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Theme 2: Structuring local communities and development of local democracy for engagement in Radioactive Waste Management governance

Brief : " Contribution of the local communities to safety and radiation protection around radioactive waste management sites"

Main Authors: Stéphane Baudé, Gilles Hériard Dubreuil (Mutadis, France)
with input by Claire Mays (Symlog) and Gaston Meskens (SCK-CEN)

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***CIP Research Brief Theme 2:
Contribution of the local communities to safety and radiation
protection around radioactive waste management sites***

Stéphane Baudé (Mutadis), Gilles Hériard Dubreuil (Mutadis)
with input by Claire Mays (Symlog) and Gaston Meskens (SCK-CEN)

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Introduction

Engagement of local communities and actors in the decision-making processes is traditionally motivated by the fact they are impacted by the decision taken. This traditional rationale for engagement of local communities and actors is driven not only by ethical concerns, but also by the necessity for public authorities to comply with national or international legal frameworks which give to stakeholders, concerned by a decision having environmental impacts, the right to be informed and participate in the decision (e.g. the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters or, in the French context, the Charter for the Environment which has been included in the French constitution in 2005).

In the field of radioactive waste management (RWM), the results of COWAM 2 European research project (2003-2006) reinforced this drive towards engagement of local communities and actors in decision-making processes by showing that safety of a radioactive waste management site depends not only on the quality of its technical conception and implementation, but also on the quality of surveillance of the facility and of its impacts and on the development of a "safety legacy" (know-how, procedures, resources, safety culture ...)¹. In particular, COWAM 2 has shown that local communities play a key role both for the continuity of surveillance and monitoring and for the development and transmission of the safety legacy from one generation to another².

Accordingly, the potential impacts of a radioactive waste facility on the environment partially depend on the capacity of the local communities surrounding the site to contribute to the surveillance of the facility in the short, middle and long term.

This research brief aims to identify conditions for an effective and sustainable contribution of local communities and actors to the safety of a radioactive waste management (RWM) site and to radiation protection. The objective of the research brief is more precisely to identify conditions in the siting process that could favour the contribution of local communities to safety and radiation protection.

In order to do so, a transversal analysis of four case studies of siting processes has been carried out using a specific analytical grid. The considered case studies were the following:

- The Belgian partnership approach for siting a low and intermediate level waste (LILW) repository³
- The Slovenian partnership approach for siting a LILW repository⁴

¹ See introduction of the COWAM 2 Final synthesis report (pp. 5-8)

² See in particular Section 6 of COWAM 2 WP4 Final report (pp. 38-47)

³ See the research brief "Belgian case study: local partnerships for the siting of a LILW repository"

⁴ The analysis of the Slovenian Partnership approach was based on the National Insights for Slovenia included in the final report of Work Package 5 of COWAM 2 and on the participatory assessment of the Slovenian partnership approach carried out in the framework of CIP by the Slovenian National Stakeholder Group (NSG) – the outcomes of this participatory assessment process are available in the minutes of the 2nd and 3rd meeting of the Slovenian NSG

- The process for siting for a regional industrial waste repository in the French region of Midi-Pyrénées and the regional dialogue carried out through the Regional Observatory of Industrial Waste in the Midi-Pyrénées (ORDIMIP)⁵
- The Community Siting Partnership approach for siting geological disposal in the United Kingdom⁶

The analytical grid used for the review of these four case studies (the analytical grid is given as an appendix to this research brief) has been developed on the basis of COWAM 2 results, of other European research projects (e.g. TRUSTENT IN ACTION), of the analysis of the French Local Liaison Committees (CLI) and their national association (the ANCLI) and of several research works:

