

RADIOACTIVE WASTE MANAGEMENT ESSENTIALS: INVOLVEMENT, LOCAL PARTICIPATION AND INTEGRATION

Katleen Derveaux, Project Coordinator, STOLA / STORA, Local Partnership of the Municipality of Dessel

ABSTRACT

This paper describes the way in which the waste manager in Belgium turned around its program for the disposal of low-level short-lived waste, to include the local stakeholders in the decision making process. As a result, local partnerships were established with the municipalities of the possible repository sites. This paper follows the working of such a local partnership, “STOLA”, up to the integrated project for the disposal site that was worked out and the request for a continued stakeholder involvement on all nuclear matters in the concerned region.

INTRODUCTION

To decide on a final repository for radioactive waste, even if it is low-level short-lived waste, is not something that can be done from behind a big black desk. Such a decision has to be deliberated with the local population, the people that will actually be confronted with the repository in their day-to-day lives, and that for the rest of their lives.

In Belgium, the agency that ensures the management of radioactive waste, ONDRAF/NIRAS, acknowledges the importance of this societal implication. Because imposing a repository on a community, even if safe and technically acceptable, just doesn't work. That is why in 1998 ONDRAF/NIRAS turns around its program for the disposal of low-level waste.

The implantation of a disposal infrastructure will inevitably have economic, social and ecological consequences, so the public demands that socio-economic aspects are taken into account. Based on this knowledge, the federal government in 1998 asks ONDRAF/NIRAS to develop new methods, including management and dialogue structures, necessary to integrate a repository project at the local level. Furthermore, ONDRAF/NIRAS has to limit its

investigations to the four already existing nuclear zones in Belgium, namely Doel, Fleurus, Mol-Dessel-Geel, and Tihange, and to the municipalities that are interested in preliminary field studies.

DESSEL, A SMALL MUNICIPALITY WITH A LARGE NUCLEAR HISTORY

Two of the four existing nuclear zones in Belgium comprise nuclear power plants (Doel and Tihange), the other two are zones with companies performing other nuclear activities. The latter is the case for Dessel. Dessel is a small municipality with a surface of 2.703 ha and 8.700 inhabitants or about 3.500 households. A nuclear perimeter of 1.000 ha stretches out over three municipalities, and covers 250 ha of the territory of Dessel. In this region, there have been nuclear activities since 1952. At present, seven companies are active in the nuclear perimeter, among which two research centers, two fuel production companies, a waste treatment company and two smaller companies (transport and services). All Belgian radioactive waste (low, intermediate and high-level) is treated and temporarily stored at Belgoprocess in Dessel.

Needless to mention that the nuclear companies represent a large sector of employment in the region: with over 1,800 employees, the nuclear sector has an important local impact. The municipality Dessel also gathers an income of the nuclear sector, generated by imposing a tax on the supply, transportation and temporary storage of all radioactive waste. This tax represents 12.30 % of the total income of the municipality.

All these factors and the historical habituation of the people of Dessel with the nuclear presence, have a role in the decision of the municipality in 1999 to comply with the proposal of ONDRAF/NIRAS to carry out studies on the technical possibility and social acceptability of a repository of low-level, short-lived waste.

DEVELOPING A STAKEHOLDER INVOLVEMENT

In an attempt to address the issue of disposing the low-level, short-lived waste through both technical research and concept development and interaction with the local stakeholders, ONDRAF/NIRAS, together with social sciences departments of Belgian universities, develops the concept of “the local partnership”. In such a local partnership, partner number one - ONDRAF/NIRAS - cooperates with partner number two - the concerning municipality, to investigate the technical feasibility and the social acceptability of a disposal project.

In the Dessel municipality, ONDRAF/NIRAS created the first local partnership in 1999, named “STOLA” (“Study and Consultation Low Level Waste”). Beside STOLA, two other local partnerships were established: “MONA” in the neighbouring municipality Mol (2000) and “PaLoFF” in Fleurus-Farciennes (2003).

Key features of the local partnerships are the involvement of all stakeholders at an early stage in the decision making process and the participation through representation.

Participation through representation

All representative local stakeholders from Dessel participate in STOLA: the active political parties, economical and social movements. Apart from these organisations, also individuals join STOLA in the working groups. In total, 76 inhabitants of Dessel volunteer to take part in STOLA and discuss whether and under which circumstances they could accept a repository. Their personal concern and engagement create an atmosphere of constructive collaboration.

