Saf. Nucl. Waste Disposal, 2, 267–267, 2023 https://doi.org/10.5194/sand-2-267-2023 © Author(s) 2023. This work is distributed under the Creative Commons Attribution 4.0 License.





Solving problems collectively in nuclear waste governance

Stefanie Enderle and Elske Bechthold

Institute for Technology Assessment and Systems Analysis (ITAS), Karlsruhe Institute of Technology, Karlsruhe 76133, Germany

Correspondence: Stefanie Enderle (stefanie.enderle@kit.edu)

Received: 31 March 2023 - Accepted: 23 May 2023 - Published: 6 September 2023

Abstract. Nuclear waste governance is a technical and societal task with numerous and complex challenges. The goal is generally accepted and clearly defined, which is that high-level waste is to be stored in a deep geological repository. The path to this goal is determined by the site selection procedure outlined in the Repository Site Selection Act (StandAG). Today (2023), we are in the phase of moving from potentially suitable areas in Germany to a limited number of siting regions. However, selecting a repository site with the best possible safety is only one of the challenges on the way to the final storage of nuclear waste. It can be assumed that the conditions of the social and political framework will change during the decade-long process of site selection, construction, and storage in a repository (Hocke et al., 2021). It is highly probable that unforeseen developments will occur and that a response will be necessary. The entire disposal process must be designed to be flexible so that the central players can remain capable of acting. At the same time, however, it must also be sufficiently robust to allow the process of emplacement in a repository to be completed with as little delay as possible. What precautions need to be taken so that, from the current perspective, the best possible response can be made to unforeseen developments? What decisions will have to be made, and what consequences can be expected? How can path dependencies be avoided (Scheer et al., 2023)? These and other questions were the subject of the 2 d workshop "Nuclear Waste Disposal - Possible Paths, Directional Decisions, Future Challenges", which was held with a selected group of stakeholders from the field of nuclear waste governance in May 2023. In our contribution, we will present key results of the workshop. The focus of our attention is on the question regarding which problems and perceptions the central actors represented in the workshop focus on and to what extent the experimental setting of the workshop is suitable for promoting collective problem-solving (Werle and Schimank, 2000).

Financial support. This research has been supported by the Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz (grant no. 02E11849E).

References

Hocke, P., Kuppler, S., and Enderle, S.: Robuste Langzeit-Governance und Notwendigkeiten neuer Navigation. Zur Qualität soziotechnischer Gestaltungsprozesse, in: Robuste Langzeit-Governance bei der Endlagersuche. Soziotechnische Herausforderungen im Umgang mit hochradioaktiven Abfällen, edited by: Brohmann, B., Brunnengräber, A., Hocke, P., and Isidoro Losada, A. M., transcript Verlag, Bielefeld, 363–385, https://doi.org/10.14361/9783839456682-017, 2021.

Scheer, D., Becker, F., Hassel, T., Hocke, P., Leusmann, T., and Metz, V.: Trittsicherheit auf Zukunftspfaden? Ungewissheitsbewältigung bei der Entsorgung hochradioaktiver Abfälle, in: Entscheidungen in die weite Zukunft, edited by: Eckhardt, E., Becker, F., Mintzlaff, V., Scheer, D., and Seidel, R, Springer Nature VS, Wiesbaden, in preparation, 2023.

Werle, R. and Schimank, U. (Eds.): Gesellschaftliche Komplexität und kollektive Handlungsfähigkeit, Campus Verlag, Frankfurt a.M., ISBN 3-593-36470-0, 2000.