- **The IGNA study**⁷ (Inclusive Gouvernance of Nuclear Activities, July 2006), which is a European study whose objective was to make an inventory of the information and participation processes in the context of nuclear activities in the European Union.
- The book “*Acting in an Uncertain World: an Essay on Technical Democracy*” of **Callon, Lascoumes and Barthes**, which is now among the classics in the field of citizen participation procedures. It provides assessment principles concerning the “dialogism” of these procedures.
- The works of **Fung and Wright**, who emphasise the notion of counter-power, as a necessary element for actual citizen participation. In the article “*Counter-power within deliberative and participatory democracy*”, they sketch out some conditions of citizen participation.
- The works of the Swiss researcher **Etienne Wenger**, who develops in the book “*Communities of Practice: Learning, Meaning and Identity*” a social perspective of learning, which is attached to collective practices within “communities of practice”. According to these works, phenomena of learning and competences development are directly linked with phenomena of meaning and identity creation.

This analytical grid is divided into five key issues that influence the safety, robustness and sustainability of the contribution of local communities and actors to safety and radiation protection around a RWM site:

- The capacity of local communities and actors to assess the justification of siting a RWM facility in their territorial context
- The quality of interactions between local actors and of local democracy
- The development of local knowledge, know-how and expertise
- The capacity of local communities to interact with other decision levels which have a local impact

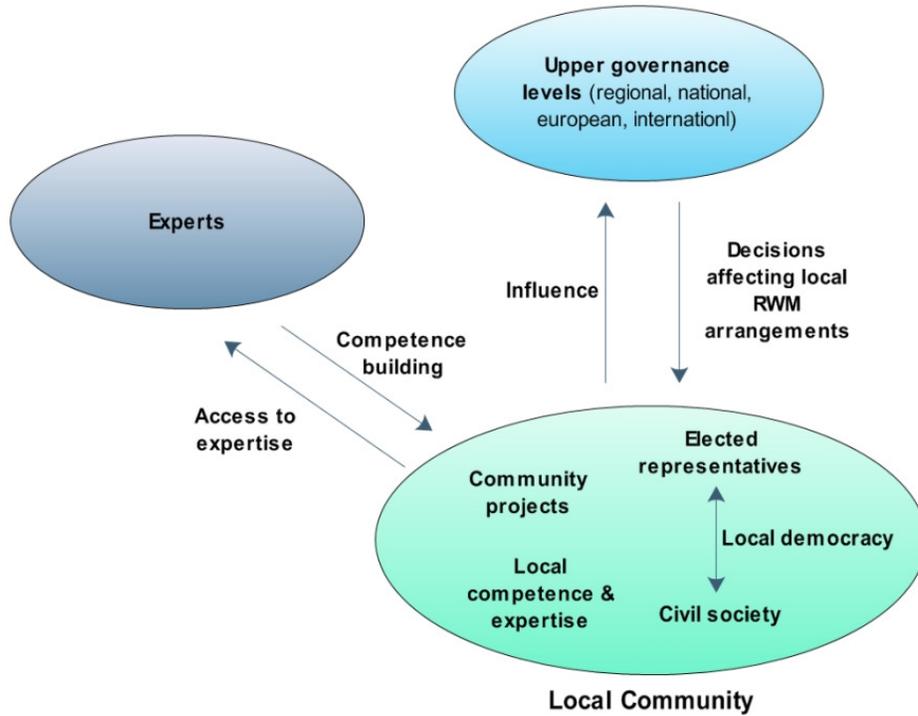
⁵ See the presentation of the ORDIMIP case study in the research brief "Participatory Assessment of Decision-making Process"

⁶ The analysis of the Community Siting Partnership approach for siting geological disposal in the United Kingdom has been based on the White Paper "Managing Radioactive Waste Safely – a framework for implementing geological disposal" issued by the Department for Environment, Food and Rural Affairs (DEFRA) in June 2008.

⁷ http://www.mutadis.org/IMG/pdf/IGNA_0407.pdf

- Integration of radioactive waste management in local socio-economic activities and development projects

The present research brief is structured by these five themes.



