

**CARL THEMATIC REPORT**

**Stakeholders in Radioactive Waste  
Management and their Networks**

Lead author Anne Bergmans

University of Antwerp

Belgium



## Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	THE TERM ‘STAKEHOLDER’ .....	2
1.2	THE TERM ‘NETWORK’ .....	3
<b>2</b>	<b>STAKEHOLDER NETWORKS AS POLICY NETWORKS .....</b>	<b>4</b>
<b>3</b>	<b>POLICY NETWORKS ON OVERALL WASTE MANAGEMENT STRATEGY AND PROGRAMMES</b>	<b>6</b>
3.1	IDENTIFYING THREE BROAD TYPES OF ACTORS .....	6
3.2	LINKING THE ACTORS WITHIN THE NETWORK .....	8
3.3	POTENTIAL IMPACT OF ‘NETWORKING’ ON POLICY OUTCOME .....	10
<b>4</b>	<b>POLICY NETWORKS ON THE SITING OF REPOSITORY FACILITIES.....</b>	<b>11</b>
4.1	IDENTIFYING TWO TYPES OF ‘SITING NETWORKS’ .....	13
4.2	THE ROLE OF THE RWM AGENCY AS GO-BETWEEN LINKING THE LOCAL TO THE NATIONAL LEVEL.....	15
4.3	THE STRENGTH OF THE LOCAL NETWORK .....	21
<b>5</b>	<b>CONCLUSION.....</b>	<b>34</b>
<b>6</b>	<b>BIBLIOGRAPHY .....</b>	<b>36</b>

## 1 Introduction

This report looks at the emergence of networks in relation to public and stakeholder involvement (PSI) in radioactive waste management (RWM) and, in particular, in the siting of radioactive waste repositories. It is based on the individual country's analysis as documented in the CARL country reports<sup>1</sup>; in depth interviews with key actors in Belgium, Sweden, Slovenia and the UK<sup>2</sup>; the output of a CARL workshop in Troon (Scotland) aimed at drawing stakeholder networks<sup>3</sup>; and intense discussions on these data within the CARL research team. To some extent, this report also builds on the analysis in the other thematic reports, in particular the report on governance.

The governance report identifies changing patterns in stakeholder involvement across the four countries (and elsewhere in the world – *e.g.* Finland, Canada, France, ...) and highlights elements of 'governance' (rather than 'government') in the way aspects of radioactive waste policy are developed today. The notion of 'governance' refers to a model of decision-making that is characterised by an explicitly shared responsibility between the state, business, and civil society; whereas 'government' refers to a more traditional model where the state controls the decision-making process and where consultation is generally more formal and elitist. The shift in governing from more 'government' to more 'governance' can be seen in part as a reworking of the relationship between the state, civil society and business, involving a limited delegation of responsibility to other actors in the network in relation to developing inputs to policy (Walls & Simmons, 2008).

The governance report indicates that differences in political and organisational culture among the four countries have led to differences in the way the concept of governance has been shaped. On the one hand, the 'pure' governance-oriented approach is built on a network model; with specific bodies feeding into the policy development process, even though they are relatively loosely attached to the formal decision-making structure (*e.g.* CoRWM in the UK). However, as demonstrated below, the governance approaches contain government aspects that are essential to

---

<sup>1</sup> Reports on Sweden, Belgium, Slovenia, the UK and Finland to be downloaded from: [www.carl-research.org](http://www.carl-research.org)

<sup>2</sup> Interviews held in the course of 2006.

<sup>3</sup> During this workshop (November 2006) we asked participants to draw what they saw as their stakeholder networks. The purpose was to get an idea of the clusters of different types of actors that took shape in each country around the (policy)issue of radioactive waste management and how these clusters might penetrate, or be penetrated by, other clusters representing particular subsets of the countries' political, social and economic life.

their effective functioning. On the other hand, the government-oriented approach is based on the formal decision-making structures, and makes these directly responsible for handling issues like PSI, rather than letting (civil) society govern this (*e.g.* the Oskarshamn model in Sweden). However, the Swedish government approach is such that it leaves much room for PSI, and, thus, for elements of governance. The concepts ‘government’ and ‘governance’ are thus not mutually exclusive.

In what follows, we will not look so much at the models of governing, but at the networks of actors that play a role in PSI processes, whether in governance-oriented or government-oriented type of policy settings. As we will see, the nature of these networks will be quite diverse. They can be tight or loose; formal or informal; institutionalised or functioning more or less outside the regular policy framework. Networks can be situated on local, national or international level. One actor can be part of different networks, while some actors in themselves constitute networks of their own (*e.g.* the Belgian and Slovenian local partnerships).

Particular attention will be afforded to the place of citizen stakeholders (particularly local stakeholders from nuclear communities) in policy networks related to RWM. To what extent have they been able to penetrate existing networks? Did they have to create opportunities for themselves, or were opportunities offered to them by others? Did they develop parallel networks of a different kind? Could something be identified as a “RADWASTE network”, or a series of networks addressing different or overlapping aspects relating to RWM policy? And, assuming that there are diverse networks, how do they relate to each other?

However, before discussing the topic of stakeholder networks in radioactive waste management, we need to define the terms ‘stakeholder’ and ‘network’.

### 1.1 The Term ‘Stakeholder’

The term stakeholder is widely used, which is both convenient and troublesome. Traditionally, the term has a legal connotation and refers to: *“an independent person or organisation with whom money is deposited, especially when a number of people make a bet or other financial transaction”*<sup>4</sup>. More and more, however, the word stakeholder has become used to refer to *“a person, company, etc., with a concern or*

---

<sup>4</sup> Oxford English Dictionary

(*esp. financial*) interest in ensuring the success of an organisation, business, system, etc.”<sup>5</sup>. Originating from management theory, stakeholder theory acknowledges that there is a broader range of interested parties to a business undertaking than the shareholders (see for example: Freeman, 1984). Today, the use of the term stakeholder has moved beyond management theory and the holding of a mere financial stake in an entity. However, most bilingual and multilingual dictionaries or online translation services only provide an interpretation of the word stakeholder in its original legal sense; making it difficult to translate the concept into other languages.

In the context of RWM, the term stakeholder is often used to refer to concerned citizens and citizen groups; to those stakeholders that traditionally do not belong to the inner circle of actors influencing policy. As described in the first comparative CARL report<sup>6</sup>, the term stakeholder, in the context of this project, refers to: ***any person or organisation with an interest - or ‘stake’ - in the management of radioactive waste*** (e.g. waste producers and waste management agencies, experts, citizens living near current or future waste sites, and NGOs defending the environment or the public interest).

## 1.2 The Term ‘Network’

The term network has a number of different meanings, depending on the context in which it is used. Literally it means “*an arrangement or structure with intersecting lines and interstices resembling those of a net*”<sup>7</sup>, whether that be man-made or natural in origin. Figuratively speaking, the term network refers to “*a chain or system of interconnected [or interrelated] ... things*”<sup>8</sup>. Regardless of these ‘things’ being immaterial things, material objects or human beings.

It is in the latter respect - a network as an interconnected group of people or collectivities; as a cluster of different kinds of actors - that the term network is most commonly used in social and policy sciences. Examples of this are the theoretical reflections on today’s society as a network society, the different schools dealing with the subject of policy networks and governance (see also the thematic report on governance), or the notion of epistemic community. The theory of the network society deals with connecting individuals or ‘*human subjects*’, but focuses extensively on the means through which this connection is realised, namely through “*microelectronics-based, software-*

<sup>5</sup> Ibid

<sup>6</sup> Bergmans, A., ed. (2006), *CARL – First Comparative Report*. Antwerp: University of Antwerp (<http://www.carl-research.org>).

<sup>7</sup> Oxford English Dictionary

<sup>8</sup> Ibid

*operated, communication technologies*” (Castells, 2004: 7 ). According to this theory social structure in modern society is set up as a network, without hierarchy and without a centre. The term epistemic community in policy theory can be contributed to the Dutch political scientist Peter M. Haas, and refers to a group of peers or experts, sharing technical knowledge, normative principles and a similar conception of interests a regards to a particular field or issue (see for example: (Haas, 1992)). Such an epistemic community is therefore to be interpreted as a network of professionals capable of influencing policy, rather than a physically real community. While the theory of epistemic communities and some interpretations of policy networks (particularly the US tradition) look mainly at networks as connecting individuals, policy networks in terms of governance (the European school) puts more emphasis on the structural relationship between institutions. Nonetheless, the interconnected ‘things’ remain essentially human in nature.

For the purpose of this paper, we will focus on the notion of stakeholder networks as policy networks. This remains closest to the stakeholders’ own interpretation when interviewed on this subject and when asked to draw their networks, as we did during the Troon workshop.

## **2 Stakeholder networks as policy networks**

In policy analysis, the term policy network refers to: “*a cluster of actors, each of which has an interest, or ‘stake’ in a given ... policy sector [or particular policy domain] and the capacity to help determine policy success or failure*” (Peterson, 2003: 1). This implies that there can and will be differences in the constellation of policy networks depending on the policy domain or sector (in our case radioactive waste management) and even depending on the policy issue (as a subset of a given domain or sector). Peterson’s definition furthermore stresses that policy networks are not only about reconciling diverging interests, but that they are also about linking various knowledge bases. In order to solve problems, and in particular complex problems like the management of radioactive waste or the siting of a repository, the perceptions and actions from the different actors involved must be attuned. The quality of the communication between those actors is therefore essential for the quality of policymaking. If we see policy development as a social interaction process (with consideration, negotiation, coalition building and conflict between involved parties), networks can simplify interaction, cooperation and mutual learning between actors (van Bueren, et al., 2001: 171). In order to achieve this, however, a level of stability within the network is required. In policy network theory, there can only be a proper network when interaction patterns exist between a relatively stable group of actors over a certain period of time.

The condition of stability, however, does not mean that policy networks should be seen as static structures. They are part of the broader social world and always “*in a state of becoming*” (Evans, 2001). Therefore they are not fixed entities. Networks are flexible structures, made up by actors or agents and their mutual relationships. Together the actors shape their network (through negotiating and renegotiating network structures). At the same time, the network structure predetermines to some extent the possible actions of the agents within that network, by providing constraints, but in the meantime also opportunities for actors to base their strategies on (Marsh & Smith, 2000). However, this does not mean network dimensions and characteristics should be regarded as a given, for networks are enacted by their agents, who’s beliefs and actions construct the nature of the network (Rhodes, 2002).

Among policy network theorists, some adhere to a structuralist approach, emphasising the structural limitations networks enforce upon the actors engaged in it. Others start their analysis from a constructivist perspective and stress the fact that networks only exist by the grace of the agents enacting them, consequently focussing on the actors within the network, rather than on the network itself. Our analysis in this report follows a more constructivist approach by focussing on the actors and their individual accounts of their network(s).

When looking at stakeholder networks as policy networks, we will examine more closely the networks drawn by the participants at the Troon workshop. These drawings reveal a clear distinction between, on the one hand, policy networks addressing issues such as the overall management strategy and RWM policy programmes, and, on the other hand, policy networks focussing on the siting of a repository facility. The former generally remain a more closed circle of government bodies, agencies and industry (although particularly in the UK gradual changes in this closed system can be seen emerging since 1997<sup>9</sup>). The latter, on siting, tend to be broader and generally include representatives of the potentially affected populace. In the following two paragraphs, we will examine more closely the two types of policy networks.

---

<sup>9</sup> 1997 is the year the UK ‘returned to basics’, after a public enquiry ended Nirex’s attempts to site a Rock Characterisation Facility in Sellafield (Simmons, et al., 2006: 17, 20).

