

IGD-TP EURAD Position Paper 3

With this 3rd position paper (and an additional letter formulated during the EURAD proposal stage), the IGD-TP would like to continue, in an open and constructive way, to provide feedback on various aspects to EURAD. As EURAD is a new instrument and several aspects are developing though learning by doing, we hope this feedback can be taken into account, to help EURAD improve and have the impact it aims for. We are of the strong opinion that the national Waste Management Organisations (WMOs) need to play a critical and supportive role in this as they have the societal responsibility for the implementation of radioactive waste disposal projects together with the Technical Services Organisations (TSOs). They therefore need to focus on the essential and strive for an efficient and economical way of realising these projects.

- 1. Roadmap and Knowledge Management (KM)** – The IGD-TP welcomes the progress made in the development of the roadmap and the work breakdown structure (WBS) as a means of capturing the knowledge in one structure. The system boundaries of the roadmap need to be agreed by consensus and clearly defined upfront and then consistently communicated. The IGD-TP proposes a scope limited to the science and technological knowledge required to implement geological disposal, consistent with the objective of EURAD and to avoid duplication with NEA and IAEA activities that are developing complementary knowledge management systems (e.g. safety case development, implementation programmes). Based on the agreed scope the process to populate the roadmap and WBS needs to be planned. It needs to be recognised that this knowledge capture can only happen in reasonable measurable steps. Each step needs to be well defined in terms of who to involve, what are the deadlines and what resources are needed. External experts need to be involved in population and the review of the roadmap where this scientific/technological expertise is currently not (sufficiently) present within the current EURAD membership. Where activities originally planned to be taken on by the KM Work Packages (WPs) are re-allocated to the Project Management Office (PMO) and/or Bureau a reallocation of the resources needs to take place as well.
- 2. EURAD Strategic Research Agenda (SRA)** – The updating of the IGD-TP SRA and the identification of topics for the EURAD second wave by the WMO community showed that several domains of high priority for the WMOs are not covered in the current EURAD SRA. Important examples are specific scientific domains where knowledge transfer from other domains is needed (e.g. long-term geological evolution or also climate change), criticality safety assessment, as well as the whole domain of industrialisation and optimisation. A number of the high-priority domains are best pursued as WMO-funded projects, but some are suitable for shared activities within the scope of EURAD. The current EURAD SRA is focused on the academic aspects of radioactive waste disposal. The IGD-TP will make its updated SRA available (draft by April 2020) and hopes that it will provide guidance for selecting the second wave topics and for updating the EURAD SRA in the future.
- 3. Research partners able to benefit/participate in EURAD** – The research community serving the implementation of radioactive waste disposal is wider than currently represented in EURAD, either as Mandated Actors or as Linked Third Parties. If the research community is not enlarged this could lead to rigidity as it will not be possible to tackle multiple topics needed to realise the EURAD vision. In order to address the

current gaps in our understanding and realise the vision it needs to be possible to select the best placed research institutes and/or service providers. The Research Entity (RE) college needs to represent the whole research community, and needs to develop and implement a strategy to achieve this. The selection of future EURAD priorities needs to occur based on a thorough gap analysis. Common interest of the three colleges cannot be the main criterion for selecting future research topics as this might lead to self-serving behaviour and thus unjustified spending of the budget. This point was previously raised in our Position Paper dated 14 October 2019 (IGDTP/PP/2019/01).

4. **Use of existing WMO services** – The transfer of knowledge between WMOs has a long history and a proven record. Multiple WMOs, that are not part of a governmental body, have developed commercial arms (e.g. Posiva Solutions, SKB International, Nagra International Services and Projects, etc.) to tailor various aspects of a repository programme and its implementation (technical, strategic, communication, etc.) to the needs formulated by other advanced or early programmes worldwide in recent decades. There is a clear need for this, as tailored services can result in more immediate and greater progress than knowledge transfer through document structures alone (e.g. the roadmap). Support can be related to the development of the roadmap, reviewing documents, organising specific training or one-to-one coaching (using existing initiatives or expanding new ones). The knowledge held within the WMOs is an asset for the industry. Already by making many of their reports (that required significant investment) open access, the WMOs have taken a large share in serving the community. It is the view of several WMOs that a discussion needs to take place within EURAD as to whether these WMO services can contribute to the EURAD goals or if EURAD aims to provide complementary aspects of knowledge transfer to the existing WMO services.
5. **Planning of new projects** – While the IGD-TP acknowledges that where new projects have just started, no additional budget can be attributed for the same topic. However, this should not be the case for projects in their 3rd or 4th year. At that point it might be clear if the project can address the questions adequately, or if open safety-relevant topics remain. In order to retain momentum in resolving important remaining issues, it should be possible to plan new projects such that the topics can continue without a multi-year gap in between.
6. **EURAD management** – In the future it would be helpful if the PMO and Bureau expectations for input from the Colleges could be clearly defined in advance for the 6-12 months to come. It is recommended to focus the General Assembly meetings: documents need to be made available at least 2 weeks before the meeting; we should only discuss where there is disagreement; agreed decisions should clearly recorded in the meetings; and we need a formal approval process. It is suggested that the technical and scientific discussion is separated from the administrative requirements, perhaps starting the General Assembly meetings with the technical WP session and then all non-voting attendees could leave. The permitted attendance at both the technical and administrative discussions should be clarified. The addition to the grant agreement required to kick-off the 2nd wave topics could be used as an opportunity to also adjust certain aspects.