Factors influencing the contribution of a local community to the safety of a RWM site

A draft version of this grid was presented to the Slovenian National Stakeholder Group (NSG) during its 3rd meeting (Brežice, 10th January 2008). A refined version of the analytical grid was then used to carry out a transversal analysis of the four considered case studies. For each of the five themes of the grid, cross-cutting elements were identified in the considered case studies and were illustrated by practices extracted from the four considered siting processes. The results of this work were presented to the Slovenian and French National Stakeholder Groups respectively during their 4th meeting.

1. Capacity of local communities & actors to assess the justification of siting a RWM facility in their territorial context

Local dialogue processes are in particular intended to give local communities and actors an opportunity to contribute to the assessment or to the development of a RWM site. This assessment is not limited to the technical characteristics of the RWM site or to the risks and benefits associated with the project. As hosting a RWM site will engage the local community over several generations, it is necessary that the local debates on the RWM site project address the justification (from ethical, societal, technical ... points of view) of siting a RWM facility in the given territorial context from a local point of view.

As regards the issue of justification, the analysis of the four case studies identified two different cross-cutting issues: the engagement of local communities on a voluntary basis and existence of a capacity of withdrawal on the one hand and, on the other hand, the arrangements and mechanisms enabling local actors to investigate and debate the justifiability (ethical, societal, technical) of siting a RWM facility in their given territorial context.

1.1. Voluntary engagement of the local communities and existence of a capacity of withdrawal

Voluntary engagement of local communities in the siting process is a factor that favours the development of a local debate on the justification of hosting a RWM site. The voluntary character of the engagement supposes that the decision of local governments to engage in the process is backed by a first assessment of the justification of siting a RWM facility in the local context from a local point of view. This local justification from the point of view of the local elected representatives can then constitute a first base for discussing the justification of the project with all concerned categories of local actors. The Belgian and Slovenian partnership approaches for siting a LILW facility as well as the British approach for siting geological disposal are based on the voluntary engagement of the local communities in a decision-making process. In the case of the ORDIMIP process in France, the industrial waste repository was to be developed and operated by private firms, which have to apply for an operating license to the region Prefect. The "candidates" are therefore not local communities but firms. The ORDIMIP process however gave local and regional actors extended opportunities to assess the different proposed projects with a set of criteria including environmental, social and economic dimensions.

In order to allow the local communities to fully draw the conclusions of the local debate on the justification of the project in the territorial context, it is necessary that an effective capacity of withdrawal of local communities exists, supported by contractual or legal provisions, until a predetermined stage of the siting process. Thus, voluntary approaches as defined in the Slovenian and Belgian partnership approaches for siting a LILW facility and in the British approach for siting geological disposal also include a right of withdrawal. In the UK, the decision framework presented in the DEFRA and al.⁸ White Paper "Managing Radioactive Waste Safely – A Framework for Implementing

⁸ The White Paper was issued by the department for Environment, Food and Rural Affairs (DEFRA), the Department for Business, Enterprise and Regulatory Reform (BERR), the Department of the Environment of Northern Ireland and the Welsh Assembly Government.

Geological Disposal" gives unconditional right of withdrawal to the local communities "until a late stage, when underground operations and construction are due to begin". In both Belgium and Slovenia, this right was actually exerted by local communities. In Belgium, the town council put a veto in 2006 to the Fleurus-Farciennes site. In Slovenia, two local communities withdrew from the siting process in 2005 two months after their initial engagement. In 2006, the municipality of Sevnica also withdrew.

1.2. Arrangements and mechanisms for local debate on the justification of siting a RWM facility in a territorial context

Voluntary approaches and the existence of a right of withdrawal of local communities necessitate that the decision-making process, in particular the processes of local dialogue and debates, gives the local actors actual capacities and means to evaluate the justification of siting the considered RWM facilities in their territorial context. In the case of the ORDIMIP in France, the process allowed the various concerned local and regional stakeholders (elected representatives, NGOs, firms, local divisions of the State administrations, experts) to carry out a detailed assessment of regional waste flux and of their prospective evolution in order to determine the validity of the objective of creating a regional industrial waste repository. This work was carried out before specific projects of repository were considered and was supported by expert studies commissioned to external consultancies and funded by the ORDIMIP. At the later stage of the assessment of industrial waste repository projects, local hearings allowed local actors to express themselves on the projects, including their justification.