### 3 Policy networks on overall waste management strategy and programmes

At the Troon workshop, the group of representatives from agencies and regulators identified a two-tiered network described as a “*proper policy network*” and a “*more consultative network*,” feeding into the former one<sup>10</sup>. Both, however, can be seen as parts of one policy network that can be described as a tight core, formed by the main actors that together shape RWM policy at the national level, and a looser, less intense, but still stable set of relations linking this core with a broader group of diverse contacts.

#### 3.1 Identifying three broad types of actors

Notwithstanding particular differences between the countries, the core of the network consists everywhere of the RWM agency(s), the regulator(s), the nuclear industry, and relevant governmental bodies<sup>11</sup>. The actors in this network keep regular contacts, both formal and informal in nature. The people and organisations in the core of the network are the actual **policy makers** (not just the ones taking the formal decisions) regarding the overall waste management strategy and programme. While their capacity to determine policy varies to some degree (and certainly among individuals within these organisations), it is generally quite high.

Regardless of their capacities, however, these policy makers also rely on a broader network providing input and information that help shape policy. This broader consultative network can be divided into at least two layers (see figure 1). First, a group of **policy advisors**, who provide input on the policy making on radioactive waste in terms of strategy and programme. Second, the **‘peripheral’ actors**, who do not form an integral part of the policy network, and have infrequent, often indirect and less stable contact with the core.

Within the diverse group of **policy advisors**, some advisors are clearly more influential than others. The core group of policy advisors consists of:

- R&D institutions and organisations (*e.g.* public research institutions or universities and private consulting companies) that advise the agency and other policy makers on relevant matters relating to RWM policy – whether technical or social in nature;

---

<sup>10</sup> See workshop proceedings ([www.carl-research.org](http://www.carl-research.org)).

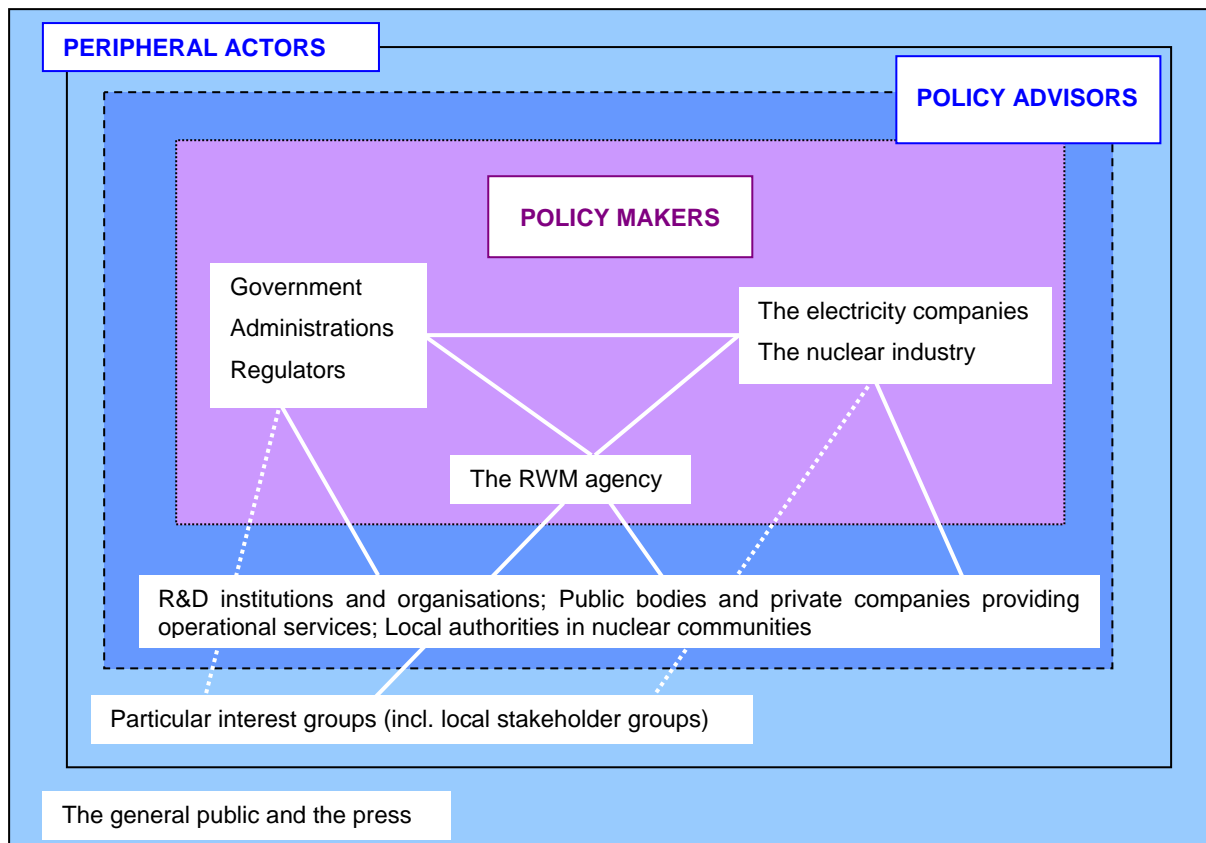
<sup>11</sup> For the purpose of this paper, we will not make a distinction here between national or federal and regional levels of government.

- public bodies or private organisations providing operational services (*e.g.* waste treatment facilities, transport companies, legal advisors, and public relations services); and
- local authorities in nuclear communities, if only because of their statutory advisory role in licensing procedures on an operational level (*e.g.* expansion of storage facilities).

While the R&D organisations provide more general policy advice, the other core policy advisors have influence mainly on the level of implementation – in this way, however, they can also indirectly influence general policy. The relations between policy advisors and policy makers vary in intensity and can be either formal or informal. Particularly in Slovenia the informal part of the network plays quite an important role (Polic, et al., 2006).

A more **hybrid** form of policy advisors (that also could be seen as peripheral actors), are the particular interest groups, such as local stakeholder groups, NGO's, (local) politicians, and MP's. We have identified them as a separate category (see figure 1) because, in general, contacts between these parties and the core are quite loose when it comes to advising on general policy issues. However, with some of these groups, contacts are far more intense with regard to particular other issues, such as siting (as we will see in the next paragraph), and in this way, these groups occasionally become more involved in consultations on overall RWM policy. For example, in the CoRWM consultation in the UK, diverse interest groups have been consulted before the committee issued its advice to the government.

Among the **peripheral actors**, we count the general public and the press. Even though some participants in the Troon workshop explicitly included the general public in their network, contacts with the public are generally more infrequent and one-directional, and, thus, no basis for a stable network. The press remains a somewhat peculiar type of stakeholder. For one, frequent contacts between policy makers and members of the press are common. Also, the press occasionally exercises a certain influence on policy, for example, in the way an incident is reported. However, in general, the press appears to remain relatively peripheral with regard to shaping and advising decision-making in RWM.



(Legend: dotted lines refer to the weakest and full lines to the strongest links)

Figure 1. The different layers of the policy network on overall RWM strategy and programme

### 3.2 Linking the actors within the network

Evaluating the relations between different interest groups is not always easy, as the more informal parts of the network largely remain opaque (even if it is not intentional). Nonetheless it is clear that the intensity of the links between the core of policy makers and the broader network of policy advisors and peripheral actors differs significantly for agencies and regulators. In most cases, regulators apparently prefer not to engage fully in participatory initiatives, hence contacts with particular interest groups remain relatively weak. The agencies, however, seem to have much stronger ties with local stakeholder groups, particularly in countries where an active siting programme exists. Links to other particular interest groups (*e.g.* NGO's) remain relatively weak. In addition, some differences in network structure can be found among the countries. The Swedish regulators, in particular, developed relatively strong contacts with a number of local stakeholders in line with their active role in the Swedish PSI process. Meanwhile the RWM agency in Slovenia appears to have a somewhat weaker position in relation to other core actors than is the case for its counterparts in the other countries. In Slovenia, decision making in general and for RWM in particular remains highly centralised and political (Polic, et al., 2006: 10),

sometimes leaving the agency unaware of any developments. One recent example of this would be the declaration of the Minister of Economics (including the energy sector) that Slovenia would be prepared to accept Croatia radioactive waste. Thus far the agreement between the governments of Slovenia and Croatia had been a shared responsibility in the decommissioning and management of the waste of the nuclear power plant shared equally between the two republics (Polic, et al., 2006: 7-9). The recent change in strategy - part of broader negotiations between the two countries - will have a significant impact on ARAO's work, but was not discussed beforehand with the agency.

In spite of these differences, contacts between the core network of policy makers and the second layer of policy advisors are, generally, quite stable, but mainly issue oriented and not directly focussed at producing policy. These contacts can be both formal and informal. Some of the formal contacts are quite institutionalised and restricted within a particular setting (*e.g.* contacts with local authorities in nuclear communities in light of legally mandated (public) consultations to obtain on-site building permits).

The contacts or links between the core network of policy makers and the peripheral actors are undoubtedly less strong and less frequent. The occasional contribution from some of the more peripheral groups to the overall strategy and RWM programme, in most cases, only occurs on the initiative of members of the core group (*e.g.* the RWM agency consulting the public as part of a required legislative procedure; the RWM agency publicly announcing its plans for the future; a government consultation on RWM strategy, ...). Most contacts with the peripheral actors (including most interest groups) seem to remain at a relatively superficial level. In some cases, personal or company initiatives leave more room for in depth networking. Two examples :

- The BNFL dialogue initiative in the UK: Whilst the BNFL dialogue was initiated by BNFL (British Nuclear Fuels), it nonetheless brought in a range of stakeholders who helped steer the process; particularly in working groups which had some (limited) impact on BNFL policy and operations. Although it was rather a testing process with some NGO's pulling out of the dialogue and in a survey 63% of the stakeholders thought BNFL thinking had not been influenced (TEC, 2002), it was one of the first processes post 1997. So whilst helping to initiate a new relationship among actors, the process was prone to some conflict. But it did help to start the process of the development of a network between NGO's themselves, as well as between the company and the NGO's. In essence, it brought previously antagonistic actors together to work jointly on a number of issues.
- The member of the Green Party and former Greenpeace man who became Belgian secretary of state for Energy and thus the responsible cabinet member for RWM between 1999 and 2003. This opened the door more widely to policy input from environmental NGO's in that period for both the issues of nuclear energy and RWM. A door that was soon to be shut again with the arrival about a year later of a member of the Liberal Party as tutelage minister of Energy with far stronger ties to the electricity companies.

