

Agreement

between

Swiss Confederation, represented by the Federal Office for Water and Geology (FOWG),

Agence nationale pour la gestion des déchets radioactifs (Andra), France,

Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Germany,

Empresa Nacional de Residuos Radiactivos, S.A. (ENRESA), Spain,

Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) mbH, Germany,

Institut de Protection et Sûreté Nucléaire (IPSN), France,

Japan Nuclear Cycle Development Institute (JNC), Japan,

Nationale Genossenschaft für die Lagerung radioaktiver Abfälle (NAGRA), Switzerland,

Obayashi Corporation (OBAYASHI), Japan, and

Studiecentrum voor Kernenergie, Centre d'étude de l'énergie nucléaire (SCK•CEN), Belgium

concerning the

Mont Terri Project



Preamble

In 1996 FOWG (former SNHGS), ANDRA, Nagra, JNC (former PNC) and SCK•CEN have decided to make a cooperation agreement in order to perform a joint underground investigation programme, consisting of experiments in the reconnaissance tunnel of the Mt. Terri motorway tunnel, Canton of Jura, in a shale formation named the Opalinus Clay.

After 6 Phases of successful experiment work and a widening of the circle of Partners (BGR, ENRESA, GRS, IPSN and OBAYASHI), the République et Canton du Jura (RCJU) asks for a new organisation in which the Swiss Confederation takes towards the RCJU the full responsibility for the agreed Mont Terri research programme and its transparency, the management of the underground laboratory and the security in the laboratory.

The agreement partners therefore agree as follows:

1 Definitions

- 1.1 Partner shall mean a party to this agreement.
- 1.2 Delegate shall mean the delegate nominated by each Partner organisation.
- 1.3 Project shall mean the Mont Terri Project.
- 1.4 Programme shall mean the long-term Programme of the Mont Terri Project composed of single experiments.
- 1.5 Experiment shall mean a series of investigations (e.g. drilling boreholes, testing, analyses, longterm monitoring) with a specific aim. It comprises all actions at the Mont Terri underground laboratory and on rock and/or water samples deriving from the site.
- 1.6 Phase shall mean a phase of the project with a duration of twelve months. A Phase begins on 1st July of a year and ends on 30th June of the following year.
- 1.7 Programme Proposal shall mean the detailed description of the research activities in a specific Phase with the proposition of new experiments and the annual research programme.
- 1.8 Work Programme shall mean the detailed description of the work to be carried out in a specific Phase, which is approved by RCJU.
- 1.9 Experiment Partner shall mean a Partner participating in an experiment.
- 1.10 Experiment Delegate shall mean the person representing the Partner in an experiment.
- 1.11 Principal Investigator shall mean the person responsible for an experiment.
- 1.12 Project Manager shall mean the person with responsibility for the implementation of the Work Programme.



2 Scope of the agreement

- 2.1 The scope of this agreement is to guarantee the implementation and realisation of experiments in the Mont Terri underground laboratory in galleries or boreholes and to ensure that any data from such experiments and analysis on rock and/or water samples deriving from this site will be made available to all Partners, with the following objectives:
 - to test and improve techniques for hydrogeological, geochemical and geotechnical investigations in an argillaceous formation,
 - to characterise the hydrogeology, geochemistry and geomechanical behaviour of the Opalinus Clay formation,
 - to investigate the interaction of the Opalinus Clay with other materials and engineered barrier systems.
- 2.2 During the realisation of the programme in the underground laboratory the functionality of the motorway system into which the underground laboratory is integrated has always to be maintained.

3 Organisation

- 3.1 The Project is under the responsibility of the Federal Office for Water and Geology (FOWG). FOWG appoints a staff member as Director of the Mont Terri Project.
- 3.2 The Programme Committee is composed of one delegate from each Partner and chaired by the Director of the Mont Terri Project.
- 3.3 A Project Manager (PM), who is responsible for implementing the Work Programme, is appointed by FOWG.

4 Federal Office for Water and Geology

- 4.1 FOWG is responsible for the appointment and the supervision of the Project Manager and for maintaining relations with the authorities of RCJU. It guarantees the security measures and elaborates with the authorities of RCJU the general information about the Mont Terri Project.
- 4.2 FOWG annually asks for authorisation for new experiments for their entire duration and the specific annual research programme of the next Phase.
- 4.3 At the end of the Project, FOWG takes full responsibility for the decommissioning of the underground laboratory. No other Partner shall be deemed liable for any costs for the restoration of the site.