A *general assembly*, uniting representatives of all participating organizations, decides on the main course and sets out the course for the actual discussions. The general assembly appoints an *executive committee*, in charge of the day to day management of STOLA. The committee is, amongst many other things, responsible for the co-ordination of working group activities, decision making on budget spending and the supervision of the project co-ordinators.

The backbones of the partnership are the *working groups*. They actually shape the integrated disposal project. Here the various aspects of ONDRAF/NIRAS's generic disposal concept are studied in detail, all relevant existing research is taken into consideration, the need for additional studies is evaluated and independent experts are invited to participate in the debate. The working groups propose different options and discuss them, weigh up the pros and cons and seek expert advice. In this way, ONDRAF/NIRAS, in its role of project developer, enters into direct dialogue with the Dessel community. Questions and reactions from the stakeholders may require the ONDRAF/NIRAS experts to be more creative and to rethink certain aspects of their initial concept or project. Thanks to the input of external parties and the ideas of the working group members, the disposal concept further grows into a STOLA-concept perfect for Dessel.

The STOLA-partnership has four working groups:

- 'Implementation and Design': handles all aspects related to the disposal concept and its implementation in Dessel;
- 'Environment and Health': explores the possible consequences of a disposal site to the environment and health;
- 'Safety': tackles the different safety aspects of a disposal facility;
- 'Local Development': discusses how the added value can make a disposal site socially acceptable in Dessel.

The working groups are composed of both representatives of the organizations that founded the partnership, as well as individual citizens who expressed an interest to participate actively in this discussion forum.

Since all these people participate on a voluntary basis, two full time *project co-ordinators* are employed by the partnership. These project co-ordinators take care of administrative and communication tasks and support the working groups both logistically and scientifically.

For in the local partnership the emphasis lies in on the local stakeholders, its seat is situated at the heart of the community concerned. It is not a field office of ONDRAF/NIRAS, but an independent local organization in which ONDRAF/NIRAS participates as the only non-local partner amongst a multitude of local stakeholders (ONDRAF/NIRAS has only one vote, albeit with a veto on technical feasibility).



Fig. 1 All relevant local stakeholders are involved in the development of an integrated project with technical and societal implications.

A disposal project, integrating technical and social implications

The ultimate goal of the local partnership is to develop a repository concept that is acceptable for all parties involved and an integrated project, fitted to its environment and bringing added value in community life. Based on the collection and examining of information, the stakeholders in STOLA assess the feasibility of the repository and decide on the desirability and acceptability of the integrated project. Thus, the stakeholders do not only decide on the technical repository concept and where it should (or should not) be implanted. Through the partnership, the local community can decide on the technical, environmental and safety conditions and furthermore, on an accompanying local project that seeks to bring added value to the community and additional local conditions (concerning environment and public health).

All these elements are integrated to become one global project. Both the technical and the social area of the project are assessed separately and must prove to be achievable. If it is technically not feasible, or when the social guarantees are inadequate, the project will be stopped.

The final outcome of the discussions in the partnership should therefore be (a) a decision against the repository project for technical, safety or other reasons, or (b) an integrated project, carried by both local stakeholders and ONDRAF/NIRAS.

Focus on Transparency and Public Involvement

The partnerships are intended to bring the decision making process closer to the public and to lower the threshold for active participation. Key words in the partnership approach are therefore transparency and public involvement. As explained before, public involvement is considered crucial in reaching an acceptable solution for the nuclear waste problem. This means that as many stakeholders, with as many different backgrounds and opinions as possible, should be invited to participate in the partnership. Local partners should therefore represent different political, economic, social, cultural and environmental movements or organizations within the community.

The partnership, however, should not become just another select club of decision makers. One of its primary tasks, therefore, is to be open and transparent, to make itself known to the rest of the local community and to communicate what position it is taking. Through consultation within STOLA with the various partners and individuals, STOLA tries to feel the pulse of the population. It is, however, of paramount importance to make as many citizens as possible aware of the purpose and operation of the association. STOLA wants to review its work through the eyes of the Dessel population and give everyone the opportunity to express his opinion in or on STOLA. To achieve this, STOLA develops several communication initiatives targeted at a large public, within the municipality of Dessel.

These initiatives vary from newsletters distributed from door to door, articles in the municipal information booklet, a web site, an office window and info sessions, to information campaigns at local events (annual fair, Christmas fair) and a STOLA-event to present the integrated disposal to the local population and to solicit a response. To raise the appeal, STOLA involves the local schools, the library, Dessel associations - from the local history club over various dance and music groups - and the company that processes and stores radioactive waste.