### 3.3 Potential impact of ‘networking’ on policy outcome

As indicated above, the impact of policy advisors and peripheral actors on the overall RWM policy is mainly indirect and not as consistent as that of the actors in the core group. Nevertheless, a number of examples, clearly demonstrate the occasional impact of such relative outsiders on a country’s RWM policy:

- Belgium: In 1994, 47 municipalities featured on a NIRAS/ONDRAF long list of potential sites for a LILW repository. The downright refusal of all these municipalities to take up a stakeholder role and the public outcry following the publication of the list were the direct cause for a land slide in Belgian RWM policy regarding those types of waste. First, it led to the recognition of socio-economic aspects as a vital element in repository siting. Second, it questioned the ‘politics of the obvious’ as regards to the repository concept<sup>12</sup>. The government, therefore, commissioned a report addressing all long-term management options for LILW, including prolonged storage. Based on this report, the government took the decision in 1998 to opt for final disposal, either on surface or underground and for the engagement of local stakeholders in the decision-making process regarding the siting of such a facility. The explicit choice to avoid creating new ‘nuclear oases’<sup>13</sup> and start looking first for a site in the existing nuclear communities, appears to be the direct result of the public outcry of 1994.
- Canada: On 14 June 2007, the Canadian Federal Government accepted the NWMO’s recommendation to choose ‘*Adaptive Phased Management*’ as the approach for the long-term management of Canadian spent fuel. Prior to its recommendation, the NWMO conducted a large scale expert and public opinion study based on deliberative dialogues. In a first instance, values were identified that people believed to be important for decision-making regarding spent fuel. Following that, a discussion document was issued (*Understanding the Choices*) assessing the three technical methods (deep geological disposal in the Canadian Shield; centralized storage either above or below ground; and storage at nuclear reactor sites) that the NWMO was obliged to consider under the Nuclear Fuel Waste Act (June 13, 2002)<sup>14</sup>. Since none of the three methods met the objectives citizens had identified as important, the NWMO developed a fourth approach, claimed to build on the strengths of the others, while additionally taking into account the values of the Canadian public. One and half years after the NWMO issued its recommendations, the government decided to pursue it. There has been some criticism about the NWMO’s dialogues process, claiming it to be mainly used as a means to implement technical objectives<sup>15</sup>. However, even if the NWMO dialogues did not lead to public empowerment, the upstream framing of issues or co-determination of decisions, they nevertheless have been one of the relatively few attempts to consult widely before developing national policy on RWM, thus also giving peripheral actors some form of input (however small) into the decision-making process.
- UK: the ‘Managing Radioactive Waste Safely’ policy process and in particular CoRWM’s way of working appears to have activated a number of particular interest groups (among which local stakeholders from nuclear communities) and brought them into the policy network. Not everybody was particularly happy with the outcome of the process (in terms of the recommendations formulated by the committee, as well as in terms of the decision government took based on these recommendations). But most people seem to be very appreciative of the way the process was run and the opportunity it raised for more peripheral actors to act as policy advisors on the issue of RWM.
- Sweden: since 1996 municipalities chosen for feasibility studies as regards an encapsulation plant or deep repository can be offered financial assistance from the Nuclear Waste Fund. In 2004, legislation was changed so that financial support can also be offered to non-governmental organizations

---

<sup>12</sup> Until then, it had been assumed that long term management of LILW was best served with a surface repository based on the French model.

<sup>13</sup> A siting strategy based on the assumption that people living close to existing nuclear facilities are usually relatively positive to an expansion of this activity is often referred to as a ‘*nuclear oases*’ siting strategy (see for example: Blowers, et al., 1991).

<sup>14</sup> See the NWMO website: [www.nwmo.ca/default.aspx?DN=1498,50,19,1,Documents](http://www.nwmo.ca/default.aspx?DN=1498,50,19,1,Documents)

<sup>15</sup> See for example: Durant, 2006.

participating in the EIA process connected with site investigations (Elam & Sundqvist, 2006: 60). One of the environmental groups that has applied for such funding is the Swedish NGO ‘Office for Nuclear Waste Review’ (MKG). MKG strongly focuses on alternative technology, a point of interest that has recently been picked up by the Swedish National Council for Nuclear Waste (KASAM)<sup>16</sup> which has organised a number of seminars on this topic. MKG has for example put forward deep boreholes as a serious alternative to KBS (SKB’s preferred concept). A seminar on the issue was organised by KASAM in March 2007 and a report issued later that year: (Olofsdotter, 2007).

- **Slovenia:** because of the relatively strong political character of the decision making at the central level, local officials can, through the links with their parties on the national level, exercise relatively strong, but mainly informal powers to influence policy (Polic, et al., 2006). The current Minister of Economics, also responsible for energy policy comes from the Krško area, which appears to give the municipality hosting the nuclear power plant additional weight to influence general (nuclear) energy policy and RWM strategy.

#### 4 Policy networks on the siting of repository facilities<sup>17</sup>

When looking at the way policy is developed on the siting of repository facilities, the policy networks are composed somewhat differently than those for overall policy programmes. In Sweden, Belgium and Slovenia, the local communities directly implicated in site investigations for a radioactive waste repository facility feature, in one way or another, in a broader network. For this policy issue, it seems that the core of the network expands to include local stakeholders. It is, however, not easy to determine whether this has also led to a shift in the power balance. Interviews with Belgian members of local partnerships (both before and after the government decision to site the repository in Dessel), as well as Swedish local actors views’ on their role in the process indicate that, with regard to the siting issue, local actors feel they have indeed been able to penetrate the core of the policy making process. While they may not take the final decisions, many feel they did/do manage to feed their views and demands into the decision-making process:

*“We were able to put forward our conditions and hence contribute to a better solution.” ./.. “As citizens we were given the power to stipulate conditions, ... mainly social conditions.” (participants in MONA)*

*“STOLA has explicitly formulated criteria of acceptances, in accordance with the demands of the working groups. If you can call that power, then we did gain the power to seriously change their [refers to NIRAS/ONDRAF] project.” (participant in STOLA)*

---

<sup>16</sup> KASAM was established in 1985, and is an independent committee attached to the Ministry for Sustainable Development. Its mandate is to study issues relating to nuclear waste and the decommissioning of nuclear installations and to advise the Government and certain authorities on these issues. The members of KASAM are independent experts within different areas of importance for the disposal of radioactive waste, not only within technology and science but also within areas such as ethics, psychology, law and social sciences ([www.sou.gov.se/kasam/inenglish/index.htm](http://www.sou.gov.se/kasam/inenglish/index.htm)).

<sup>17</sup> In this paragraph we will focus on the Swedish, Belgium and Slovenian case, because the UK currently has not established an active siting programme.

*“I’m not saying you can contribute much, but the fact is, that when people get involved and when you have them prepare things with you and take basic decisions, that you cannot push just anything forward. ... I’m not saying we weighed very heavily on the decision, but I do think that a number of elements have been taken into account.”* (participant in STOLA)

Some Belgian respondents also referred to the complete pointlessness of their exercise, if none of their input would be taken into account:

*“We have been able to stipulate certain conditions on the basis of which government could decide to locate the repository here or not. I assume those were taken into account when the decision was taken a couple of weeks ago. If not our work would have been completely useless.”* ./.. *“I thought it logical that government decided to choose Dessel, because the stuff is already here. ... But if anything will come of these conditions ... that I would doubt.”* (participants in STOLA)

*“I don’t want to be too optimistic yet, but during the process we have most certainly been taken seriously by NIRAS and the nuclear sector. And now it is up to government ... If you engage people, empower them and give them a voice, you must be careful they don’t wake up with a hangover afterwards. That is a fear that has always been present in the back of our minds.”* ./.. *“Yes, we were taken seriously, and then government took that decision [refers to confidential advise from NIRAS/ONDRAF to government (see infra)]...”* (participants in MONA)

The Swedish municipalities seem to go even one step further, as they often argue that it is they who are the most important decision makers, referring to their legal right to withdraw (the veto option).

But even if there is some doubt and if some participants in the Belgian partnerships felt their impact has been less important than expected, the parties concerned in Belgium are still talking, and, as in other countries with an ongoing siting process, most local stakeholders consider themselves to be part of a (policy) network, in one way or another.

This is confirmed by the strikingly broad networks drawn by citizen stakeholders at the Troon workshop. Particularly the Swedish and Belgian participants drew – starting from their municipality or partnership – extensive maps of people, organisations and institutions they saw as part of their network. In Sweden, the municipality, represented by its elected officials, is the central nod linking local political and socio-economic life to other actors in the network. At the same time, the municipality constitutes a network in itself, linking citizens, local companies, associations, political parties, ... etc. The Swedish participants in the Troon workshop were quite satisfied with their network. They considered their direct link with the authorities (SKI, SSI) as the most important one; while the link with the national level (in particular government) was considered the weakest. The EIA forum, where all relevant parties meet four times a year, was

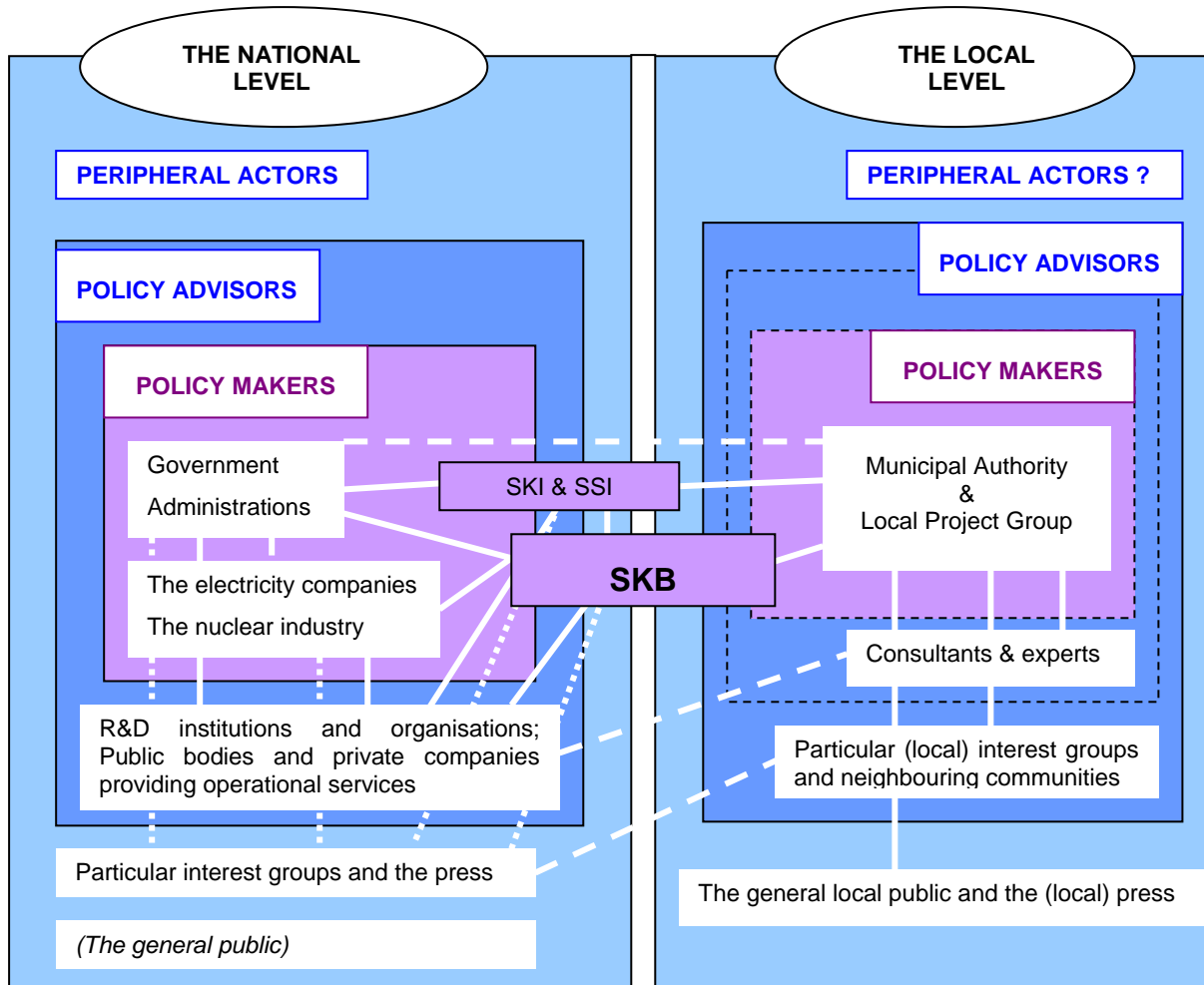
identified as key in the network because it offers municipalities the opportunity to talk to other players in the field.

