

CALL FOR PRESENTATIONS

IGD-TP 4th Exchange Forum

Proposal and/or ideas to be sent before August 31, 2013 to the Secretariat
secretariat@igdtp.eu

**The IGD-TP 4th annual Exchange Forum (EF) will be held October 29-30, 2013
in Prague, Czech Republic**

After the publication in 2012 of the Deployment Plan, the Implementing Geological Disposal of Radioactive Waste – Technology Platform (IGD-TP) has entered into a new phase of implementation of new working groups and technical projects directly linked with Strategic Research Agenda (SRA) priorities. In addition, IGD-TP has set up organisational working groups on cross-cutting activities. All of them are centred on the “joint activities” described in the Deployment Plan (DP).

The outcomes of two technical working groups have already led to EC projects: DOPAS (Full Scale Demonstration of Plugs and Seals) dealing with the strategic issue of the plugging and sealing of drifts and cells, and CAST (Carbon-14 Source Term) dealing with the study of the various source terms of C14, their release modes and speciation forms.

Furthermore, IGD-TP Executive Group supervises the activities of working groups on previously launched EC projects and to prepare future calls, projects, or organisational activities.

In addition, the IGD-TP Secretariat, supported by an EC project (SecIGD2: Secretariat IGD-TP 2) has set up working groups to reinforce IGD-TP organisation and deploy its activities towards less advanced programme needs and to support the work of the Competence Maintenance, Education and Training group.

The first Exchange Forums (EFs) were mainly dedicated to explain Waste Management Organisations (WMOs) priorities and information on on-going projects or projects under development.

For this 4th Exchange Forum we would like to focus on new ideas that could complement our SRA priorities through a bottom-up approach and we would like to involve in a more efficient way new actors of the RD&D.

Thus, the **aims** of this 4th Exchange Forum are:

1. Bring forward new projects in a bottom-up approach in the framework of the deployment of activities described in the SRA/DP
2. Identify new subject of collaboration related with SNETP (Sustainable Nuclear Energy Technology Platform) future needs
3. Identify subject of common interest with Technical Support Organisations (TSOs) through SITEX (Sustainable network of Independent Technical Expertise for radioactive waste Disposal)
4. Inform on working groups activities and EC projects
5. Develop new R&D programmes on stakeholder involvement

This Exchange Forum may help in preparing for future projects, calls etc and also in initiating or further deepening contacts between research organizations, waste producers and Waste Management Organizations.

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To fulfil these objectives, the Exchange Forum will last two days and will give time for five technical working groups to discuss priorities and new areas of interest.

Five technical working groups are planned. They will focus on:

WG1: "Cement "

The aim is to determine the potential scope for future joint studies and/or experiments on cement materials interactions with other repository components, based on input from WMOs in relation to their needs. The emphasis is on long-term performance rather than engineering aspects.

Based on first screening amongst the WMO's, the potential topics are:

1. Porosity and permeability changes due to cement-rock interaction (in a very large sense: high and low pH cement, all types of rock and bentonite, impact of ingressing species, hydro-mechanical impact, ...)
2. Organics - cement interaction (acidic potential, complexation capability, ...)
3. Radionuclide retention (good databases exist, but improvements are possible, e.g. impact of redox conditions, evolution as function of time, ...)
4. Corrosion rates in cement (ongoing research in the different national programmes and converging towards very low rates: multiple lines of evidence)

Before the EF (probably somewhere in September), some additional feedback from the WMO's will be provided with some more details on the requirements for each of these topics. Based on this input, presentations on how the topics might be tackled are welcomed for the EF.