5 Programme Committee

5.1 The Programme Committee elaborates at Steering Meetings the research programme, decides unanimously on the Programme Proposal and the budget, makes propositions for PM and contractor selection and accepts new Partners. The presence of each Delegate or his substitute and of the Project Manager is required at the Steering Meetings. To ensure that the Programme Committee can work in an efficient way, each Delegate should have the authority within the necessary scope to represent his own organisation. A delegate of RCJU is invited as an observer.



- 5.2 Every new experiment proposal must include the general concept and scope, a time schedule and budget estimation. Each Partner may select the experiments in which he will participate.
- 5.3 If third parties are supporting financially or participating in an experiment, special rules may be convened by the Experiment Partners and FOWG.
- 5.4 At technical meetings, experiment proposals with potential contractors may be elaborated and proposed to the Programme Committee, results from experiments and publications may be discussed. Each Experiment Partner is invited to send several technical advisors to these meetings. A delegate of RCJU is invited as an observer.
- 5.5 At any time, technical discussions can be organised by each Principal Investigator, the Project Manager or the Director of the Mont Terri Project to discuss specific issues.

6 Project Manager

- 6.1 The Project Manager places the task orders with contractors (with cost ceilings) for the Work Programme, organises the supervision and payment of contractual work.
- 6.2 The Project Manager is responsible for the data management and reporting for the whole programme.
- 6.3 The Project Manager is responsible for the book-keeping of the project. His company acts as office of account.
- 6.4 The Project Manager issues instructions for staff working at the Mont Terri site.
- 6.5 The Project Manager is responsible for the on-site realisation of the experiments.
- 6.6 The Project Manager organises, on request, accommodation and administrative formalities such as work permits or tax recovery.

7 Experiments

- 7.1 Each Partner may select the experiments in which he wishes to participate. Each experiment as part of the Programme is managed independently. For each Phase a detailed Work Programme is carried out.
- 7.2 In the planning phase of an experiment, the Project Manager informs the experiment team about all potential interactions of the experiment with other running or planned experiments.
- 7.3 Each Experiment Partner nominates an Experiment Delegate to the experiment. One of the Experiment Delegates will be nominated by the Experiment Partners as Principal Investigator. The Project Manager may also be nominated as a Principal Investigator by the Experiment Partners.
- 7.4 The experiment is proposed and realised by an experiment team consisting of the Principal Investigator, the Experiment Delegates and the Project Manager. To ensure that the experiment team can work in an efficient way, each Experiment Delegate shall have the necessary authority to represent his own organisation.
- 7.5 The Principal Investigator has the scientific responsibility for the experiment, organises the data transfer to the Project Manager and the reporting on the experiment. He is nominated and supported by the Experiment Delegates.



7.6 At the end of the experiment the site shall be restored by the Experiment Partners to a state specified in the Programme.

8 Cost-Sharing, Financing

- 8.1 Propositions on budget and contractors of an experiment will be made by the Experiment Partners.
- 8.2 The costs of an experiment are shared in equal parts among the participating Experiment Partners. An Experiment Partner has to bear the costs of additional work required for his own purposes.
- 8.3 A Partner may also join an experiment in a later Phase, with a financial contribution to the previous Phases, which is to be agreed upon by the Delegates of the participating Experiment Partners.
- 8.4 The costs for project management, general logistic support and site preparation (infrastructure) are added to the experiment costs for each Phase and are proportional to the experiment costs at the Mont Terri site.
- 8.5 For each Phase, the total costs of each experiment (including costs for project management, laboratory infrastructure and general logistic support) and the contributions of the Experiment Partners are evaluated in advance.
- 8.6 The Project Manager provides every 6 months a settlement of accounts for each experiment, not later than 2 months after the end of the 6-month period. Verification and other substantiation documents shall be available for inspection as reasonably requested.
- 8.7 Each Partner shall bear all his own costs relating to his participation in the project (such as personnel costs, travelling and administration costs). However, a Partner may offer his services for specific work as a contractor.
- 8.8 The Partners agree to make advance payments every 6 months corresponding to their contributions to the budget for this period, payable on invoice within 30 days (of the end of the month) to the company of the Project Manager.
- 8.9 If an experiment has to be stopped, the Project Manager organises in the framework of the Phase closure the repayment of the remaining amounts paid in advance by each Experiment Partner.
- 8.10 At the financial closure of a phase all payments have to be completed and all accounts must be verified by an external audit.

