Deployment Plan Working Group Status Report

November 2011

Implementing Geological Disposal of Radioactive Waste Technology Platform (IGD-TP)

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DP WG Meetings

- February 7, 2011, Paris
 - Definition of the approach
- April 8, 2011, Stockholm
 - Presentation of the methodology and grouping of SRA Topics
 - Compilation of the proposals for selected Topics for immediate deployment (request from the Executive Group meeting no 4)
- May 31, 2011, Turku
 - Clarifications on the approach and of the needs
 - Drafting of the contents of the Deployment Plan report

- July 5, 2011, Telephone meeting
 - Drafting of the final contents of the DP report
- August 30, 2011, Stockholm
 - Brainstorming and agreement on the Master Deployment Plan of the DP
 - Review of written contributions
- October 14, 2011, Telephone meeting
 - Review of contributions and detailed discussion
- November 8, 2011, Heathrow
 - Final review before draft submission to the Executive Group







General Methodology of Deployment









Type of Joint Activities

- Five types of joint work were identified
 - Information Exchange Platform (IEP)
 - Organisational Working Group (ORWG)
 - Technical/Scientific Working Group (TSWG)
 - Technical Project Group (TEP)
 - Technological Transfer (TT)







IEP – Information Exchange Platform

- Organized forum of exchange between IGD-TP members and participants
 - Memorandums of understanding or exchange agreement on a noncommercial basis
 - In-kind contributions
 - Lifetime of an IEP depends on the its goal
 - Can be limited when a product is expected, for example a roadmap
 - Can be unlimited for cooperative work; needs clear timetable and deadlines for deliverables
 - Ideal for debating new ideas or approaches, to prepare projects and to share information

Assumes to have balanced contributions between organisations joining









TSWG – Technical and/or Scientific Working Group

- Working group to further develop a technical or a scientific SRA Topic
 - For example, preparatory work for a joint project, or state-of-theart report
- Costs could be covered by each participating party,
- Limited lifetime
- Outcome: planning reports, initiation of technical projects, workshops

Needs a clear commitment of the participants to plan and create a possible future Technical Project







ORWG – Organisational Working Group

- Working group for organizing around a Topic
 - Work focuses on the strategic or practical organizational approaches around an SRA Topic (e.g. organizing peer reviews or benchmarking)
- Has a task and time specific focus compared with an IEP
- Costs could be covered by each participating party,
- Outcomes
 - Reports on specific questions related to the organization
 - Provision for more permanent infrastructures
 - Needs a clear commitment of the participants to build and work and work on how a joint project could be organised









TEP – Technical Project

- Technical or scientific work on a specific SRA Topic or group of topics
- Can be launched after a preparation work
- Needs
 - A detailed project plan
 - A project agreement
- Costs- the number of options is large, we have at least :
 - Application for EC co-funding through the FPs calls
 - Funding shared among the partners involved in the TEP
 - Possible contribution (direct or in-kind) of the participants
- Agreement needed for the programme, governance, funding, IP rights

Solution Needs a clear commitment of the participants to contribute to and work on a project

✤ Main trends and rules may be consistent with the FPs







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TT – Technological Transfer

- Balanced* contribution from the engaged parties
- Modalities to be defined
 - Agreements of transfer of previously acquired results or knowledge on a commercial basis
 - Less formal pooling of expertise on a non-commercial basis may potentially take place

* Implies to give a value to the already produced work in order to find a way of compensation









Routes for deployment



Outcomes to SRA update

Organisation of Topics and programmes

- Classification
 - all Topics were then classified according to the start date
 - the next step was to group the Topics in each of the above categories
 - the permanent actions, Cross-cutting activities and WMOs specific activities were segregated to clarify the table
- Selection of Topics to serve as test cases, so called "Pilot Projects"







Outcomes of the Selections

- Selection of joint activities for immediate deployment, submitted to the EG and approved
 - Evaluate safety of construction and operations ventilation etc
 - C-14
 - Seals and plugs
 - In-situ experiments on bentonite state of the art
 - Increase safety case tool testing
- Selection of one small joint effort to be worked as an example of one of the models for future cooperation within the SecIGD project
 - Retrieval of prototype repository selected
 - Full scale plugging and sealing experiment
 - · Bentonite state of the art in situ experiment
 - Safety of operations and construction









Content of the DP report (1/2)

- The general vision of the Deployment (HOW)
 - Governance (generic for all joint activity types)
 - Project Management (generic)
 - Types of joint activities for deployment work on the SRA (description, the text exists)
- Define the working rules for the different types of deployment activities (How and what) concerning joint activity management
 - Outcomes from SecIGD background work
 - Regrouping of the SRA (in Appendix in more detail, the excel)
 - Information Exchange Platform (IEP)
 - Organisational Working Group (ORWG)
 - Technical/Scientific Working Group (TSWG)
 - Technical Project Group (TEP)
 - Technological Transfer (TT









Content of the DP report (2/2)

- Timeline for the SRA Key topics and topics (WHAT) deployment (WHEN partly in SRA)
 - First pilot project to be implemented (in Appendix)
 - Remaining three Topics from the list (in Appendix) for deployment
 - Last "50" from the SRA on the rough timeline for deployment
- Way forward and highlighting the timing opportunities for the IGD-TP participants (WHO - Terms of Reference of the EG group)
 - Decision making in the EG for lead and participation, scoping of the activity
 - Announcing opportunities to participants
 - Involvement of other stakeholders
- Conclusions









Main production

Detailed review of the timetable

Production of a reference timetable as a part of the Master Deployment Plan







Master Deployment Plan (1/3)

SRA Topics and their deployment activities

Waste forms and behaviour: TSWG launched in 2011 (Topics 2.1, 2.4, 2.5)

Plugging & Sealing: TSWG launched in 2011 (Topics 3.6, 3.10, decision of the June 2011 EG)

Waste forms and their behaviour: TSWG on C14 (topic 2.2, Releases from ILW and their detailed characterization)

Monitoring the Environmental reference state: TSWG (Topic 6.3)

Operational safety: ORWG (Topics 5.1 and 5.2)











Master Deployment Plan (2/3)

SRA Topics and their deployment activities	
Materials interactions: TSWG and TEP (Topics 1.1 - the only TSWG, 3.11, 3.12, 3.15, 3.17) especially cement and clay based interactions	Concrete project?
Monitoring programme: TSWG (Topics 6.1, 6.2, 6.4)	MoDeRn
Safety Case: TSWG on process model benchmarking (Topic 1.3)	• •
Safety Case Peer review: ORWG (Topic 1.2)	••••••
Long-term stability of bentonite in crystalline environments: TEP (Topic 3.9)*	0
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Master Deployment Plan (3/3)

SRA Topics and their deployment activities

Various topics (Topics 7.1, 3.1, 3.2, 3.3, 3.4, 3.5, and 3.16) belonging to different categories - Topics the concern governance of the decision making and various topics related to technical feasibility of repository components

ORWG on Adaptation and optimisation of the repository (topic 4.1) IEP on Communicating result from RD&D (CC1?, CC4)

Competence Maintenance, Education and Training: ORWG CMET (CC 2)

Nuclear Knowledge Management: ORWG NKM (CC3)

WMOs IEP (WMO 1-6)







Conclusion

- Selection by the EG of the of joint activities for immediate deployment
 - Further decision on how to implement
 - Team
 - Team leader
 - Type of product
 - Deadline
- Production of a Master Deployment Plan (incl. timeline)
- EF 2 to present the DP and discuss first actions to be launched