In Belgium and Slovenia, partnerships shape the local policy network. While, the Slovenian partnerships have not been active for very long, the participants in the Troon workshop indicated that they felt they finally had a platform for networking. Most local stakeholders interviewed in Belgium, apparently see their partnership as an active participant in policy development. They thought the partnerships managed to set up a relatively broad network of contacts, though not all of the same intensity. The link with the RWM agency was considered the strongest, while the link with the federal and regional government and administration was seen as missing.

#### **4.1 Identifying two types of 'siting networks'**

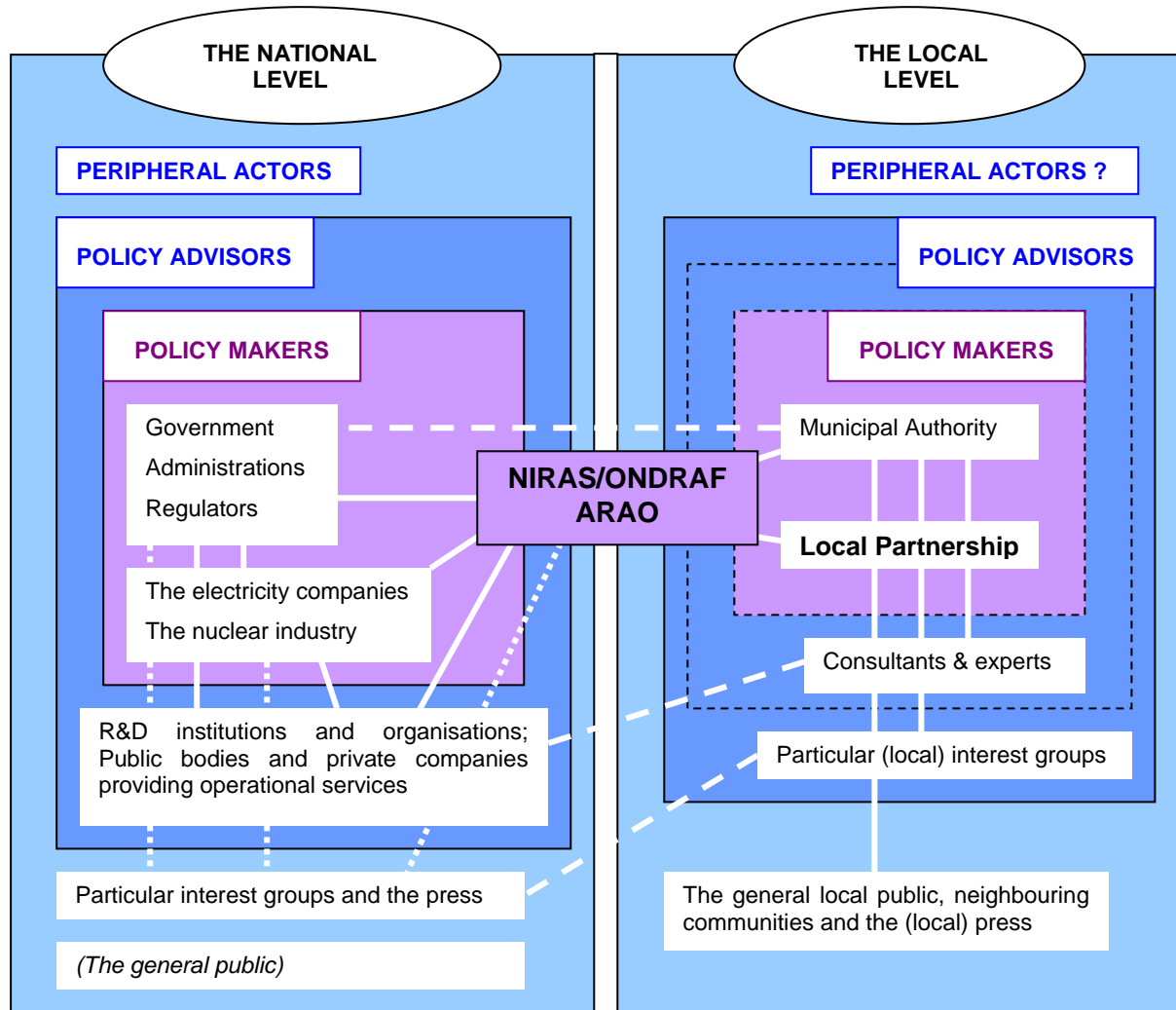
While the networks are comparable in many ways, it is clearly not possible to draw one generic network on siting for Sweden, Belgium and Slovenia. The main differences between Sweden (see figure 2), on the one hand, and Belgium and Slovenia (see figure 3), on the other hand, are:

1. The nature of the RWM agency: with SKB fully embedded in the nuclear sector and NIRAS/ONDRAF and ARAO semi-governmental or public bodies
2. The role of the regulator(s): the role of SKI and SSI in the Swedish site investigations might not be as strong as SKB's, which has sole responsibility in carrying out these investigations; however, the Swedish regulators do take more explicitly part in local meetings, on demand of the municipalities.
3. The embeddedness of the local PSI process in Sweden in the regular political and administrative operations of the municipality. In Belgian and Slovenia the PSI process is shaped round the setting up of local partnerships that play an important role in connecting the local network to the waste management agency.



(Legend: dotted lines refer to the weakest and full lines to the strongest links)

Figure 2. The different layers of the policy network on siting in SWEDEN



(Legend: dotted lines refer to the weakest and full lines to the strongest links)

Figure 3. The different layers of the policy network on siting in **BELGIUM** and **SLOVENIA**

#### 4.2 The role of the RWM agency as go-between linking the local to the national level

When looking at the above networks more closely, the strengthening of the links between these local actors and the RWM agencies appears to be the most important factor in opening up the core group of policy makers to local stakeholders on the siting issue. The links between the RWM agencies and local stakeholders have clearly multiplied and deepened in the countries where the process of stakeholder involvement has been introduced for some years now. The nature of the contacts between the other ‘traditional’ core actors (like the regulator or government) and the local actors varies from one country to the other. As already indicated, the role of the Swedish regulators appears to differ from that of their counterparts in other countries.

An important difference between Sweden and the other two countries, is that nuclear waste is the responsibility of the nuclear industry. This makes it possible for government authorities to strictly focus on reviewing, which is usually defined as reviewing safety, to assure that the proposals from the industry are safe enough. This view is also strongly promoted by the two municipalities that consider SKI and SSI to be independent reviewers that could be trusted.

This division of labour and arm length distance between industry and government – where the government will have the last say as legislator, responsible for the Waste Fund, and as final decision maker has been utilised by Oskarshamn. In this respect, the municipality has confronted the government several times asking for changes in the process (‘to shake the tree’). On more than one occasion these attempts have been successful. For example:

*“During the spring of 1995, when Oskarshamn already knew that within the near future they would be asked by SKB to participate in a feasibility study, the Municipality wrote to the Government expressing its concern about how the issue of the final disposal, as an entire system including encapsulation, transport and deep repository, was to be coordinated at a national level. The Municipality was concerned that the review of the R&D programme, the selection of feasibility studies and the planning for encapsulation were all being carried out simultaneously, but without any defined coordination. The Municipality wrote: ‘it is felt that a precondition for Oskarshamn’s further participation in the final disposal programme is that a national environmental impact assessment (ELA) is carried out by a government appointed independent expert or equivalent’.*

*Oskarshamn also criticized the right of the government to overturn the municipal right of veto (the so-called ‘veto valve’) and argued that this resulted in uncertainty about if and when it was possible to back out after having entered the process. The Municipality thus recommended that the ‘veto valve be removed’. Oskarshamn was successful in its proposal to the Government. Decisions were taken by the Government which indicated a strengthening of the municipality’s role in the decision-making process and an independence with regards to SKB. A National Coordinator was set up and the municipalities could apply for funds in order to carry out their own activities.” (Sundqvist, 2002: 195-196)*

So with the exception of Oskarshamn, the impact of the local stakeholders on siting policy appears to be in the first place an indirect impact through the RWM agency. By affecting the views and positions of the agency they can cause a ripple effect extending to other core policy makers. In a way, the RWM agency instigated the participation process, and through this process the local communities became linked to other actors in the policy process – sometimes directly, but often indirectly. The director-general of NIRAS/ONDRAF clearly indicated that he sees the role of his agency as a bridge between the local and the national level:

*“... connecting the knots in the organisations on the local and the federal level through NIRAS as an intermediary. What is important, is the role of NIRAS as intermediary or mediator between the partnerships and the federal government.”*

The community of Oskarshamn stands out as being the only one that actively sought to develop direct and strong links with other actors, like the regulators and the national government; pulling

the regulators into the process, forcing them into a more active role than they had defined for themselves and pushing government to change legislation.

In general, however, **local actors do not seem to mind that their link to the national level of policy makers is basically established through their relationship with the RWM agency.** Participants in STOLA, for example, stated a clear preference for a simple structure for organising public and stakeholder involvement, with a broad local base and a few, but strong contacts to the national (and regional<sup>18</sup>) level. Contacts with the waste producers (the electricity companies) and different governmental bodies should be first and foremost established through NIRAS/ONDRAF. The same can be said for the participants in MONA<sup>19</sup>, including for the individuals that felt betrayed by NIRAS/ONDRAF's confidential advise to government (see infra).

*"In a process like this it is important that all concerned parties are presented. But I think that was the case. NIRAS may not be a producer [of radioactive waste] itself, but it did represent the interests of the producers in this case."* (participant in STOLA)

*"I think that the presence of NIRAS was more than sufficient to guard the interests of the waste producers. In the end, NIRAS is to some extent linked to these companies. So for me NIRAS is the representative of the waste producers in the partnerships." ./.* "NIRAS acted as go-between between the waste producers and the partnership. At this stage I consider that to be the best solution. If ever needed, NIRAS can always organise a meeting with both the electricity companies and the partnerships." (participants in MONA)

The respondents who suggested that more direct contacts with other national policy makers would have been useful, limited the potential scope of these contacts to a mutual exchange of information, not to co-decision-making. Interestingly, a direct link to the electricity companies was generally seen as a threat to the partnerships' independence, rather than a means to establish greater influence on national policy level.

*"What is needed, is that the electricity companies and others [he refers to government administrations etc.] should be prepared to come and give us information when we ask them to. But I don't think it would be healthy if they would become a structural component of the partnership." ./.* "I think it would be very useful to have people in the general assembly as observers with an advisory role. By which I mean they can actively participate in the discussions, but not in the actual decision-making [within the partnership]. This is the role I see for the electricity companies, different administrations, etc.: an advisory role and a role of 'active listeners', so they can understand what is important to us and take that with them." (participants in STOLA)

*"I think the waste producers are the last once that should be allowed to participate in the PSI process. That would be like having prisoners decide on the design of their prison. ... You cannot be judge in your own case. I think the producers should not be directly involved in the decision-making."* (participant in MONA)

<sup>18</sup> The term 'regional' level here refers to anything broader than the municipal level, not necessarily converging with the boundaries of intermediary political and administrative entities (like the Provinces and Regions in Belgium).

<sup>19</sup> With the clear exception, however, of a stronger appreciation for a PSI process at a more regional level.

### 4.2.1 Moving decision-making to the local level ?

The interviews reveal that respondents feel that the bulk of the decision-making on the siting issue has moved to the local level. This may seem contradictory to our former conclusion that the local stakeholders only have an indirect impact on the decision-making through the RWM agency, but this needs not be the case. Charts 2 and 3 actually show a split process, where the RWM agency is the main or even sole actor to bridge the local and the national level. As long as there is no need for national intervention (*e.g.* a decision to confirm a site, a licensing application, an agreement on costs and financing), the RWM agency, in most countries, seems to have a free hand to organise its work and accomplish its mission. Within the Swedish EIA procedure, SKB has sole responsibility to carry out site investigations, and Swedish municipal authorities have a legal right to veto any plans on siting a repository on their territory. In both Belgium and Slovenia, the waste management agencies offered volunteering communities an informal right to veto any decision regarding the siting of a repository. With regard to siting, SKB, NIRAS/ONDRAF and ARAO have committed themselves to engage with local actors in preparing their positions and their strategies vis-à-vis the other policy makers on the national level. So, as long as the RWM agency and local actors can see eye to eye and the agency plays its role of go-between in an open and transparent way, a good part (if not the main part) of the decision-making can swing to the local level. In Belgium, this appears to have happened, apart from the fact that a government decision was needed to decide on the disposal option and site.

