

Co-designing a Cave: a Partnership Approach to Developing a Radioactive Waste Repository Concept



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Abstract

In the late 1990s the Belgian Agency for Radioactive Waste and Enriched Fissile Materials (NIRAS) invited potential host communities to set up “local partnerships”, bringing together representatives from the local civil society in order to investigate and consider the technical and social feasibility of implementing a repository facility for low and intermediate level, short-lived waste in their municipality. Three such partnerships were created, involving four municipalities.

All three partnerships developed, together with NIRAS, an integrated concept for a repository project, encompassing societal preconditions (including continuous participation through the partnership), and advised their municipal councils positively on the feasibility question. Two municipalities subsequently decided to put themselves forward as potential host communities. In 2006 the Belgian federal government chose one of these as the final site, and acknowledged that the partnership approach should continue during the further elaboration and implementation of the repository project, as well as during the operation of the storage facility.

The installation of the partnerships and their persistence over time has had an impact on NIRAS as a semi-governmental organisation at the federal level, on its relationship with other concerned actors at different governance levels, and on the municipalities involved - both in terms of the socio-political relations within the municipality, as in the municipality’s relationship with regional actors. Moreover, the partnerships have had an undeniable impact on the design of the repository project itself.

In this paper we will look at the partnership approach as a new form of governance: not so much in terms of process design or innovative mechanisms for interaction, but as a case of collaborative learning and collaborative research and development; co-design as the partnerships name it themselves. We will therefore focus on the subsequent changes in the technical design of the repository facility, in particular adding an inspection “cave” as a new feature, due to the incorporation of “local knowledge” and the reconciliation of different notions of what a safe and secure site entails. These negotiations started from the very beginning of the partnerships’ mission and to some extent still carry on today, as the repository has not been implemented yet.

By telling “the story of the cave” we will show how the partnership approach solved to some extent the problem of finding a repository site, but also created additional challenges. One of them, is that the tasks for the local partnerships evolve and already today stretch well beyond the limits of what they were initially set out for. In that respect, a qualitative analyses was conducted in 2010/2011 focussing on the challenges of long-term community engagement in a project that will take several years of implementation, decades of operation before a decision to close the facility, and at least one hundred years of monitoring after closure.

Considering that long-living local partnerships are unique, the answers to the challenges identified in this paper will have to be both creative and durable for this policy experiment to serve as an example of long-term innovation in governance.