The division of the decision-making process into clearly identified steps is also a factor which facilitates the assessment of the justification of the RWM facility. At each step of the process, local communities can refine their assessment of the justification of the project according to the new data and information available at the considered stage of the process. A stepwise approach was adopted in the Belgian and Slovenian process for siting a LILW facility and is part of the British approach to siting geological disposal.

2. Quality of local democracy on RWM issues

The capacity of the local community to contribute to safety and surveillance of a radioactive waste facility notably depends on the capacity of local actors to jointly identify key issues of local interest linked to radioactive waste management, structure local debate and build a shared understanding of these issues, and take joint actions accordingly.

This depends on two main aspects of local democracy: the intensity, quality and sustainability of the mobilisation of local actors on the one hand and, on the other hand, the quality of local dialogue and debates. The intensity, quality and sustainability of the local community will vary depending on the way local actors engage in RWM issues. Top-down involvement through institutional processes and tools may face the problem of stakeholder fatigue if they are not suitably articulated with local concerns and projects and if local actors are not able to tailor these tools according to their needs. Conversely, autonomous engagement triggered by local actors is likely to result in sustainable engagement of local actors. The degree of autonomy of local actors (existence of long-term objectives of the local actors, of resources supporting mobilisations, of an actual will to trigger durable change and of means to fulfil this objective) is also an important criterion. Finally, the capacity of the local actors to stay mobilised on RWM issues through time, in particular after the siting decision, has to be considered.

The quality of local dialogue and debates depends on several factors such as the diversity of engaged actors, the transparency and structure of local debates, the clarity of the rules that govern them and the balanced access of the engaged actors to local debates. The way in which risk concerns are included (or not) in the local debates is also a quality criteria. Is the issue of risks included in the local debates? Is it considered in isolation or together with the other issues linked with radioactive waste management? The quality of local dialogue or debates should be considered not only in a procedural perspective, but also with a view to its outcomes at the local level: how do local debates contribute to the development of a shared understanding of local radioactive waste management arrangements integrating all dimensions at stake (risks, local development, inter-generational perspective ...)? And finally, how do local debates influence decisions of elected representatives?

The analysis of the case studies identified four cross-cutting issues as regards local democracy on RWM issues: the availability of the necessary time and means for local dialogue, the autonomy of local communities and actors engaged in the decision-making process, the self-organisation capacities of local communities, and the articulation of the roles of local dialogue bodies and local governments.

2.1. Availability of the necessary time and means for local dialogue

Local communities and actors need time and means in order to develop ownership of RWM issues, become empowered and build a cooperative process of assessment of both the project of RWM siting (integrating technical, economic, environmental and social issues) and its justification in the local context.

Thus, in the UK, DEFRA et als White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" states in its guidance for community siting partnerships that "the partnership must be able to develop, evolve and respond to change over a period of decades to enable it to fulfil its mission and objectives". In Belgium, seven years passed between the establishment of the MONA and STOLA partnerships (1999-2000) and the choice of the site of Dessel by the ONDRAF in 2007. In the case of the Regional Observatory of Industrial Waste in Midi-Pyrénées (ORDIMIP), the regional and local dialogue for the creation of a regional industrial waste repository lasted more than six years between the creation of the ORDIMIP in February 1993 and the issuing of an operating license for the final repository project on the site of Graulhet in July 1999. Local dialogue continued during the further phases of the process, i.e. the building works (199-2002) and the operation of the industrial waste repository (since 2002).