The question now is, if it will be possible to keep decision-making with local actors during the next phases of the process. This is currently a hot issue in Belgium where the process is moving from a preliminary study phase to a conceptual design phase in which the blue prints for the project will be drawn, up to the last detail. Soon this will also become relevant in Sweden and Slovenia.

In cases where the legal or regulatory framework mandates the consultation of concerned communities, or even requires their formal consent (*e.g.* the Swedish municipal right to veto), local actors are in a stronger position to force the agency to include them into its network. Where this is not the case (*e.g.* in Belgium), much will depend on mutual goodwill and the perceived need by the agency for local support to perform its task.

*“I do think NIRAS takes this matter seriously. In part also because they need this process to fulfil their assignment. So it is to some extent in their own interest that they have set this up, but that is not necessarily a bad thing.”* (participant in STOLA)

#### 4.2.2 A Belgian intermezzo: the stir caused by the government decision

On 23 June 23 2006, the Belgian federal government decided that the final repository for LILW should be a surface repository and that it should be located in Dessel. Government commissioned NIRAS/ONDRAF with the tasks of: (1) continuing the participatory process, first and foremost with Dessel, but also with Mol and if necessary, extend it to neighbouring communities with a legitimate interest; (2) further developing the integrated project, based on the proposal put forward by Dessel, before applying for the necessary licences; (3) finding the necessary financing and negotiating with all interested parties to come to a binding agreement between them before implementing the facility<sup>20</sup>.

The decision in itself was not particularly contested. However, some weeks later a confidential note from the director-general of NIRAS/ONDRAF to the competent Minister surfaced in which the choice for Dessel over Mol was defended on relatively loose grounds, according to seemingly shaky criteria that had not been discussed with anybody beforehand. Many in Mol felt betrayed by their partner. The RWM agency had always taken the position that it would not make a final choice between the MONA and STOLA proposals, as each had been given the NIRAS/ONDRAF stamp of approval in its final report to government. With two elections dawning (one at the municipal level in the autumn and one at the federal level the next year), the window of opportunity for a 'serene' decision was not thought to be very big. Not only the waste manager, but also the local politicians insisted on a swift decision by government. According to the director-general, the competent Minister had explicitly asked NIRAS-ONDRAF to select and advance a single project, for otherwise they would not take a decision. The confidential note, in his view, should thus be seen as a way to secure a swift decision and further a common cause, and not as a backstabbing of Mol and MONA. The very fact, however, that he opted for a confidential note and did not consult his local partners, meant a sever blow to the system. In a first reaction, MONA sent a letter to NIRAS/ONDRAF complaining that the decision completely disregarded the demands stipulated in their final report and that, in view of the closeness of the site to the municipal border, they demanded to be more than a mere sidekick to STORA in the continuation of the participatory process. Consequently, attempts had to be made to find ways of keeping both Dessel and Mol in a participatory process in which both would feel comfortable. The relatively opposed views on how collaboration between the two municipalities and their partnerships should be set up increased the level of distrust between MONA and NIRAS/ONDRAF (although some MONA members took a more understanding position<sup>21</sup>). In addition, it fuelled the fears in both Dessel and Mol that NIRAS/ONDRAF would steamroll them once it thought having secured the repository. Keeping the parties around the table did not prove to be an easy task, and negotiations went on for somewhat over a year. By the autumn of 2007, agreement was eventually reached on collaboration between NIRAS/ONDRAF and the two partnerships through the installation of a steering committee in which the mayors of Mol and Dessel also participate as advisors. In the mean time, NIRAS/ONDRAF had not given up working on its task to further develop the repository project, but without a clear local platform to interact with<sup>22</sup>, this work mainly remained preparatory in nature (such as setting up a project team in Dessel, preparing a detailed work plan and timing, and launching calls for proposals to find the right companies to perform detailed studies on a number of project components). The partnerships were kept informed on these developments and were asked for input through their respective executive committees. It was only after the signing of a new collaboration agreement (November 2007) that the interaction re-intensified to a level comparable to the in depth collaboration with the partnerships and their working groups in the previous phase.

While starting out as a story of local actors feeling they had not been served well by the government decision, this Belgian experience still demonstrates that the local stakeholders have

---

<sup>20</sup> Decision by the Cabinet of Ministers of the Federal Government of June 23, 2006.

<sup>21</sup> Interestingly the representatives of the local green and anti-nuclear movement showed much more understanding for the agency's position and did not seem prepared to hold the director-general's initiative against him for too long (interview with 4 participants in MONA d.d. October 11, 2006).

<sup>22</sup> The partnerships of STORA and MONA remained in place, but as long as there was no agreement on how they would collaborate and on who was to take which decisions in this phase of the process, NIRAS/ONDRAF was not able to make much substantial progress.

secured a firm position for themselves in the policy network and that they can paralyze the agency to a large extent. More than a year had passed since the government decision, before enough common ground could be found to continue on the route set out by the government. Before that, there was not much NIRAS/ONDRAF could do in terms of making the repository project more concrete. Not only did the government ask the agency to continue its participatory process, NIRAS/ONDRAF also needed the local input in order to be able to realise the chosen project proposal.

Three elements indicate that, in spite of the hick-up at the end of the process and the bad aftertaste for several people in Mol, local stakeholders remain prepared to work on their relationship with the agency and choose to respect the basics of the partnership:

1. Interviews with participants in the partnerships (before and after the government decision) reveal that the relationship with the NIRAS/ONDRAF representatives in the partnerships has remained stable and undamaged.

*“I don’t think NIRAS is infatuated with us, and we are not infatuated by them, but the people we have worked with here, ... that has certainly been a pleasant experience.” ./.* *“In the working group on local development, there was Evelyn from NIRAS and she has always been very favourable [of this integrated approach] and convinced of the need for more openness ... And then there was Laurent [representative of N/O in the steering committee] who I also only have known to be very positive. No, I can’t say they have changed much in the cause of the process, they always have been very favourable of participation.”* (participants in STOLA)

*“We have very much appreciated the openness of the representative of NIRAS [in the steering committee]. He was here to represent NIRAS, but often he took more the position of someone from MONA” ./.* *“This ‘dirty trick’ they played, ... that was on a higher level, ... that was the director-general’s responsibility. He made a serious error there. That was not the trust we had in NIRAS. But that has been a one off mistake. It was quite a heavy blow, but ... well, it happened ...”* (participants in MONA)

2. Most people consider their partnership experience to have been an experiment. A form of pilot project that they experienced to be worth the while - regardless of a number of shortcomings that most respondents put down as part of a learning process. This implies important challenges for the future, as the next phase may be seen as ‘the real thing’ where ‘teething troubles’ may no longer be an excuse.
3. And finally, there is the waste. With storage facilities in Dessel facing the limits of their current capacity, the locals actors and the RWM agency are bound to the same faith. NIRAS/ONDRAF cannot risk losing its remaining local partners since Fleurus and

Farciennes are out of the picture<sup>23</sup>. Moreover, NIRAS/ONDRAF risks losing face if being accused of no longer taking its local stakeholders seriously because of the relative weight it afforded to participation in the recent past and its claims of being a pioneer in the ‘participation league.’ And for the local stakeholders ... if they want anything to be done about the waste in their community, and if they want to see the pre-conditions set out in their partnership reports realised, they need the waste manager to make it happen.

### **4.3 The strength of the local network**

Focussing on the local part of the networks drawn in charts 2 and 3, the question is how strong they are in and of themselves? Three main elements seem to have an impact on the strength of local stakeholder networks:

1. the political support for the PSI process on the local level;
2. the inclusiveness of the PSI process on the local level through broad representation of interests and views within the community; and
3. the ability of the groups and people participating in the process to ‘touch base’ with the rest of the community.

In discussing these elements more thoroughly, we will focus on experience in Belgium and Sweden, for experience in Slovenia regarding efficiency of the local network today is still rather limited. However it does seem that the local partnerships in Slovenia are firmly controlled by local officials, leaving other interest groups feeling excluded and marginalised. Quite a number of local civil initiative groups therefore do not see the benefit in cooperating, as they assume the partnerships to be no more than a façade, while the real decisions are taken elsewhere.

#### **4.3.1 Political support for the PSI process on the local level**

Without local political support it seems a difficult, if not impossible, task for local stakeholders to get firmly attached to the (national) policy network. The experience in PaLoFF demonstrates this. The partnership put forward a project proposal, but the municipal council of Fleurus voted against it. Without a minimum of political support and engagement of local politicians, a PSI process is unlikely to influence decision-making at that level.

---

<sup>23</sup> The partnership PaLoFF did put forward an integrated project proposal and a number of local conditions, but the municipal council of Fleurus voted against the project in February 2006.

#### 4.3.1.1 Experience in Belgium

According to PaLoFF respondents: “The council of Fleurus took a decision without knowing the content. And what is more, they never cared to know”.

*“We lacked political support. In Fleurus, politicians refused to accept that ordinary citizens could develop such a project and they have not been willing to take into account the merits of our work. ... At no point has there been any feedback from the council. The mayors did not manage at all the flow of information to and from the official municipal bodies.” ./.* “PaLoFF missed a political advocate (*un ‘défenseur politique’*). ... While the technical working groups received all the support they needed from ONDRAF, the local authorities (politicians and administration) refused to corroborate with the group working on local development. ... Our local politicians did not allow their local people to develop a local project. They thought it their prerogative and refused to share information. ... There was a complete lack of transparency and the partnership was unable to force the local authority to become more open.” (participants in PaLoFF)

Even though the municipalities of Fleurus and Farciennes are technically nuclear areas, they never really considered themselves as such. The nuclear activity of the IRE (Institut National des Radioéléments), the only nuclear company in the area, is of little economic importance, and, as a result, local authorities were not very interested in the issue (Bergmans, et al., 2006: 50). The politicians were never keen on emphasising the nuclear character of their community and were never truly prepared to side with NIRAS/ONDRAF to promote a LILW repository as an opportunity for the local community.

*“The mayors did not want us [the partnership] to have frequent contact with the press. That is why we did not make enough use of the local media. Consequently the people of Fleurus and Farciennes were too little aware of what was going on in PaLoFF.”* (participant in PaLoFF)

In combination with the apparent aversion of the local political elite to allow citizens to take up responsibilities in the (re)shaping of their social environment, this led to an incompatibility in views between the partnership and the reigning local political majority. Where the former saw the repository as an opportunity to develop a strategy for reshaping the social environment<sup>24</sup>, the local politicians apparently saw it as a threat. Not so much as a nuclear threat, but as a threat of a political kind; an instrument for ordinary citizens and, in their wake, political opponents to undermine their powerbase. With NIRAS/ONDRAF and its inclusive programme residing on an almost permanent basis in their community, it seems the local political elite feared too much interference in issues of local development by ‘uncontrollable’ citizens.

In Mol, and in particular in Dessel, the partnerships gained much stronger political support – for some too strong:

---

<sup>24</sup> When questioned about their reason to participate, many people from PaLoFF referred to concerns about the well-being of their community and the opportunity for long term financing for local development in case the repository would come to Fleurus-Farciennes (Bergmans, et al., 2006: 52).