To find out how the Dessel population feels about the disposal, STOLA organises several opportunities for public comment. STOLA orders a focus group survey, conducts small-scale surveys and holds debates.



Fig. 2 The local population is given the opportunity to learn about the integrated project and to express their opinion on it.

INVOLVEMENT LEADS TO RESULTS

In 2004, after a five year operation, STOLA comes to the conclusion that the Dessel community can accept a repository for low-level short-lived waste, providing binding commitments adequately meet the conditions and expectations among the population.

Of all prerequisites and conditions for acceptance of the Dessel community for disposal, *safety* remains the first concern. For the implementation of the selected disposal option, those techniques must be used that offer the best *safety, health and environmental* guarantees. There must also be continuous follow-up of the environmental, safety and health effects and technological and/or scientific developments. If it appears that adjustments can have a positive impact, these should be made during the disposal process.

Two options for the disposal of low-level and short-lived waste are acceptable to STOLA in Dessel: disposal in concrete casts near the surface and underground disposal in the Boom Clay. The concepts of both options, as developed by STOLA, offer sufficient benefits and safety guarantees. The disposal facility can be set up on a site within the nuclear perimeter, within the Dessel municipal boundaries.

The end of the activities of the non profit organisation STOLA, due to the completion of its assignments, should not put an end to the involvement of and dialogue with the Dessel

population. There is a clear need for a *permanent forum for local participation and communication*.

When all safety, environmental, health, communication and participation requirements are met, the population will also expect in return that their contribution to solving a serious social problem is somehow compensated. This compensation implies tangible *social, economic and cultural added value* in the short, medium and long term. STOLA proposes different initiatives which are beneficial to the development of the town of Dessel and its population: a contact and support centre as a forum for all nuclear matters, a digital and interactive network in Dessel, a theme park focusing on radioactivity, a fund to support projects that contribute to improving the quality of the living, housing and working conditions of the Dessel population and opportunities for environmental planning.

Towards a decision on the disposal of low level waste

After the approval of the STOLA-file by the general assembly of the non profit organisation (September 2004), the Dessel municipal council approves it unanimously (January 2005). ONDRAF/NIRAS hands over the STOLA-file to the federal government, which makes the final decision on the disposal for low-level waste. At the end of 2005, the federal government has three specific partnership files (STOLA, MONA and PaLoFF) to its disposal and is able to make a decision. It is the request of Dessel community that the decision on the siting of the repository in Dessel, Mol or Fleurus-Farciennes is made within a short deadline.

CONTINUED STAKEHOLDER INVOLVEMENT

Following the approval of the STOLA-file, the municipal council of Dessel agrees on the principles of a permanent forum in Dessel for local participation and communication in radioactive waste management. This successor of STOLA (meanwhile dissolved) is named “STORA” (Study and Consultation Radioactive Waste) and is created in spring 2005.

The non profit organisation STORA is based on the same principles as STOLA: stakeholders involvement by a broad representation of all the active local political, economical and social movements. Its structure and way of working is similar to that of STOLA.

Two working groups are nowadays active:

- ‘Radioactive Waste’: discusses all phases of nuclear waste management and the nuclear activities in the region;
- ‘Communication’: explores the possible ways to better inform the local population.

In comparison to STOLA, the objectives of STORA are broader: *all aspects of the nuclear waste management* are part of the dialogue with the Dessel population. STORA discusses all the present nuclear waste in Dessel and informs the local population on all nuclear matters, concerning the nuclear activities in the region.

Awaiting the actual decision of the federal government on the siting of a low-level waste repository in Belgium, *follow-up of the STOLA-file on the possible disposal in Dessel* is guaranteed within the municipality. One of the tasks of STORA is to monitor the progress of the disposal project, up to the negotiation stage.

STORA is kept up to speed on the current state of affairs, further developments and prospects, to review the progress against the original integrated STOLA project and possibly update particular aspects, taking into consideration new facts and data.

Until the government decision on the disposal of low-level and short-lived waste, the purpose of the association is to monitor the progress of the negotiations, position-taking vis-à-vis the negotiating partners and the town council, defend the disposal project and continue reporting on the situation to the local population.

CONCLUSION

The best judgement of the local partnership principle can be made by the local stakeholders involved. Their explicit request to pursue their way to participate in the radioactive waste management and the local nuclear current affairs, is significant. The local stakeholders feel they can have a finger on the pulse of the nuclear reality they deal with in their region. In Dessel, the community has required a front row seat and some speaker time in the local nuclear world.