



Selection of essential records from a repository program to inform future generations: insights from a study for the Konrad repository

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Abstract. During the NEA initiative Preservation of Records, Knowledge and Memories (RK&M) Across Generations, a systemic approach was developed to establish a diverse RK&M preservation strategy that integrates multiple and complementary methods with varying characteristics (NEA, 2019a). One of these methods concerns the preservation of a so-called Set of Essential Records (SER) (NEA, 2019b). The SER is proposed as a collection of the most important records for waste disposal selected for permanent preservation during the repository lifetime. The goals are (i) to provide members of future generations, primarily professionals, with knowledge of radioactive waste management (RWM), the contextual information that helps them to understand the repository system and its implementation process on a deeper technological and societal level, and (ii) to reduce the number of records deemed for preservation to a manageable set and thereby rationalize required resources.

On a generic abstract basis, a procedure for how to identify and select the essential records from the vast number of records produced during a repository program has been proposed (NEA, 2019b). However, the actual approach for how to implement the SER has not yet been defined. The current project tests how this abstract procedure can be implemented by applying it to the records of a “real” repository (currently under construction), i.e., the Konrad mine for the disposal of low- and intermediate-level radioactive waste in Germany, anchoring it in an existing research and technical context. This helps to check which tools can contribute to the procedure and to evaluate how far the process can be automatized. Special challenges arise from the fact that the license application for construction and operation of the repository was submitted in 1989, and many key records are already more than 30 years old. During the course of this study, 77 016 records, including 4866 full reports, were accessible in the Konrad record management system. Different approaches and tools have been applied to test an efficient record-selection procedure, which reduced the SER to about 150 records. The applied methods and current status of the study will be presented.

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