In the four studied cases, significant means were deployed to support the works of the local dialogue bodies. In the case of the Belgian partnerships, each partnership received an annual budget of about 250 000 euros from NIRAS/ONDRAF in order to support the partnership operation. This covered general expenses like the salaries of permanent staff, communication activities, operational costs (telephone, mailing, electricity ...) and logistical support (invitation of experts, visits, participation in conferences) ...for the working groups. In addition to this, a one-off budget of 150 000 euros for each partnership was set aside by NIRAS/ONDRAF for the elaboration of the project proposal and for socio-economic studies. In Slovenia, the radioactive waste agency, ARAO, made funds available to support the works of the local partnerships. ARAO funding covered the operation expenses of the local partnerships, communication actions and expert studies commissioned by the partnerships. In the case of the ORDIMIP, the average annual budget has been of about 114 000 euros. This budget included operational costs, communication actions and expert studies. It has been co-funded by the State, the European Commission, the Water Agency, the Environment and Energy Management Agency and the Regional Council. Finally, in the UK, DEFRA et als White Paper explicitly includes the support of local dialogue, and in particular of the setting-up of Community Siting Partnerships through an "engagement package". The White Paper sketches out a non-exclusive list of activities that are anticipated to need support (e.g. public information, staff and other operational costs of a Community Siting Partnership, commissioning of specialist advice, process evaluation, reimbursement of out of pocket expenses of Community Siting Partnerships members).

2.2. Autonomy of local communities and actors engaged in the siting process

Beyond time and means, one of the key conditions for local communities and actors to develop over time a sustainable contribution to safety and radiation protection around a RWM site is their degree of autonomy in the process. Autonomy is in particular a condition for local actors to develop their own investigations on RWM issues in a way that links with the key concerns of the community.

The four studied cases show a set of arrangements and practices which are intended to enable local actors to engage in a position of autonomy. For instance, the ORDIMIP (regional dialogue forum on industrial waste management) in France and the local partnerships in Belgium are autonomous legal entities and take the legal form of a non-

profit association. Autonomy of the local dialogue body is in particular a condition for the local actors to organise their work according to their own agenda and to develop investigations that addresses the key concerns of the local community. Moreover, the legal form of a non-profit association facilitates co-ownership and co-management of the dialogue process by the participating actors. For both ORDIMIP and the Belgian partnerships, the status and rules of operation of the association are specifically designed to allow all categories of participating stakeholders to take part in the management of the association in a balanced way. The Slovenian partnerships are not local entities and are created through a formal agreement between ARAO and the local communities. In the UK, DEFRA and als White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" does not give prescriptions concerning the legal form of the Community Siting Partnerships.

Freedom of allocation of the funds is also an important factor for the trust of local participants. This is the case in the four cases. For the ORDIMIP in France and the Belgian partnerships, the governing bodies of the association (i.e. Administration Board and General Meeting) take the financial decisions freely, within the limits defined by the status of the association. In the Slovenian case, the local partnerships are not legal entities and their budget is defined on a yearly basis. The decision on the use of the funds is however taken by the local partnerships. In the UK, DEFRA et als White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" states, in its guidance for community siting partnerships, that "it will be for a Partnership to decide exactly how – in seeking to fulfil its mission – it spends its funding".

In several cases, support to local engagement is distinguished and separated from possible economic support to the local communities, with a view to avoid creating dependency relationships. Thus, in the UK, the White Paper makes a clear distinction between, on the one hand, the "engagement package" which is intended to support local dialogue processes and is made available to local communities at early stages of the process and, on the other hand, the "community benefit package". The same distinction is made in the case of the Belgian partnerships.

2.3. Self-organisation capacities of local communities

The self-organisation capacities of communities are a key factor for the establishment of a comprehensive local dialogue and the development of a shared assessment of RWM issues in the local context.

The clear engagement of local authorities in the dialogue process is key for the development of a local ownership of the local dialogue process. In Slovenia and in the UK, the local governments are expected to play a key role in the development of a local dialogue process. In Slovenia, the local partnerships take the form of a formal agreement between the local communities and ARAO, the radioactive waste management agency. The process of setting up the partnership was led by the local communities. In the UK, the White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" does not characterise precisely the process of setting up a Community Siting Partnership, to enable a tailored approach to be negotiated with each local community willing to engage. However, the White Paper explicitly states that the Government expects local authorities to "take the lead role in initiating further discussion

with potential local partners and organising community engagement" after the initial Expression of Interest by local authorities. In particular, local authorities are expected to play a lead role in setting up a Community Siting Partnership.

