



Transdisciplinary research with respect to trust/confidence building by longer-term, near-field monitoring of a geological repository – part II

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Received: 30 March 2023 – Accepted: 23 May 2023 – Published: 6 September 2023

Abstract. In the disposal of radioactive waste in Germany, a question arises with regards to how confidence in the safety and thus also in the acceptability of a deep geological repository can be increased. One way to achieve this is to involve the interested public in the monitoring process of the repository, even after the emplacement phase and even in already backfilled areas of the repository. The transdisciplinary research project TRANSENS, specifically its work package TRUST, is investigating how the longer-term monitoring of a deep geological repository can lead to greater trust and confidence among the public. This scientific research is done in cooperation with a group of non-scientific actors chosen from the interested public, the so-called ArbeitsGruppeBevölkerung (AGBe). Results of a first workshop held together with the scientific research members and 12 non-scientific actors were already presented in Othmer et al. (2021). Building on this first workshop, a second workshop was held on the topic of repository monitoring. The results of this second workshop are presented in this article, focussing on the workshop process, the used methodology, and the insights gained.

The second workshop consisted of three blocks, namely joint transdisciplinary research, concerns and reservations, and conflicting goals in the technical design of longer-term repository monitoring. After the workshop, an online questionnaire was sent out to AGBe members to gather their basic attitudes towards repository monitoring and the weighting of individual aspects of the monitoring concept. The results provided insights into the requirements of the AGBe for the design of socio-technical monitoring concepts that are considered trustworthy. The findings also revealed existing concerns and reservations, requirements for the technical design, and the relevance of individual aspects of the monitoring concept. Moreover, a change in attitude towards repository monitoring was observed, compared to the first workshop. In addition, the second workshop improved the experience in the application of various methods for transdisciplinary formats. It made progress in the transdisciplinary treatment of near-field monitoring topic as well because relevant information for the design of a socio-technical-based monitoring concept was developed. Further topics, such as decision-making based on technical monitoring data, were identified and will be dealt with using transdisciplinary formats during a third workshop.

Financial support. This research has been supported by the Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz (grant no. 02E11849A), the Volkswagen Foundation (grant no. 02E11849A), and the Niedersächsisches Ministerium für Wissenschaft und Kultur (grant no. 02E11849A).

References

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