*“At a certain point in time I had the feeling the people with political commitment started steering the group in a certain direction and I didn’t understand why. It could be that I misinterpreted that, but I strongly had that impression at the time.”* (participant in STOLA)

*“We felt more and more pressure from the politicians on our decision-making. In our working group on local development we had looked at the issue independently of any political agenda. Eventually they weren’t prepared to let us get away with that. It wasn’t explicit pressure, but politicians did try and steer us into certain directions, more than we cared for. ... But apart from this political interference at the end, I do feel we were taken seriously.”* (participant in MONA)

But there is nonetheless also much prays because the process has been taken seriously by the local authorities:

*“Personally I had feared that our politicians would not take this process seriously, but it turned out they did.”* ./.. *“I don’t have the feeling this has been a political game. Certainly not locally. Of course politics always has to intervene at some point, for it is them who have to take the decisions. But I never had the feeling there was political interference, that they tried pushing us in a certain direction. My judgement is that we were left to do our work objectively and that our politicians played a fair game deciding on the end result of our work.”* (participants in STOLA)

In both STOLA and MONA, local politicians participated in the partnerships. In STOLA only elected officials were represented. In MONA, the political parties that formed the municipal council decided who would represent them. Both the presidency of the general assembly and of the executive committee were in the hands of politicians – mostly an alderman<sup>25</sup> or councillor from the majority, although after the local elections of 2000 the president of STOLA remained in place, even though he no longer was a member of the ruling coalition. Fewer politicians participated in the working groups (particularly the ones dealing with more technical issues).

Although both partnerships pride themselves of their independence, there always remained a clear link between the partnership and the local authority. Following the government decision to locate the repository facility in Dessel, the municipal council of Dessel decided to charge STORA (STOLA’s successor) with the follow up of the LILW repository issue<sup>26</sup>. Particularly in Dessel, but also in Mol, key local politicians clearly considered the partnership an asset, rather than a threat to their political primacy:

*“I think the council’s decisions on this issue were much stronger thanks to the participatory process. So STOLA has been influential and has helped us to take better decisions.”* (former mayor of Dessel)

---

<sup>25</sup> In STORA at some point the mayor.

<sup>26</sup> (unanimous) Decision of the Municipal Council of Dessel on September 14, 2006.

#### 4.3.1.2 Experience in Sweden

In Sweden, local political support for the process is such that the local project group is actually embedded in the organisation of the municipal authority. The LKO (Local Competence Building) project in Oskarshamn has the municipal council as reference group, and its full time project manager forms part of the municipal administration. The Oskarshamn municipal council decided on the assignments and structure of the LKO project, and local councillors form the core of the project's working groups. Other local actors can participate in the working groups, but the assignment, structure and priorities of the project group are determined at political level (NDA, 2007: 61-62).

In Östhammar, all planning issues (including the repository issue) are taken up by the municipal planning group consisting of the town manager, civil servants and leading politicians from the municipal board. Additional groups that look specifically into the repository issue are also firmly rooted in the municipality's political and administrative structure. The Östhammar reference group consists of a broad body of elected officials, joined by representatives from local organisations with an interest in the repository issue. The reference group works under supervision of a preparation group consisting of selected politicians and civil servants. Both are assisted by the Nuclear Waste Repository Group, a team of civil servants specifically recruited for this purpose (NDA, 2007: 65-66).

The engagement of local politicians in the case of these Swedish municipalities is thus very clear. However, a possible weakness of this line of working, compared to the partnerships, is that there appears to be less opportunity for agenda setting by people outside the political framework. Much therefore depends on the municipal councils considering the project group/working groups (or some of their assignments) a priority. If, at some point in time, this were no longer the case, there may be less opportunity left for the other local actors to support project groups, to show initiative and to carry the burden of scrutinizing SKB and its project. But it nevertheless applies to both the Swedish and Belgian-Slovenian model that the success of the system depends on the visibility of its working method and the possibility for all members of the community (who want to) to influence the ongoing work.

### 4.3.2 Inclusiveness of the PSI process on the local level

A second element affecting the strength of the local network, is the extent to which it can incorporate the prevailing interests and views within the community. This, in turn, depends on the representativeness of the participants and the ability of the network to draw on a broad pallet of local colours.

#### 4.3.2.1 Experience in Sweden

In Sweden, the responsibility for ensuring local representation lies foremost with the elected officials. In Oskarshamn, the elected officials form the LKO's reference group. Although other (local) actors – such as landowners, interested local citizens and representatives from various associations and local environmental groups – are invited to the LKO's working groups (NDA, 2007: 63), the initiative lies with the council, which outlines the working groups' responsibilities. The strategy group, which coordinates the working groups, is chaired by the mayor and is directly accountable to the municipal board and council (NDA, 2007: 64). The Östhammar working groups are coordinated by the municipal board and provide the board with input. The municipality communicates about the current status of the repository issue (NDA, 2007: 66).

In this respect, the Swedish model leans more to a traditional government model than a governance model. Local stakeholders in Sweden apparently are quite satisfied with this model – even though this claim was made by mostly elected representatives (who participated in this study project). But with a high trust in government<sup>27</sup> and the Swedish democratic system<sup>28</sup> it is indeed not unlikely that Swedes in general feel quite comfortable with such a model of decision-making. Moreover, the local project group or working groups and the funding received from the national nuclear waste fund allows the municipal authorities to consult on a broad basis, to set up targeted communications with the rest of the community, and to consort with neighbouring municipalities on the issue. However, at all times, the initiative lies with the municipality.

#### 4.3.2.2 Experience in Belgium

In Belgium, the local initiative to scrutinize site investigations was placed with the partnerships; not as a replacement for the existing political and administrative structure, but as an 'add-on'. The partnerships were a particular type of advisory body because they were given the task to study, on

---

<sup>27</sup> Still 62% in the autumn of 2006; but dropped to 55% in the spring of 2007 (First results of the Standard Eurobarometer, Spring 2007 - [http://ec.europa.eu/public\\_opinion/archives/eb/eb67/eb67\\_en.htm](http://ec.europa.eu/public_opinion/archives/eb/eb67/eb67_en.htm)).

<sup>28</sup> According to the April 2004 Eurobarometer, in Sweden, 74% said to be fairly to very satisfied with the way democracy works in their country; compared to 62% in Belgium, 55% in the UK, and 54% on average in the EU (no data for Slovenia). Data consulted on [http://ec.europa.eu/public\\_opinion/cf/subquestion\\_en.cfm](http://ec.europa.eu/public_opinion/cf/subquestion_en.cfm).

behalf of and in collaboration with the municipal authority, the possibility of hosting a LILW repository, and, if agreeable, provide a concrete project proposal. So rather than feeding the municipal council with positions and opinions to assist it in its decision, the partnerships set out to formulate their own policy proposals. One of the most cited reasons by members of the partnerships for participating in such a setting, was a conviction that “issues like a radioactive waste repository should not be left to politics alone”<sup>29</sup>. When setting up the partnerships, it was considered important that the local representation was as broad as possible, assembling not only local politicians, but also delegates from environmental, cultural, social, socio-economic, and other locally based organisations representing civil society. The intention was to create a structure robust enough to withstand changes in the political majority and representative enough for the community concerned.

The work of the partnerships, in this first period, can be seen as performing a ‘social feasibility study’ through the engagement of representatives from the prevailing views within the community. So how were these views screened and listed? To what extent is it possible to intentionally build a local policy network that extends beyond the political arena and that can be more or less representative for the whole of the community?

### **A (Belgian) methodology for setting up a partnership**

In the Belgian case, social sciences researchers from the universities of Antwerp and Liège performed a ‘social mapping’ of each of the municipalities involved through interviews of representatives of various types of stakeholders. The purpose of this ‘social map’ was threefold. First, it served to confirm that the interest of the municipal council to participate in a site investigation programme (responding to the RWM agency’s invitation) was supported by the majority of local stakeholder groups. Second, the interviews led to the identification of the variety of interests and opinions regarding the siting of a LILW repository in the community and thus the identification of potential partners. Third, the ‘mapping’ exercise helped to identify how the community felt about the proposed partnership structure and in what way people actually wanted to be involved. On this bases, the researchers drafted a proposal on how to establish a partnership in the community. Following feedback from all parties concerned, the researchers presented a final proposal to the waste manager and the relevant municipal council(s) for approval. More negotiations among future partners followed, and, after reaching an agreement on

---

<sup>29</sup> Survey held among the participants (including people who at one point stepped out of the process) from MONA, STOLA and PaLoFF – Summer 2005.

structure, composition and terms of reference, the founding parties signed the by-laws, thus establishing the local partnership.

### **1. Establishing a willingness to participate**

A first step in the implementation of NIRAS/ONDRAF's participatory approach was to establish a willingness to participate in at least one community. In this context, a willingness to participate implied a willingness to investigate the possibility of hosting a LILW repository facility; in other words, to engage in a (social) feasibility study. This, in turn, implied, on the one hand, a political preparedness to discuss the possibility of hosting a repository in an open and participatory fashion on the local level, and, on the other hand, broad community support for this position, as well as preparedness to engage in a participatory process. In practice, establishing this willingness was based on:

- a letter of interest by the municipal authority (in response of the agency's invitation);
- a preliminary social study and 'mapping' of the municipality (and its neighbours) by a third party to establish potential for acceptance (or at least sufficient common ground to start negotiations) and for setting up a partnership; and
- a formal decision by the municipal council to enter into partnership.

### **2. Establishing feasibility to participate**

Apart from finding the community members prepared to consider the possibility of hosting a radioactive waste repository, it was necessary to find a suitable site. For that purpose, NIRAS/ONDRAF performed a preliminary technical study in the four municipalities that expressed an interest<sup>30</sup>.

### **3. Identifying interests, potential partners and partnership structure**

In parallel with establishing willingness, the social preliminary study served to identify potential partners and a suitable partnership configuration. To this end, the researchers from UA and Ulg conducted explorative in-depth interviews within the municipalities concerned, in neighbouring municipalities and with actors on a more regional level. From each respondent, views were obtained on the disposal project, on possible organisation of a partnership, as well as names of other relevant people and organisations to be contacted. Interviews continued as long as new contacts were being suggested. As indicated above, on the basis of these interviews and feedback sought from the main actor groups contacted, the researchers drafted a proposal on the structure

---

<sup>30</sup> For Dessel and Mol, NIRAS/ONDRAF had enough data at its disposal from the start. The situation in Fleurus and Farciennes however was less clear. Extensive preliminary site investigations were needed here, designing a new concept in the process, as neither surface nor deep disposal would be appropriate. See country report Belgium: Bergmans, et al., 2006: 49.

and composition of a local partnership. Then, the researchers, with the help of a notary, developed a partnership memorandum with terms of reference which was first approved by the waste management agency and the municipal council concerned, following which final negotiations among the future partners took place (*e.g.* on names to be put forward for the executive committee) and the founding members signed the by-laws.

The following charts represent a schematic description of the Belgian methodology for setting up a local partnership as a local policy network that extends beyond the political arena and is fairly representative for the community as a whole.