WG2: "Monitoring"

After the MoDeRn (Monitoring Developments for Safe Repository Operation and Staged Closure) project, further developments of a monitoring collaborative project could be achieved by sharing partner developments of in situ technologies to match specific repository requirements (durability, metrology, hardening, etc.). R&D on technologies needs a qualification process that entails testing and qualifying the complete measurement chain based on several stages. These stages will take into account environmental conditions such as radiation rates etc. Our proposal is to have 4 themes based on the following work areas:

1. Strategy aspects
2. Technology development
3. Practical implementation
4. Communication & stakeholder involvement

WG3: "New Waste Type" in collaboration with SNETP

Expected changes in waste forms may have implications for geological disposal and needed R&D. The changes expected in waste forms that will need to be disposed of in geological repositories are of primary concern for WMOs. Indeed, the confirmation that this waste will be compatible with the current engineered barrier systems and host rocks may require intensive and decade long R&D. In line with its vision, the issue for IGD-TP concerns primarily changes expected in the coming two decades (e.g. higher burnups, change of cladding materials, use of fuel form other than UO₂, increased separation and recycling, change in the reprocessing end-product, GenIII reactors...). This includes also the primary and secondary waste that will be generated from the R&D facilities dealing with GenIV and other facilities...

WG4: RD&D TSO's needs: the view of SITEX

The aim of this Working Group (WG) is to present the TSO's RD&D needs and discuss some of these priorities which may meet WMOs needs as expressed in the SRA and DP. This WG offers a forum that could foster, where possible, and considering the deontological issues linked with the respective role and missions of assessors and implementers, the identification of possible joint activities linked with the joint programming strategy to be developed in the EC frame work of H2020.

WG5: Microbiological Studies

Microbial processes have been investigated by most, if not all, WMOs for up to two decades or more. Although the disposal concepts and the geological formations vary significantly from country to country, baseline microbial processes are the same. Nevertheless, the wealth of knowledge on microbial processes in radioactive waste disposal mostly remains with individual WMOs. The aim of this WG is to bring together the competence and knowledge on microbiological processes and form a long-lasting international community within which new results, projects and proposals can be shared and discussed. The WG will identify general cross-WMO interests, gaps in knowledge and discuss opportunities for a cooperative program and its financial and practical implementation. Subjects suggested for technical session and areas proposed for discussion and ground for a new proposal are:

1. What energy sources and fluxes of energy will be available for microorganisms at repository conditions?
2. To what extent, if any, can microbial dissolution of immobilized radionuclides and production of complexing agents increase radionuclide migration rates?
3. Can microbial activity contribute to keeping the repository anoxic and at a low redox potential?
4. To what extent can microbial production and consumption of gases from organic and inorganic sources influence the performance of repositories?
5. Under what conditions can sulphide producing microorganisms increase corrosion rates of metal canisters for wastes?
6. Microbial degradation of concrete is a well-known problem for many present day engineered constructions – can similar microbial processes occur in repositories?
7. How do we model microbial processes in repositories over a very long time period. Present day models and requirements for the future.

In addition, IGD-TP would like to take the opportunity with this Exchange Forum to involve a broader range of stakeholders in Technology Platform activities. For this purpose, a plenary session talk will present our thoughts on dialogue with stakeholders on their possible interests, involvement and engagement with IGD-TP.

Finally, all participants are encouraged to make suggestions for the organisation of future Exchange Forums and in this way to enrich our work programme with new ideas.

Exchange Forum participants are strongly encouraged to express their interest in participating to the Working Groups by proposing subject of presentations, projects or ideas.

The Exchange Forum is open to all stakeholders (technical or not) interested in geological disposal of radioactive waste.

Registration & application form

In order to register and/or submit a presentation, please fill in this [registration and application form](#) for the 4th IGD-TP Exchange Forum and send it to the Secretariat at secretariat@igdtp.eu.

With this form, you will specify to the Secretariat:

- if you intend to participate to the 4th IGD-TP Exchange Forum ;
- the working group you are interested in participating in ;
- if you intend to submit a presentation/proposal or ideas.

Link to download the form: http://igdtp.eu/index.php/documents/doc_download/134-igd-tp-4th-ef-registration-application-form

Deadlines

Presentations should be submitted **before August 31, 2013.**

Registrations will be open until **September 30, 2013.**

Please note that for practical reasons the number of attendees to a Working Group could be limited.

The formal invitation to the 4th Exchange Forum will be issued September 30, 2013 with the agenda.

We remind you that the registration is free of charge. A confirmation of your registration will be sent by the Secretariat at the latest one month before the event.

Information on the venue can be found at:

http://www.czecot.com/congress-place/1107_prague-congress-centre-praha