Towards a Joint Programming on Radioactive Waste Disposal

WG 1 outcomes: Exploring the domain of scientific-technical activities potentially covered by

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Topics treated

1. What are the scientific-technical topics to be addressed within a Joint Programming?
2. What are the topics for which existing scientific-technical solutions can be prohibitively expensive for small programmes?
3. What is the urgency of R&D efforts relevant to particular scientific-technical solutions?
4. Which scientific-technical solutions would be beneficial for minimising delays in the implementation of disposal?
5. Shall we deal with topics not directly linked to scientific research (social, cross-cutting activities)? How to include social science R&D programmes?

Scientific-technical topics to be addressed within the JP

The use of reports to the EC DIR 70/2011?

- ✓Both EC and IAEA (Joint Convention) require overview of national prgrammes
- ✓Directive/JC reports are providing generic information and joint programming will not cover the whole national programmes,
- ✓The objective of JP is to select priorities we could share.

Scientific-technical topics to be addressed within the JP

Commonalities of RD&D actors need to be identified while respecting differences in their requirements/needs

- ✓ SRA‘s are to be developed and compared to provide a basis for formulating the vision
- ✓ Actor‘s SRA are bases for establishing joint view
- ✓ But: is there enough time to put them together?
- ✓ Establishing joint SRA – majority interests prevail, national specifics might be suppressed

Scientific-technical topics to be addressed within the JP

Environmental monitoring: shall it be included in JP – there are implications for public acceptance

- ✓Project MODERN 2020 addresses partially the issue (mostly dealing with facility monitoring), there will also be a monitoring project within JP

JP for national programmes In different stages

- Common requirements for site selection could be elaborated
- The national strategy is a basis for establishing a DGR
- Most participants feel that predisposal activities to be included (long term storage, SNF conditioning, co-disposal of different types of RW, extension of service life of storage facilities, processing waste with exotic and long lived waste (C-14, T)

Different designs and host rocks

- Among countries it might be easier to find cooperative approach than at EU level (IGDTP has different focus).
- A grouping is needed, full overlaping of programatic topics cannot be anticipated
- Developing methodology of the research
- Modelling tools, standardisation of investigation methods
- Necessary to identify Issues that are difficult to achieve and are common for other areas

Topics for which existing scientific-technical solutions can be prohibitively expensive for small programmes

- Joint effort for R&D expensive issues (SNF performace, the same type of SNF, HLW)
- Sharing knowledge regarding engineering

Urgency of R&D efforts relevant to particular scientific-technical solutions

- Prolonged storage of SNF: what will be its statute?
- To consider ageing management of SNF/HLW
- Criticality might be problem in the case of failure of the system, needs to be addressed in safety case

Scientific-technical solutions beneficial for minimising delays in the implementation of disposal

- Currently, lack of knowledge regarding operational safety issues, fire protection
- Operational issues are crucial for the DGR project, but it is difficult to be prognosed in long term
- After the first DGR's are put in operation this will be checked and adequately adopted
- Retrivability issues – early decision on the concept needed
- Selecting similar concepts eases joint efforts, grouping countries according to disposal concepts seen as beneficial

Topics not directly linked to scientific research

- R&D involving societal issues is recommended for each national programme

Miscellaneous topics

- Regional repository: Outside of the scope of JP as apolitical aspect, but some technical issues are relevant (e.g. disposal of different types of SNF/RW in a facility)
- Consider Safety Case as a common playground, everybody needs it, its scientific background is similar for all disposal options
- Standardised format of SC – would be beneficial
- Security, is it an aspect to be investigated?