





## **Preliminary Programme**

## **Second Regulatory Workshop**

December 4-5, 2013 – Zurich, Switzerland

## December 4, 2013 (Wednesday)

| 08:30 - 09:00 | Registration   |                                       |
|---------------|--|---------------------------------------|
| 09:00 - 09:15 | Opening words, background  | BGR, NAGRA                            |
| 09:15 - 10:00 | Overview WP 2 and 3 (To be confirmed)  | Juan Carlos Mayor<br>(ENRESA)         |
| 10:00 - 10:45 | WP 2 – Mont Terri Heater Experiment (HE-E)  The 1:2 scale HE-E heater experiment at elevated temperatures (140°C) at the Mont Terri URL was designed and constructed as part of the PEBS project. After 2.5 years of heating the monitoring and modelling results will be presented. | Irina Gaus<br>(NAGRA)                 |
| 10:45 - 11:15 | Coffee break   |                                       |
| 11:15 - 12:00 | WP 2 – Mont Terri Engineered Barrier (EB) Experiment  The presentation aims to inform about the objectives and evolution of this long-term experiment and in particular about the dismantling operation carried-out recently in order to present and discuss the obtained results.   | José Luis García-Siñeriz<br>(AITEMIN) |

| 12:00 - 12:30 | WP 3 – THM Modelling  The presentation starts with a short description of the coupled THM formulation in relation with the phenomena likely to occur in the transient period of the EBS. Extensions of the formulation to incorporate other processes that may have an impact on EBS behaviour are introduced. The main results of the modelling of the EB (WP3.1), HE-E (3.2), and mock up (WP 3.3) experiments are presented. Agreements with and departures from experimental observation are discussed. Finally, the extrapolations to long term behaviour for the envisaged cases are presented and reviewed.  | Antonio Gens<br>(CIMNE)     |
|---------------|---|-----------------------------|
| 12:30 - 13:00 | WP 3 – THC-M Modelling  The presentation starts with a short description of the coupled THC-M formulation and its numerical implementation – highlighting recent extensions of the formulation incorporated during the PEBS project. The main results of the modelling of the FEBEX mock up test, heating and hydration experiments on compacted bentonite, experiments on the interactions between steel corrosion and bentonite, and between bentonite and concrete (WP 3.4) are presented. Agreements with and departures from experimental observation are discussed. Finally, the extrapolations to long term behaviour for the geochemical case are presented and reviewed. | Javier Samper<br>(UDC)      |
| 13:00 - 14:00 | Lunch break   |                             |
| 14:00 - 14:45 | WP 3 – Long-term extrapolation  Findings of the PEBS experimental and modelling work are used to improve models for long-term prediction of repository behaviour. Various extrapolation cases concentrating on different aspects have been defined and the outcomes are presented.  | Klaus Wieczorek<br>(GRS)    |
| 14:45 - 15:30 | WP 4 – Impact on long-term safety  Potential impact of the extrapolated processes in the EBS and their uncertainties in relation to the safety functions and to long-term performance will be discussed.  | Lawrence Johnson<br>(NAGRA) |
| 15:30 - 16:00 | Coffee break  |                             |
| 16:00 - 16:45 | General discussion  |                             |
| 16:45 - 17:00 | Closing words   | BGR, NAGRA                  |

## December 5, 2013 (Thursday)

| 07:00           | Departure from the hotel   |
|-----------------|--|
|                 | Visit of Grimsel Test Site   |
|                 | The Grimsel Test Site located in the Swiss Alps was established in 1984 as a centre for underground Research and Development supporting a wide range of research projects on the geological disposal of radioactive waste. |
| 16:00 (approx.) | Return to Zurich   |