9 Data Management, Reporting, Publications

9.1 All data (including raw data) collected as part of the project shall be available to all Partners and RCJU. The data will be archived by the Project Manager. All data should be accompanied by detailed descriptions of how the data were collected, with what instruments, the data format etc., to ensure that the quality of the data is as high as possible. The traceability of data also has to be ensured.

At the end of the Mont Terri Project, all data shall be archived at FOWG.

9.2 Internal technical notes are to be produced by the organisation, company or person in charge of each task or activity. Technical notes are to be produced promptly after completion of each activity and rapidly distributed to the Partners, the Project Manager and RCJU. Formalised reviews are not necessary for technical notes. Internal technical notes will be written in English.



- 9.3 Internal technical reports will be produced for each or a group of experiments. These reports will document the results of the experiments, provide more detailed analysis and interpretation, will be submitted for review to the Experiment Partners and distributed to the Partners, the Project Manager and RCJU. Internal technical reports will be written in English.
- 9.4 Each Experiment Partner has the right to publish data from his experiments, provided the Programme Committee is informed in advance.
- 9.5 Partners who do not participate in an experiment and RCJU have the right to use for publication any data 2 years after their acquisition. Publication prior to expiry of this 2-year period requires the approval of all involved Experiment Partners.
- 9.6 General publications relating to the Project require prior approval by FOWG.
- 9.7 A copy of each internal technical note, internal technical report and publication shall be deposited at FOWG.

10 Confidentiality

- 10.1 All Partners shall have full and unrestricted rights to use, disclose and reproduce project information in any manner and for any purpose, except as provided in Articles 9.5, 9.6, 10.2, 10.3 and 11.
- 10.2 So far as any project information is validly considered to be and is designated as proprietary or confidential, it shall not be disclosed by the receiving Partners to third parties (except affiliates of such party) without the prior approval in writing of the submitting Partner.
- 10.3 The following types of project information will always be considered as proprietary or confidential:
 computer codes for interpretation;
 - detailed instrument descriptions and drawings;
 - detailed construction descriptions.

11 Patent Rights

In case of inventions made during the course of the project, joint ownership shall be established. Each Experiment Partner is entitled to apply for world-wide patent rights in the joint names of all Experiment Partners, naming all participating inventors. The Experiment Partners are entitled to enjoyment of patents and licences in equal shares, in so far as there is no special agreement to the contrary.

12 Responsibilities

- 12.1 Each Partner undertakes to use all reasonable endeavours to perform on time his project shares. Each Partner will promptly notify the Project Manager of any delay in the execution of his project shares.
- 12.2 In transmitting any information to the other Partners, each Partner shall use his best efforts to ensure the accuracy thereof and, in the event of any error therein will promptly notify the other Partners. The "transmitting" Partner shall not be under obligation or liability in respect of the information and the receiving Partners shall be entirely responsible for the further use of it.



13 Exclusion of Warranties

None of the Partners makes any warranty regarding, or in connection with, his performance or the results of the Project and expressly disclaims all written, oral, express or implied warranties, including any statutory warranties and including any warranties of merchantability, fitness for purpose, freedom from the infringement of patents or other privately held rights and including any warranties as to the accuracy, completeness or usefulness of any project information provided hereunder.

14 Liability Insurance

- 14.1 All Partners, each on their own account, are fully liable for the accident and medical insurance coverage of their own staff, in accordance with the appropriate federal and cantonal legal and regulatory requirements. Consequently, each Partner shall proceed to the appropriate formalities and shall sustain all the costs, if any, associated with the insurance underwritten in order to cover his own staff against the above mentioned risks.
- 14.2 Each Partner shall be responsible for informing another of any claim or damage arising during or consequent to any work performed by the staff of the other Project Partner, employed by him, in order to proceed to the various regulatory and legal requirements.
- 14.3 Each Partner is liable, pursuant to applicable law, for damages caused by his staff to the staff of another Partner.
- 14.4 In accordance with the appropriate local regulations, each Partner remains liable for damage to third parties caused by his own staff.
- 14.5 The Project Manager shall effect a third-party liability insurance to cover any damages incurred to third parties (e.g. the RCJU) arising from the construction and operation of the underground rock laboratory.
- 14.6 On the decision of the Programme Committee, the Project Manager may effect an insurance for damage to test apparatus, machinery, measuring equipment and for official visitor groups.

