workpackage. The WP2 delegates will organize their workshops; facilitate the transfer of information with their WP partners and coordinate the publication of their results according to the ENGINE policy.

The WP2 delegates are:

- Eva Schill (Mainz University) for WP3
- Stefanie Frick (IE) for WP5
- Thomas Mégel and Clément Baujard (Geowatt) for WP6
- Angela Spalek (GFZ) for WP7
- To be nominated for WP4
- To be nominated for WP8
- To be nominated for WP9

A WP2 meeting will be held in Potsdam on April 27-28. Every WP2 partner and WP2 delegate will be very welcome to help us to go further in the Information and Dissemination System achievement.

WP3. Investigation of Unconventional Geothermal Resources and in particular Enhanced Geothermal Systems

At the first meeting of WP3, the following persons have represented their institutions and for the moment are considered reference persons: BRGM A. Genter, GFZ D. Bruhn, ISOR O. Flovenz, IGG A. Manzella, ELTE P. Dovengy, GGA J. Orzol, GEIE A. Gerard, IGGL S. Slaupia, MeSy F. Rummel, VUA M. Tesaro for S. Cloetingh, CRES D. Mendrinis, PGI M. Wroblewska, GEMRC V. Spichak, GEOWATT T. Kohl. A. Lokhorst will represent TNO and CNRS will nominate his contact person. C. Clauser (RWTH Aachen University), although not a partner in this CA, is volunteer to participate to the activities of WP3/WP6, and will be kept informed. As first step toward the organization of the activity for this WP, a table has been proposed to the partners, listing the name of the participants to the CA, their expertise, and the foreseen workshop participation.

The main decision taken was to organise a meeting in Potsdam on April 27-28 instead of workshop 1, in order to

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- establish the list of research fields representing exploration and investigation of geothermal systems. A first draft will be proposed by the WP leaders, also on the base of the tables received on March, and will be discussed during the meeting;
- define the groups of people working for each of the research themes defined;
- define the groups of people in charge to represent the geothermal investigation activity for the various countries.
- discuss topic 4 of the WP3 deliveries "Technological Challenge of the investigation phase"
- discuss a publication strategy for the submitted reports

The preparation of each presentation will be the occasion to establish a connection between partners working in common research fields or country. Beside the presentation, each group of authors will be requested to write an extended and detailed report of what they will present at the Workshop. The preparation of common presentation may also be the occasion for visits and exchange of personnel.

The two planned workshops are:

- Workshop 1 "Defining, exploring, imaging and assessing reservoirs for potential heat exchange" to be held in Germany organised by GFZ Potsdam with the help of other German partners. This workshop will be postponed on November 2006 as its organization requires additional time and activities to be successful. The presentations will cover all important aspects of research for geothermal exploration and investigation, and will summarize the geothermal investigation and exploration activity in the European countries. Invited keynote speakers from industry are also foreseen. The deadline for receiving the PowerPoint presentation file and extended report will be one week before the Workshop.
- Workshop 2 "Exploring Supercritical fluid reservoir: a new challenge for geothermal energy" to be held in Italy organised by IGG in 2007.

WP4. Drilling, stimulation and reservoir assessment

As stated in the project description "the state-of-the-art must be established in order to identify and analyze the best practices to be adopted, the innovative concepts to be applied or developed, as well as the main gaps in knowledge and/or technology". Active participation in the workshops is essential for this to be successful. The list of the subjects to be covered and suggested title of papers to be presented at the workshops is expected as soon as possible. This will allow the WP leaders to identify early where there is good coverage of the subject and where are gaps. Ernst Huenges has drafted a "road map" with keywords for the critical items to be covered and who will provide the expertise.

A short note from each participant is expected to define the input of each institute for WP 4. For any contact or information, contact s@isor.is.

Two specialized workshops are already planned to which each of the partners must contribute to at least once:

- Workshop 3 "Stimulation of reservoir and induced microseismicity" to be held in Switzerland end of June 2006, organized by GEOWATT. Detail information on the upcoming Workshop 3 "Stimulation of reservoir and induced microseismicity" is now on the ENGINE website (<http://conferences-engine.brgm.fr/conferenceDisplay.py?confId=3>). Attached to this e-mail please find the workshop flyer. Please note: The registration for Workshop 3 is requested by 25 March 2006.
- Workshop 4 "Drilling cost effectiveness and feasibility of high-temperature drilling" to be held in Iceland end of June 2007, organized by ISOR.

WP5. Integration of scientific and technical know-how and practices in the field of exploitation, economics, environmental, and social impacts

The main partners involved are BRGM, GFZ, TNO, IE, IGR, IGG, IVTRAN, CFG, CRES, PGI, GEUS, ORME, IGME. A Clarification of the WP deliverables has been done, defining the expected contents of proceedings, guides to workshops and articles, reports of study and analysis.

For the different deliverables, the following deadlines have been agreed:

- "Economic approach of geothermal energy", responsible: ORME, contributors: IE, GFZ, , CFG, IVTRAN, IGR (?), JSC (?), deadlines: 29.09.06 (full paper); 30.06.06 (outline);
- "Socio-economic benefits of geothermal exploitations", responsible: CFG, contributors: IE, TNO, CRES, IGME, deadlines: 31.12.06 (full paper); 30.09.06 (outline);
- "Environmental impacts", responsible: IE, contributors: GFZ, PGI, CRES, deadlines: 31.03.07 (full paper); 31.12.06 (outline);
- "Increasing policy makers awareness and public acceptance", responsible: CRES, contributor: IE, TNO, BRGM, deadlines: 30.06.07 (full paper); 31.03.07 (outline);

- “Reports of study and analysis in the field of exploitation, economic, environmental and social impacts”, responsables: BRGM, GFZ, TNO, IGR, IGG, CFG, IE, CRES, PGI, GEUS, IVTRAN, JSC, ORME, IGME, deadlines: 31.12.06, 31.12.07, 31.12.08.

The organisation of the Workshop 5 “Electricity Generation from EGS” has been discussed. It has been agreed to have a two day event at a place where it is easy to get in and out to allow people from industry to attend the workshop. The city of Straßbourg has been chosen. The date has been agreed to be the 14th and 15th September 2006. The WP coordinator will develop a proposal together with BRGM and send this proposal around to all WP 5 members. The structure of the workshop could be: Day 1: Overview presentation on the possibilities and limitations of low temperature cycles; Presentations by producers of power plants (e.g. Siemens, Ormad, GMK, X-Orka, etc.); Day 2, presentation of experiences (e.g. Altheim, Neustadt-Glewe, Tuscany, Iceland, ORC-Biomass); Open discussion / Actions to be taken