**Integration Group for the Safety Case (IGSC) Symposium 2024***MOVING TOWARDS THE CONSTRUCTION OF A SAFE DGR – GETTING REAL*

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| **Abstract Title: Operational Safety and Safety Assessment – Lessons learnt from the operation of existing facilities** | |
| **Abstract (300-500 words):** The IGSC ad-hoc group on transfer and return of experience gained on safety cases for disposal facilities (TARGES) has identified six topics that are relevant to the planned extended mandate of IGSC. Topic 3, specifically, focuses on the experience gained from operating facilities and how this can be transferred to deep geological repositories (DGR). To further clarify the objectives of this topic and enhance the interface between IGSC and Expert Group on Operational Safety (EGOS), a workshop between both groups was held in October 2023. Issues concerning industrial and operational safety and the handling of common technical systems and processes between non-DGR and DGR facilities were of interest in the workshop. Thus, IAEA gave an overview of the knowledge exchange with the DISPONET group (International Low Level Waste Disposal Network), and eight speakers gave a deep insight into the experience gained in their respective national facilities. The workshop covered near-surface disposal facilities, underground research laboratories, geological facilities in shallow depth, and existing low and intermediate level waste DGR.  During the joint session, the speakers were encouraged to share their experience in the safe operation of their facilities. Of particular interest is experience related to incidental or accidental events and the interaction with internal and external safety and rescue infrastructure. While DGR for high-level waste (HLW) are not yet in operation, it is valuable to learn from the experience of operators of long-running facilities and to consider the implications of long-term operation on facility design. Relevant questions for the speakers include e.g.:  What sources/methods were/are used to identify possible accidents/incidents?  How did or do you ensure that the planned prevention and mitigation measures for different incidents/accidents were/are sufficient?  What optimization measures (e.g. technical innovations/additional prevention/mitigation measures) have been implemented in the design and operation of the facility and how?  What is your experience with the development and application of requirements for operation and operational safety? Have requirements changed and have additional requirements been established during operation? If so, what were the reasons?  In terms of changed requirements and/or optimization, which stakeholders (e.g. waste producers, regulators, post-closure safety assessors, others) have been involved and how has the interaction with these stakeholders been managed?  The proposed contribution will summarize the workshop and the main conclusions. | |