15 Force Majeure

- 15.1 No Partner shall be deemed to be in breach of this agreement where his failure to perform, or his delay in performing, any obligation is due wholly or in part to a cause beyond its reasonable control, including but not limited to an act of God, an act of any national, civil or military authority, governmental priorities, civil commotion, war, strikes, lockouts and other labour disputes, fire, flood, sabotage, earthquake, storm, epidemic and inability to obtain necessary and proper labour, supplies or transportation.
- 15.2 Each Partner shall notify the Project Manager promptly of any failure to perform, or delay in performing any obligation due to a cause set out above and shall provide an estimate as soon as practicable of the time when the obligation shall be extended; over which such extension shall be for a period of time at least equal to the period of delay resulting from such a cause.



16 No Partnership or Agency

Nothing in this agreement shall be deemed to create a partnership or agency between the Partners.

17 No Assignment

No Project Partner shall, without the other Partners' prior written approval, assign or otherwise transfer, whether in whole or in part and by way of subcontract or otherwise, any of his rights and obligations under this agreement.

18 Arbitration, applicable law and place of jurisdiction

- 18.1 The Project Partners agree that in the case of any dispute concerning or arising out of this agreement, they will make every effort to reach an amicable settlement with, if necessary, the assistance of one or several independent mediators.
- 18.2 If such a settlement cannot be reached, all disputes arising in connection with the present agreement shall be finally settled under the Rules of Conciliation and Arbitration of the Swiss Society of Engineers and Architects (SIA) by one or more arbitrators appointed in accordance with the said Rules.
- 18.3 This agreement shall be governed by, subject to, and interpreted in accordance with the law of Switzerland.
- 18.4 Place of jurisdiction is Berne, Switzerland.

19 Duration and Termination

19.1 This agreement shall become effective on the 1st July 2001 for Phase 7 of the Mont Terri Project and shall continue in full force and effect until the Project is completed.

The Cooperation Agreement regarding the Mont Terri Project (April 1996) between the Partners will terminate at the 30th June 2001.

- 19.2 This agreement may be terminated at the end of each Phase by any of the Partners upon 6 months in advance by a written notice to the Partners.
- 19.3 A Partner terminating this agreement has to fulfil all obligations resulting from the Programme and his participation in the experiments. He receives all technical notes and internal technical reports which document the ongoing Phase and from the experiments he participated.

20 Additional Partners

- 20.1 Further organisations may join the project at the beginning of each Phase.
- 20.2 The minimum financial contribution for future Partners joining the project is CHF 500'000.- or an equivalent contribution in individual experiments, if not unanimously agreed differently by the Programme Committee.



- 20.3 The application to join the project shall be sent to the Director of the Mont Terri Project, mentioning the experiments in which the applicant is interested in and the total initial financial involvement. The Director conducts the negotiations with a candidate Partner.
- 20.4 The Programme Committee decides on the admission of a new Partner by a simple majority vote. In principle, a candidate Partner should be accepted, if he fulfils the conditions required by this agreement.
- 20.5 A delegate of a candidate Partner may participate in Steering Meetings as an observer of the preparation for the Work Programme of the experiments in which the candidate Partner wishes to participate.
- 20.6 The partnership becomes effective by a confirmation letter to the Partners accepting: - the present agreement and amendments thereto if any,
 - the work programme of the planned project Phase and the financial contributions,
 - possible financial contributions to previous costs of ongoing experiments.

This agreement is signed in ten originals, one for each Partner.



Berne, Switzerland, 1st June 2001

Dr. Chr. Furrer, Director Federal Office for Water and Geology (FOWG) Switzerland	
F. Jacq, General Manager Agence nationale pour la gestion des déchets radioactifs (Andra), France	
Prof. Dr. F. Wellmer, President Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Germany	
A. Colino, President Empresa Nacional de Residuos Radiactivos, S.A. (ENRESA), Spain	
Dr. Manfred Banaschik, Head of Administration Division Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) mbH, Germany	
M. Livolant, Director Institut de Protection et Sûreté Nucléaire (IPSN), France	
Dr. Toshio Wakabayashi, Director, Internat. Coop. and Nuclear Management Division, Japan Nuclear Cycle Development Institute (JNC), Japan	
Hans Issler, President, Dr. Markus Fritschi, Division Head, Repository Projects Nationale Genossenschaft für die Lagerung radioaktiver Abfälle (NAGRA), Switzerland	
Yoshihisa Obayashi, Senior Managing Director Obayashi Corporation (OBAYASHI), Japan	
Prof. F. Deconinch, Chairman of the Board, P. Govaerts, General manager Studiecentrum voor Kernenergie, Centre d'étude de l'énergie nucléaire (SCK•CEN), Belgium	