The capacity to adapt the dialogue process to the local community structure and stakes is also a factor that favours local ownership of the dialogue process to be implemented. In particular, it is important that the national RWM framework leaves some freedom to local communities and actors in the definition of the objectives, structure and rules of operation of the local dialogue process. Thus, in the UK, the White Paper stresses that "Government does not wish to be over-prescriptive about the way that the voluntarism and partnership arrangements should work at the outset as individual local circumstances differ and, to a degree, a tailored approach to any discussions will need to be taken". Moreover, the White Paper explicitly foresees that the Community Siting Partnerships can adopt additional objectives to the ones outlined in the White Paper. In the case of the Slovenian local partnerships, each local community (Sevnica, Krško and Brežice) adopted a different approach to the setting up of local partnerships. In the case of the ORDIMIP in France, the structure and rules of operation of the ORDIMIP were agreed with the different participants during a preparation phase and were voted during the initial General Meeting of the ORDIMIP. They were updated several times to respond to emerging needs.

The dialogue process implemented through the ORDIMIP has however been an ad hoc process that went far beyond the minimal requirements of the national legal framework.

Self-organisation capacities of the local communities also include their capacity to integrate in the local debate all dimensions at stake (e.g. technical specifications of the RWM facilities, risk and safety issues, local economic development, social and cultural issues, environmental issues ...). Thus, in Belgium, the local partnerships worked on an integrated project which includes the technical design of the facility, arrangements for the follow-up of the site's safety as well as of health and the environment, local dialogue arrangements, the development of a communication centre and a local development fund. In the UK, the White Paper recommends carrying out a "sustainability appraisal" of the RWM site project that integrates environmental, economic and social factors. Moreover, the proposed mandate for the Community Siting Partnership includes all issues related to the RWM site project as well as the contribution of the project to the well-being of the community. In France, the ORDIMIP allowed an integrated regional vision to be developed of industrial waste that included economic and environmental dimensions.

A last key aspect of the self-organisation capacity of local communities is their capacity to engage in the local debates the various components of the local community. For instance, in the case of the Belgian partnerships, the initial membership of the local partnerships was decided according to a "social mapping" of the local communities carried out by Antwerp University. In the case of ORDIMIP in France, the members of the ORDIMIP included local and regional elected representatives, NGOs, enterprises, local divisions of State administrations, experts and academics. In the UK, the White Paper recommends, in the guidance for Community Siting Partnerships, that the recruitment of the members of a Local Partnership would "be informed by local research to identify all stakeholders that wish to participate".

2.4. Articulation of the roles of local dialogue bodies and local governments

A key factor for the quality of local dialogue on RWM issues is the capacity of the local community not only to organise local debates which integrate all categories of issues and stakeholders, but also to articulate in a fruitful way the decisions and actions taken by the local governments (representative democracy) with the local dialogue process (participatory democracy). This articulation is not a given but results from the experience of local actors, including the experience of conflicts. Conversely a lack of articulation between representative and participatory democracy may represent a destabilising factor which may favour the development of frustration and tensions and could jeopardise trust and engagement of local actors in the siting process.

The first condition of the articulation between representative and participatory democracy is the active participation of local governments in the local debates. In the case of the Belgian partnerships, the membership of the partnerships includes the main political parties (with a limitation to the political parties represented in the town council in the case of the local partnership of Dessel). Moreover, regular exchanges of information are organised between the local partnership and the town council. In the UK, the White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" recommends that membership of the local partnership would include local elected representatives and MPs from the concerned territories. In the case of the ORDIMIP in France, the membership is divided into several groups, including a group of local and regional elected representatives. In the case of the local partnerships in Slovenia, the local partnership is chaired by the mayor of the concerned municipality. However, the absence or lack of participation of the municipal councillors in the local partnership was identified as a weakness during the participatory SWOT analysis carried out with the Slovenian NSG.

