IGD-TP working group on RD&D dissemination

Ray Kowe, NDA

Tara Beattie MCM-International

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Work Package 2 (WP2) "Support for networking, structuring and developing RD&D competences in countries with less advanced geological disposal programmes"

This Work Package aims at:

- Providing specific support to a Working Group (WG) in charge of networking, structuring and developing RD&D competences in countries with less advanced geological disposal programmes.

- Providing the management guidelines for Joint Activities dealing with this WG.

- Supporting the organisation for two international conferences for disseminating the public scientific and technical information and results derived from the IGD-TP's Joint Activities and from other RD&D efforts in the field of geological disposal. Specifically providing support to members of countries with less advanced programme and developing the means to better take into account their attempt towards the platform.

- Enabling the further evolution of the IGD-TP's SRA.

Experiences collected from international and bilateral cooperation will be used as a basis for developing the methods to ensure effective resource utilization in the knowledge transfer.

IGD-TP Manchester Conference, 24-26 June 2014

Conference themes

Based on the topics in the SRA, those raised in the last IGD-TP Exchange Forum and the perceived needs of the less advanced programmes:

- *Waste forms and criticality safety*

- *Engineered barriers*

- *Geosphere*

- *Biosphere*

- *Radionuclide and Gas behaviour*

- *Monitoring*

- *Geological Disposal Facility Design and Safety Case*

- *Less Advanced Programmes: needs and policy*

- *Waste inventory and characterisation and acceptance criteria*

- *Societal aspects*

- *Radionuclide biogeochemistry*

These themes may be changed or grouped together before the conference

Key dates

- Oct 2013   Registration opens

- Jan 31st 2014   Abstracts for presentations due

- April 30th2014   Deadline for early and less advanced
  programme bursary registration

www.meeting.co.uk/confercare/geodisposal2014

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Two meetings May, September, 2013 London

Attendees:

Tara Beattie (MCM-International), Crina Bucur (Institute for Nuclear Research, Romania), Jacques Delay (IGD-TP), Daniela Diaconu (Institute for Nuclear Research, Romania), Mireia Grivéé (Amphos21), Jan Gugala (SKB), Darius Justinavicias (Lithuanian Energy Institute), Ray Kowe (NDA), Richard Poisson (Andra), Ewoud Verhoef (Covra), Claudia Vivalda (Vivalda Scientific)

Meeting discussions

- *Presentations on SecIGD2, geological disposal in members countries, technological transfer, NEWLANCER, EC project Lucoex*

- *Open forum on needs and common issues of less advanced programmes (Technology transfer; Access to information; Centralized accessible database; Access to experts; Link to other groups e.g. NEWLANCER, ERDO and NAPRO; Attendance at relevant meetings/conferences – less advanced programmes may not have the resources to attend; Less advanced programmes learning from nearby programmes e.g. Netherlands and Belgium, NEWLANCER; Use of other people's facilities e.g. underground research labs, site visits to existing facilities) .*

  General consensus that it was good practice to identify common needs and form partnerships and share resources and efforts.

Initial outputs from Working Group

Questionnaire to gain wider input on RD&D information needs from IGD-TP partners. This information will be used to:

i. identify the specific needs of the less advanced programmes; analyse how they could be taken into account in the joint activities;

ii. identify key open specific documentation accessible on specific topics established already and used by more advanced countries as a reference or state of the art;

iii. prepare proposals to implement these needs in the existing TS/ORWG already established in the technology platform; and

iv. identify areas of possible technology transfer through specific agreements between more and less advanced programmes.

Outcome of Questionnaire

1. IGD-TP SRA-related information

- Research needs that align with topics identified in the SRA
- Straight-forward measures considered to improve access to information, key people and general awareness/involvement in existing or new projects

2. Non IGD-TP SRA-related information

- Research needs not prioritised in the SRA
- Considered realistic and achievable ways for improving collaboration for shared research priorities beyond straight forward commercial-oriented 'technology transfer (TT)'

3. Process & programme infrastructure information

- Programme infrastructure, information and processes required to fulfil EC Directive 2011/70/EURATOM
- Considered how cooperation between advanced programmes and less-advanced programmes could be improved and synergies with existing / parallel groups, beyond 'TT'

1. IGD-TP SRA-related information

Examples include:

- *Demonstration of full-scale operations and access/involvement in URL experiments;*

- *Monitoring (site monitoring/remote sensing techniques/guidelines);*

- *Bentonite/container/EBS performance (esp.>100°C/New Build wastes and MPC-related research);*

- *Uncertainty treatment & safety assessment tools;*

- *Costing methodologies;*

- *Operational safety, repository layout and design adaptation.*

1. Implementation ideas for SRA-related info

Several straight-forward initiatives already in-development to address needs:

i.   Access to key people - key contacts list for each SRA topic developed within the deployment plan (email addresses in each programme);

ii. Wider information dissemination activities for EC projects:

- IGD-TP conference and encouraging open discussion/round table events;

- Attachment to wider-audience conferences (adding special sessions to existing conferences rather or in addition to developing isolated project-specific conferences), LUCOEX experienced difficulty in getting non-project participants involved with dissemination activities;

- Continuation of established topic networks after project completion and the need to consider project leaders with personality and passion for topics;

- Facilitate participation through effective organisation, participation is linked to structured E&T and targeted development areas, e.g. NEWLANCER focus staff in certain areas so that participation is structured so that staff are aligned and build continuity in particular areas;

1. Implementation ideas for SRA-related info cont.

Several straight-forward initiatives partly in-development to address needs:

iii.   Improved methods or approaches for raising awareness about the existence of relevant projects and how to get involved (either from the beginning or part-way through) as it was considered that this is ultimately the best vehicle for enhancing information dissemination and education and training – simply attending the final project conference or reading the final project deliverable reports is not enough;

iv.   Improved access to key documentation and state of the art information on each topic – some overlaps with knowledge management; and

v.   Support within EC projects/funds available to support attendance at events from less-advanced programmes (e.g. bursaries available for 2014 IGD-TP conference) and consideration for how involvement in projects can be maximised with minimum funding requirements (e.g. early notification of project meetings and intelligent choice of meeting locations to reduce costs where possible).

2. Non IGD-TP SRA-related info

Examples of 'out of scope' research include:

- *Site characterisation (accessing geophysical data and models)*

- *Integrated waste management activities such as centralized storage considerations (inc. lifetime extensions for SF storage) and waste characterisation;*

- *Inventory development (methodologies, software, technology for labelling and tracking);*

- *Hazard assessment (accidents and external events and their impacts on storage, transportation and repository); and*

- *Waste acceptance criteria and disposability confirmation (definition and parameter development as programmes develop);*

3. Process & programme infrastructure info

Non-research related needs include:

- *Implementation strategies;*

- *Programme development (e.g. RD&D prioritization, coordination and programming methodologies);*

- *Optioneering to consider siting and EBS approaches within national context and develop national policy approaches;*

- *Costing methodologies for policy and respository options analysis;*

- *How to do 'technology transfer'; and*

- *Adaptation to national-specific boundary conditions (technical and societal lessons learned needs);*

Implementation ideas for non SRA-related info (2&3)

Considered various approaches to improving information dissemination, cooperation and collaboration on topics not in SRA (research AND infrastructure info):

i. Expand scope of SRA:

    - Scope of directive is much wider within Europe than SRA (which is prioritised according to advanced programmes needs);

    - Consider if it is appropriate for IGD-TP Vision to be expanded somehow so that research and infrastructure info needs captured;

ii. Facilitate strategic alignment on identified info needs between less-advanced and developed programmes (based on synergies and complementary boundary conditions), e.g. COVRA-ONDRAF/NIRAS and SKB-Posiva collaborations:

    - Effort-in-kind contributions/releasing documents/high-frequency info exchanges/internships & secondment E&T opportunities;

    - 'TT', how much commercial interest here is open for discussion;

    - Advanced programmes have to be prepared to help less-advanced programmes (lessons learned/actively supporting E&T activities).

Implementation ideas for non SRA-related info cont.

ii. Facilitate strategic alignment on identified info needs between less-advanced and developed programmes continued:

- Structured Mini-Exchange Forums: ½ - 1 day interactive sessions (inc. use of webinars) to be developed that are focussed on networking is specific areas focussed on information exchange (e.g. non SRA-research or process/infrastructure oriented needs). This would be an opportunity for staff in less advanced programmes working in a particular topic area to meet the key players from the more advanced programmes and initiate network building. Such an event could include informal round tables, ideas exchange on state of the art, discussions about where information exists and can be accessed, lessons learned and future plans within the EC (e.g. priorities within SRA).

Implementation ideas for non SRA-related info cont.

iii. Alternative vehicle to SRA developed specifically for less-advanced programmes:

- If SRA to remain focussed on advanced programmes needs, an alternative route other than highly commercial 'TT' should be developed to support collaboration and cooperation (e.g. alternative platform/activity);

- Potential for specific EC-project or EC-funding to help less-advanced programmes to develop the systems and competency to meet Directive requirements based on lessons learned from advanced programmes;

- Might be more appealing to advanced programmes who do not want to communicate that they are supporting lots more 'open research' , as this could impact their own programme implementation plans and stakeholder perception;

- undertaken within or in-cooperation with existing related activities such as NEWLANCER, EDRAM and ERDO (e.g. ERDO Working Group Workshop, Luxembourg, December4/5 2013, Supporting European Member States in responding to and reporting on the EU Waste directive).