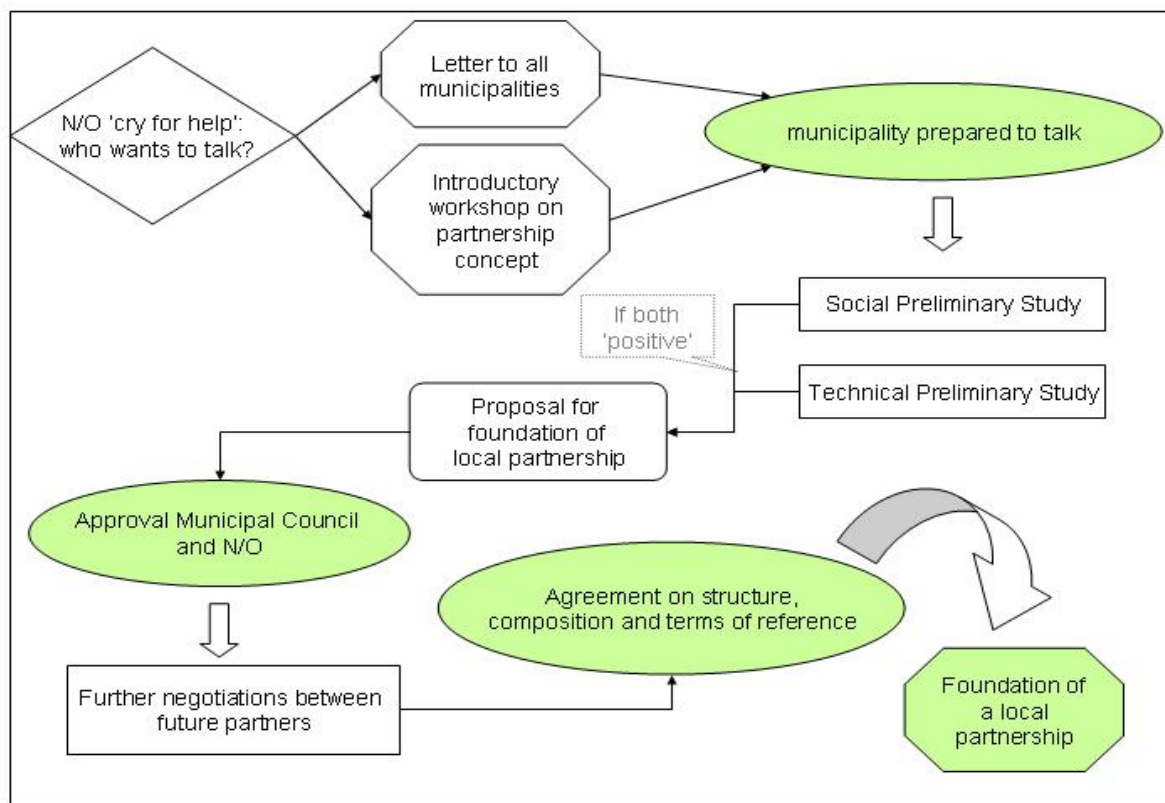


Figure 4. Applied methodology in Belgium to set up a local partnership

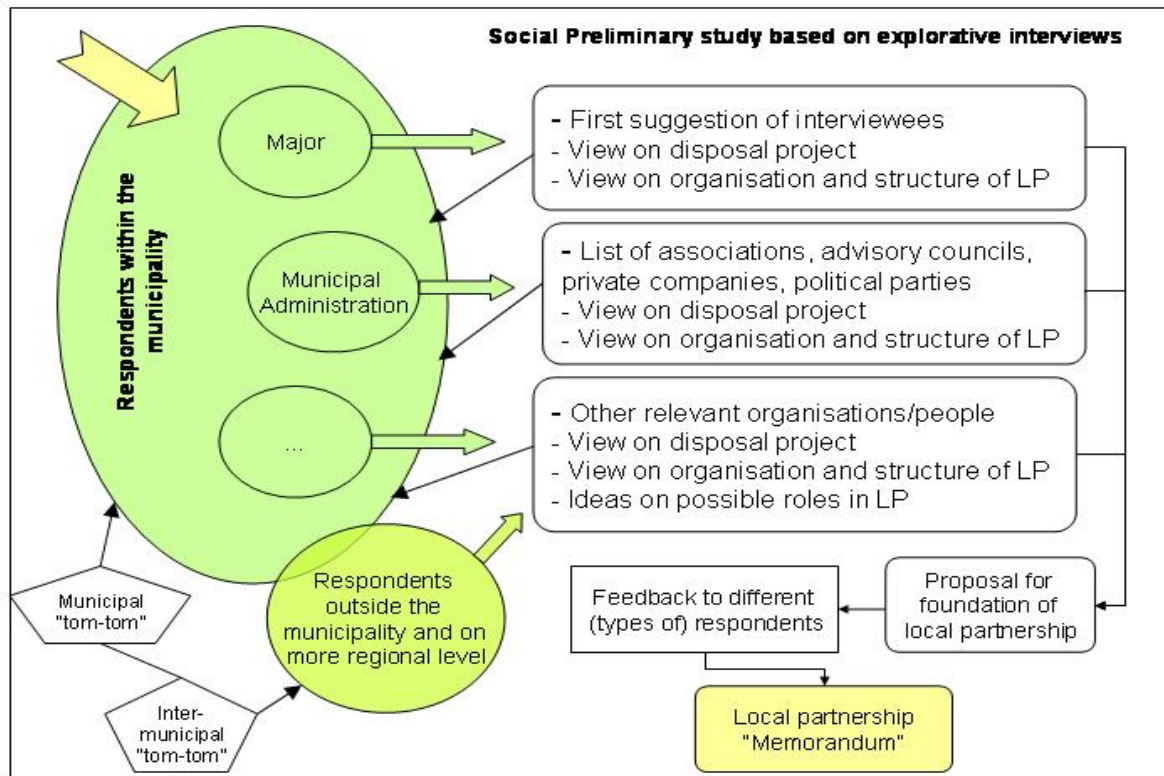


Figure 5. The social preliminary study in some more detail

Most participants interviewed from both STOLA and MONA thought the local network was correctly created and inclusive:

*“At the local level no-one was missing: everyone who had an interest was there. Nobody was excluded, even interested citizens could participate on an individual basis.” ./.* *“It was a completely open process.” ./.* *“The only ones that were excluded, were the ones that for some reason or other choose not to participate. Everyone who cared to could join.”* (participants in STOLA)

*“Everybody had the chance to participate. The threshold was kept low. I found that very positive.” ./.* *“No-one was excluded. If some groups did not participate, it was because they did not want to.” ./.* *“The door was kept open for everybody at all times. The working groups were also open to individual participants.”* (participants in MONA)

Regardless of this openness to the wider local community, some interviewees mentioned that some target groups (particularly women and young people) were underrepresented, while others (such as people with direct or indirect connections to the local nuclear sector) were somewhat overrepresented.

*“Everybody was given the chance to participate, but it is a fact that women and young people were underrepresented. This was not done deliberately, it just so happened. In the future we have to work on this.”* (participant in STOLA)

*“Nobody was consciously or deliberately refused. This has led to an unintentional overrepresentation of people attached to the nuclear sector. We have always tried to take this into account, but that hasn’t always been easy.” ./.* *“The ordinary citizen should have been more present in MONA.”* (participants in MONA)

Some respondents also referred to a number of actors beyond the local level that they missed in the set up of the partnerships:

*“No one was missing, at least not from Dessel. But it has been only Dessel. I do think there should have been deliberation with other municipalities. In first instance with Mol, since they are in part also a concerned party.”* (participant in Dessel)

*“The waste producers and federal decision makers. It wasn’t that much of a problem for STOLA, but in future I think we should extent the participatory system to these actors.”* (participant in STOLA)

*“FANC should play a bigger role, but it still remains for a large part a ghost organisation.” ./.* *“FANC should be more involved, but that local antenna here in Dessel does not work. So far that has been less then zero. You can’t go there with your complaints.”* (participants in MONA)

*“I would like to see as many independent organisations as possible to be present in MONA: the monitoring bodies like AVN (they do a good job), environmental groups like Greenpeace or Friends of the Earth (for they are independent and critical), VITO [the Flemish research centre based in Mol, working on issues like renewable energy, sustainable technology, ...], and independent academics (but I have been looking for these for 5 years now and haven’t found a single one yet).”* (participant in MONA)

## **Moving into a new phase**

At the time the partnerships were set up, the expectation was that their ‘social feasibility studies’ would take about two years. The job proved to take much more time, and, on top of that, both STOLA and MONA requested to continue their work, not only in the framework of the repository facility, but also in relation to the general nuclear activity in the two municipalities.

These new objectives and tasks called for a new mission statement, a change of ‘work style’ (probably more than people realised), and a change in the role patterns between the local participants and NIRAS/ONDRAF. The mission statements were changed relatively easily. However, both local actors and NIRAS/ONDRAF have been struggling for some time before finding a new work style. Moreover, where role patterns are concerned, the shadow dancing between the main players also took several months. This reciprocal ‘sounding out’ and marking of boundaries and roles was also clearly present in the very early days of the partnerships<sup>31</sup>. At that time, hardly anybody expected things to be differently because it is an inevitable and necessary process. However, with the shift into a new phase, this need was apparently overlooked and underestimated. While the players as such did not change, the setting did: (1) the site location

---

<sup>31</sup> For an example on how a STOLA working group reflected on its role, see the Belgian country report: Ibid.: 56.

has been chosen; and (2) the project to be further developed and implemented by NIRAS/ONDRAF is the one proposed by STOLA (Dessel)<sup>32</sup>. This turned the relationship between NIRAS/ONDRAF and its partnerships and between both partnerships (and municipalities) into a new ballgame; and different games call for different tactics ... With the five main parties (the partnerships STORA and MONA, the municipalities of Dessel and Mol, and NIRAS/ONDRAF) not always seeing eye to eye on how the process should continue – and some parties sometimes having relatively incompatible views – debate in the first year after the siting decision has been mainly about the process and each party's role in it. But even before these questions had been fully answered, new patterns began taking shape, and first steps were being taken towards renewed and in-depth interaction on the content of the still to be concretely developed integrated repository project.

After they handed in their final reports, the partnerships became the defenders and guardians of their project and of the 'criteria of acceptance' they set forth. STOLA turned into STORA with a slight change in composition, but with mainly the same actors. MONA amended its mission statement, but kept its name and composition. After the government decision, MONA for a moment experienced an existential crisis because it no longer had a to defend its project and felt betrayed by its major partner. After some time, however, it reactivated itself by focussing on acting as guardian of its 'criteria of acceptance' and making sure that NIRAS/ONDRAF lived up to its promise to incorporate the conditions set by MONA in the further development of the STOLA project. In relation to that, the partnership has also made some changes to its composition.

Now that both organisations have 'transformed' into more or less the same, the challenge will be to keep these organisations alive and presumably for a much longer period than was the case for their 'social feasibility study'. When referring to the diagnosed under-representation of some target groups, a STOLA participant observed: "this is something that needs working on in the future". If the partnerships want to keep playing their role of watchdog and stay as representative of their community as possible, it is clear they will have to develop ways of remaining flexible and adaptive to social change. This is true not only in terms of their composition (or representation) and organisation, but also with respect to their own role and relationship vis-à-vis other actors (as can be learned from the recent transition phase described in the previous paragraph).

---

<sup>32</sup> NIRAS/ONDRAF has nevertheless taken the position that all general conditions set out by MONA will also be incorporated in the Dessel project, to comply with the government decision of June 2006 (see supra).

### 4.3.3 Ability to ‘touch base’ with the rest of the community

The third element influencing the strength of the local network, is the ability of the people and organisations participating in the PSI process to touch base with the rest of the community or, in terms of the charts drawn on pages 14-15 (figures 2 and 3), the ability of the policy advisors on the local level to stay in touch with the more peripheral local actors.

In Sweden opinion polls show that about 80% of the population in both the municipalities of Oskarshamn and Östhammar are satisfied with the work carried out by the municipality. Furthermore a large majority in both municipalities looks positively at the prospect of a repository in their own municipality. A survey from 2006 shows that 78% of the inhabitants of Oskarshamn is in favour of hosting a repository; 82% of the population considers it to have a positive impact on local economy (Olofsson, 2006: 38). Similar attitudes can be found in Östhammar. This is taken by both municipal authorities as a clear response from the public that the municipal organisations are doing their work in a good way and have been able to attract strong public support.

