**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:**  **Importance of the interaction between developing the safety case and requirements management in the ‘design for safety’ process for disposal solutions – a summary of work performed within EURAD, taking advantage of the collaboration with the NEA / IGSC** | |
| **Abstract (300-500 words):**  Disposal projects address a broad range of issues, involve many different disciplines and are of long duration. This makes them complex. Experience with complex projects shows that they can strongly benefit from using requirements management to plan and implement them. This experience is also confirmed by those waste management programmes whose deep geological repository projects are further advanced and that rely on the use of requirements management to support their work, e.g., (in alphabetical order) Finland, France and Sweden. EURAD – the European Joint Programme on Radioactive Waste Management – recognized the importance of requirements management for European member states and started a project to develop some guidance on requirements management by actively involving end-users in a series of workshops and a training event. This project was concluded in May 2024 and yielded three guidance documents, one addressing mainly the methodology for generic systems, one addressing a waste management programme and/or specific waste management systems and the third one looking at the implementation of a disposal system, with the main emphasis on the disposal of spent fuel and high-level waste in a deep geological repository.  In the latter document, the role of the safety case is described extensively as it is of key importance for defining the post-closure safety requirements. The discussion clearly shows that the interaction between the safety case (especially performance assessment) and requirements management is essential in the approach to ‘design for safety’ in developing a repository. In addition to post-closure safety, the addressed issues include planning implementation, actual implementation (construction, waste emplacement operations and closure) as well as interaction with the public. This presentation provides a summary on how to address ‘design for safety’ in requirements management with the help of the safety case. The other issues addressed in the guidance will also be briefly mentioned. | |