



ENGINE COORDINATION ACTION

Minutes of the joint WP4 / WP7 Working Group Meetings,
Final Conference,
12.02. and 14.02. 2008, Vilnius

Coordinator:

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Absent Wp4/Wp7 members:

MESY, SHELL, TNO, GEUS, CERTH

Tuesday, 12.02.2008

1. Formalities (welcome, apologies, attendance)

Welcome address by work package 7 leader Ernst Huenges (GFZ)

2. Minutes of last meeting and report on recent activities.

The minutes of the last wp4/wp7 working group meeting of 02.07.2007 in Reykjavik were discussed and approved by the working group.

3. Bibliography on drilling stimulation and reservoir assessment.

The most recent version of the bibliography was presented and discussed. It contains all references handed in by working group members, as well as all references which were cited in any contribution to chapter 2 of the Best Practice Guide. About half of the references listed in the bibliography have arrived in digital form and are available as .pdf files. It was suggested to include a general note in the Best Practice Guide, pointing out to dedicated geothermal literature databases, which are accessible via the internet (IGA database, GRC database).

It is decided that the final version of the Bibliography will be circulated within the working group, prior to its inclusion in the European Reference Manual, which is the second deliverable of WP7, besides chapter 2 of the Best Practice Guide.

The working group approves the bibliography in principle, with minor changes and extensions.

4. Best Practice Guide, Chapter 2

Again, the purpose, aim and outline of the Best Practice Guide is debated. It is clarified, that the Best Practice Guide is not targeting the scientific community, but should be readable by a lay readership as well. It tries to give a very condensed overview over the state of the art in drilling, stimulation and reservoir assessment in various European geological settings, originally planned with a volume of 10 - 15 pages per chapter.

Subsequently, Chapter 2 of the Best Practice Guide in its most recent version is presented and discussed comprehensively and in detail. It is decided to extend chapter 2.2.1.3, Hydraulic Stimulation - Granites - Soultz, with a particular focus on specific stimulation parameters and procedures which were successfully applied in Soultz (► Marion Schindler). It is furthermore decided to replace table 1 in section 2.2.3 chemical stimulation, by a more comprehensive table, giving also explicit values of injectivity indices before and after stimulation (► Thomas Schulte).

5. Closure

The working group meeting of 12.02 is closed by Ernst Huenges.

Thursday 14.02.2008

6. Opening

Ernst Huenges opens the meeting, reporting on the main results of the steering committee meeting of 13.02. The presentation of the WP results on 13.02 received a positive feedback in the steering committee. It was recommended to add a further section to chapter 2 of the Best Practice Guide, covering most recent developments in drilling technology and recommendations for further research in this field. Additionally the working group was asked to give its view on innovative drilling technologies.

7. Proposals for calls.

Following the delineation of potential ENGINE spin off projects ahead of the Final Conference, the key draft proposals in the field of drilling stimulation and reservoir assessment, were presented and discussed. The relevant projects deal with:

Project 4: Improved drilling in geothermal pay zones

Project 4a: Melt drilling, laser drilling etc.

Project 5: Improving stimulation technology.

Project 6: Mitigation of induced seismicity.

Project 7: Tracing and production tests

It is generally realized that the projects which will finally be proposed to the EU, most likely have to be consolidated to a smaller number, prior to submission.

Regarding innovative drilling technologies, the working group states that a number of new methods for drilling (projectile, melt, laser, chemical, etc), though they are patented, are discussed, but their feasibility are almost doubted by drilling experts. In order to keep a future option open without wasting too much money for R&D investment in non-feasible methods, pre-feasibility studies about new drilling technologies are proposed. In the case that it is shown that reliable new techniques can be developed, a further R&D in the framework of EC should be proposed.

It is decided that the list of potential ENGINE spin-off projects shall be circulated amongst WP partners, prior to a final discussion within the steering committee.

9. Open questions

The working group meeting is brought to a close with a general review on the project realization and achievements. It is stated that geothermal can refer to economic success under certain conditions already, but that there are the remaining tasks of looking where knowledge gaps still have to be filled, and how geothermal can be brought to a wider market.

10. Closure

The working group meeting of 14.02 is closed by Ernst Huenges.