As described in the Belgium country report, one of the tasks of the partnerships was to communicate through formal and informal channels with the rest of the community, providing them with information and inviting people to contribute to the debate (for a description of the initiatives taken, see: Bergmans, et al., 2006: 54). Most people interviewed indicated that they made a point of discussing partnership issues with the organisation they represented. A number of respondents, however, also indicated they often experienced a lack of interest from the (local) public, also within their own organisations:

*“Not many people are interested in participating and only a few of those are willing to engage in such a long and intense process. Hardly anybody seems interested in the issue: people here are used to the nuclear presence and they don’t feel very much concerned. Particularly among women, I noticed an important lack of interest.”* (female participant in STOLA)

*“In theory, the whole of the population [of Dessel] should be involved. STOLA was an honest and useful experiment to try and communicate with the public as closely as possible. This was undoubtedly very useful, ... but did we succeed? ... Has this only to do with STOLA? ... The fact is that a big part of the population does not feel concerned.”* ./.. *“What has disappointed me the most, is that people, in general, are not interested in this issue at all.”* (participants in STOLA)

*“I was actually shocked how little the general public [the local public] cares about this issue. Even within my own organisation [representing one of the larger socio-cultural organisations]. At first, the interest within my organisation was quite high. They genuinely wanted to know what we were up to. But the item was the first to be removed from the agenda. ... [Why ?] I think it all took too long for most people. If you weren’t directly involved it did seem to take for ever.”* (participant in MONA)

Opinions, therefore, are divided on the question if partnership members actually succeeded in ‘spreading the news’ and bringing back input from their own personal and professional networks.

*“Those open days we had were important as a link to the community. Moreover, STOLA has frequently made itself heard, so I do think the public knew what we were doing. I think there was an impact on the community and that we have made people a bit more aware.”* (participant in STOLA)

*“A lot has happened vis-à-vis the community (newsletters, participation at all major local events, ...) but I wouldn’t know how far these were able to reach.”* (participant in STOLA)

*“First we thought using our own channels to keep our people informed on what went on in STOLA, but STOLA proved much stronger a communicator and we had nothing to add to that. We did hope we would get some reactions that we could feed back to STOLA, but those were very limited, not to say non-existent.”* (participant in STOLA)

*“You sit there representing a particular organisation. In theory you represent a certain number of people, but is this truly so? Because everybody thinks for himself. That is the tricky part. And I think this will become more and more critical. People become more and more individualised ... and the people they represent aren’t necessarily all as interested in the issue.”* (participant in STOLA)

*“The people that came to these working groups were often people with a certain connection to the sector (if not themselves, then family). The ones we missed the most were the butcher, the baker, the barber, ... people who can really feel the pulse of the community.”* (participant in STOLA)

*“Sometimes people lash out to the General Assembly saying it didn’t function properly, that there was no feedback from the grassroots. But in part you have to make this happen [refers here to the partnership itself as an organisation and in particular the executive committee]. If you cram a 50 page report unto 16 overheads, you can’t expect people to decide then and there if they support that document. If you want them to take mature and deliberate positions, you have to distribute such documents well in advance, or you postpone the decisions to a second meeting. You have to make sure people experience their contribution as a bit more than merely showing up to nod approvingly.”* (participant in MONA)

*“For me touching base with the rest of the community was by far the weakest link in MONA. I do think we did provide good communication as an organisation, but the real backbone of MONA was formed by the many organisations and advisory councils represented in the partnership. And I think the feedback at that level was insufficient, due to a weak General Assembly lacking direction. I know this sounds harsh, but things went wrong there. And consequently the GA broke down into a couple of individuals who never obtained proper feedback from their own organisations.”* (former president of MONA)

*“In the beginning people fought to gain a seat in the General Assembly, but when push came to shove, it was difficult to get a minimum of people together to lawfully assemble. I really regretted that it had to take so much effort to keep these people interested. ... And I’m not really sure if they succeeded in realising good feedback from their grassroots.”* (participant in MONA)

Some respondents in Belgium suggested that some form of methodological support would have been useful – a thought that is probably worth pursuing. In the case of PaLoFF, for example, participants indicated that a participatory approach was clearly no part of the socio-political culture in Fleurus, nor in Farciennes, and argued that, particularly in such cases, extra support is needed.

*“A partnership is not merely placing people around a table with the order to discuss. There should be a frame, a methodology, but we didn’t have any. It was all very well to have nice people from ONDRAF over to pat us on the back, but they didn’t have the right competencies to build up and carry the partnership [as a true partnership, where each partner accepts the stakes that are in the game] ... and our mayor rejected all academic supervision.”* (participant in PaLoFF)

Putting all the actors in place is one thing, playing a good and correct game is another. Moreover, in the Belgian partnership approach, much initiative was left to the partnerships themselves. The eagerness with which many actors set out to show NIRAS/ONDRAF and the rest of the country that they were capable of handling these things themselves may to some extent have been counterproductive in looking for methodological help. Many people indicated they considered this an experiment, a first time to work in this way. It was, therefore, not self evident (or desired) to move beyond the basic ‘guidelines’ set out at the start and ‘upset’ the experiment. With ‘methodological support’, respondents referred to a more reflexive attitude towards their own methods and new and more creative ways of doing the same thing. Not to innovate just for the sake of it, but, for example, to assist on issues such as conducting consultations within the community or finding ways of attracting specific target groups, like women and young people. In addition, some respondents explicitly stated that ‘educating or training’ people should not be limited to technical issues, but that the task of the partnership should also be to work on participatory culture and to create more awareness and skills on that subject as well. Or as one STOLA participant put it:

*“If we need advise on anything, it would be on structure and method. We could do with more scientific advise on those topics.”*

## 5 Conclusion

From the perspective of policy networks, it seems that ‘RADWASTE networks’ indeed exist in each of the four countries. Particularly with regard to the siting of repository facilities, local stakeholders (*e.g.* people and organisations from the (potential) host communities) are increasingly acknowledged to be an integral part of this network. The Swedish and Belgian experiences show that the local stakeholders can effectively become part of the ‘RADWASTE network’ and, in some cases, make their voices heard beyond the realm of the territory where the siting issue is being discussed. In Slovenia, decision making remains very centralised, but local communities hosting nuclear facilities have also gained relatively extensive influence in siting issues. However, the local communities remain to a large extent exotic islands connected, through a number of

recently build bridges, to a vast mainland of well established and well inter-connected entities that have long since been part of each countries 'RADWASTE network'.

Both in Sweden and Belgium, the local networks in themselves seem to be strong. For Slovenia it is still a bit too soon to tell, but some criticism on the dominance of political actors can clearly be heard at the local level. In Sweden, the style is slightly more 'government' oriented, drawing on the traditional municipal network, in a 'traditional' setting, at least where the relationship citizens-politicians is concerned. In Belgium, the partnerships also heavily draw on the existing municipal network, but within a more autonomous and more 'governance' type structure, engaging local authorities, local businesses and local civil society in an entity where they jointly shape local policy and, through their supra local partner (the RWM agency), also helps shaping national policy on certain issues.

The ideal scenario for PSI, therefore, seems to consist of a process that (1) allows for input from the local community at large; and (2) has large political support from the local decision-makers. In order for such a process to stand the test of time, it should be robust in its representation, as well as flexible and adaptive to social change. An additional helpful factor for this type of processes is an initial and (more importantly) continued ability to develop a reflexive structure and culture. However, to achieve this one must necessarily rely on the inventiveness and open mindedness of the people (and their organisations) involved, and on their willingness to learn. As a great mind once said:

*"... originality is a valuable element in human affairs. There is always need of persons not only to discover new truths, and point out when what were once truths are true no longer, but also to commence new practices, and set examples of more enlightened conduct, and better taste and sense in human life. ... It is true that this benefit is not capable of being rendered by everybody alike: there are but few persons, in comparison to the whole of mankind, whose experiments, if adopted by others, would be likely to be any improvement on established practice. But these few are the salt of the earth; without them, human life would become a stagnant pool. Not only is it they who introduce good things which did not before exist; it is they who keep the life in those which already existed."* (John Stuart Mill, On Liberty, 1859)

In more ways than one, the stories of the people involved in PSI processes on RWM, in each of the countries in this research project, show more than a few persons fitting the above description.

## 6 Bibliography

- Bergmans, A., et al.** (2006) *CARL Country Report - Belgium*. University of Antwerp - Department of Sociology / University of Liège - Group SEED, Antwerp/Liège. [www.carl-research.org/index.php?pg=10](http://www.carl-research.org/index.php?pg=10)
- Blowers, A., et al.** (1991) *The International Politics of Nuclear Waste*. New York: St. Martin's Press.
- Castells, M.** (2004) 'Informationalism, Networks, and the Network Society: A Theoretical Blueprint', Castells, K. (Ed.), *The Network Society: A Cross-cultural Perspective*. Cheltenham, UK - Northampton, MA, UAS: Edward Elgar.
- Durant, D.** (2006) 'Strategic Action in Nuclear Waste Disposal: Canada's Adaptive Phased Management Approach'. In: Proceedings of *VALDOR 2006*, Stockholm, Sweden.
- Elam, M. & Sundqvist, G.** (2006) *CARL Country Report - Sweden*. Göteborg University - Department of Sociology, Göteborg.
- Evans, M.** (2001) 'Understanding Dialectics in Policy Network Analysis', in: *Political Studies*, 49: 542 - 550.
- Freeman, R. E.** (1984) *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Haas, P. M.** (1992) 'Introduction: epistemic communities and international policy coordination', in: *International Organisation*, 46(1): 1-35.
- Marsh, D. & Smith, M.** (2000) 'Understanding Policy Networks: towards a Dialectical Approach', in: *Political Studies*, 48: 4 - 22.
- NDA** (2007) *Managing Radioactive Waste Safely: Literature Review of International Experiences of Community Partnerships*. Technical Note: TN 17086. Nuclear Decommissioning Authority, Oxford.
- Olofsdotter, A.** (2007) *Djupa borrhål. Ett alternativ för slutförvaring av använt kärnbränsle?* Rapport 2007:6. KASAM, Stockholm.
- Olofsson, A.** (2006) *Oskarshamns identitet - en kärnfråga*. Analys AB, Report commissioned by SKB.
- Peterson, J.** (2003) 'Policy Networks', in: *Political Science Series - Institute for Advanced Studies*, Vienna, 90.
- Polic, M., et al.** (2006) *CARL Country Report - Slovenia*. University of Ljubljana / ARAO, Ljubljana.
- Rhodes, R. A. W.** (2002) 'Putting People Back into Networks', in: *Australian Journal of Political Science*, 37(3): 399 - 416.
- Simmons, P., et al.** (2006) *CARL Country Report - United Kingdom*. University of East Anglia - Centre of Environmental Risk, Norwich. [www.carl-research.org/index.php?pg=10](http://www.carl-research.org/index.php?pg=10)
- Sundqvist, G.** (2002) *The Bedrock of Opinion*. Dordrecht / Boston / London: Kluwer Academic Publishers.

**TEC** (2002) *BNFL National Stakeholder Dialogue. Evidence report - Influence, productivity and Impact of the Dialogue*. The Environment Council, London.

**van Bueren, E. M., et al.** (2001) 'Spelen met weerbarstige problemen: Het beleidsspel rond emissies van zink uit bouwmaterialen', in: *Beleidswetenschap*, 2: 169-191.

**Walls, J. & Simmons, P.** (2008) *CARL Thematic Report - Governance*. University of East Anglia - Centre of Environmental Risk, Norwich.