It is also important that the respective roles of the local dialogue bodies and the local governments are clearly set out and that there are no conflicts. In the UK, the White Paper gives an advisory role to the Community Siting Partnerships, while the decision powers belong to local governments. In Belgium, conversely, the local partnership is a dialogue and decision body as it is directly responsible of developing an integrated repository project. The General Meeting of the local partnership therefore has to take the decision to present the integrated repository project to the municipal council before the municipal council can deliberate and vote to finally put the municipality forward as a candidate to host the LILW repository. However, the position of the local partnership as a decision-making body parallel to the local government raised questions about the distribution of responsibilities between the local partnership and the local government (e.g. as regards the management of a future development fund).

Finally, giving a formal role to the local dialogue bodies in the decision-making process gives formal recognition to the outcomes of the local debates and sets out clearly and in advance the respective contributions of the local dialogue bodies and the local governments in the decision-making process. In the UK, for instance, the White Paper prescribes that a report on the way local dialogue has been organised and taken into account must be attached to the "decision to participate" sent by local government. In the further phases of the process, after the setting-up of a Community Siting Partnership, a formal (though advisory) opinion of the partnership is required at each step of the

decision-making process. In the case of the Belgian partnerships, a formal decision of the local partnership was needed before the final vote of the town council, as described above. Conversely, in the Slovenian case, members of the Slovenian NSG identified as a weakness the "undetermined relationship between the local partnership and the municipality" and the "prevalent role of the mayor". The fact that "agreements [were] made outside of the local partnership"⁹ is also identified as a factor of distrust.

⁹ The quoted statements are extracted from the minutes of the 2nd meeting of the Slovenian NSG (Brežice, 10th January 2008)

3. Development of the necessary skills and know-how to contribute to the follow-up of the development and the operation of a RWM site

The development of local competences and expertise is another key issue for the quality and robustness of local contributions to the safety of radioactive waste management. A first aspect to take into consideration regarding this issue is the capacity of local communities to mobilise the necessary elements of expertise to investigate issues of local concern. This includes both the development of knowledge and competences within the local community (e.g. through the development of competences of local professionals or through the development of local centres of expertise like universities) and the capacity to resort to external expertise (e.g. capacity to mobilise public expert bodies or to commission independent experts).

The second key aspect regarding access of local communities to expertise is the capacity of the local community to develop not only expert resources but also develop a shared expertise on radioactive waste issues within the community and pass it on through future generations. This shared territorial expertise is not developed per se but as a means to investigate and exert vigilance on issues of concern for the local community. It mobilises both technical elements and precise knowledge of the territory's specificities, vulnerabilities, resources ... It is key for the quality, robustness and sustainability of this territorial expertise pool that it relies not only on local experts (e.g. local scientists, local professionals involved in radioactive waste management) but also on the growing competence of engaged non-expert citizens (elected representatives, members of NGOs, lay citizens).

The analysis of the four case studies identified two cross-cutting issues as regards the development of local skills and know-how: the contribution of the local dialogue process to the development of the skills and know-how of the local actors and the upkeep of local skills and know-how on the longer term, after the siting decisions.

3.1. The contribution of local dialogue processes to the development of local actors' skills and know-how

Local dialogue processes are not only a process of deliberative and participatory democracy, they also constitute a collective learning process through which the participating actors develop, individually and as a group, the necessary skills and know-how to assess (and in some cases co-develop) a RWM site project and its justification in the local context. The technical competence of local actors is therefore not an a priori condition for the local debate. It is conversely an outcome of the experience of local actors throughout the local dialogue process.

Through the local dialogue process, the local actors seek to develop a comprehensive understanding of the RWM site project in the local context. They therefore need to develop an individual and common understanding of the technical issues at stake, but also of economic, social, cultural, institutional, legal and governance issues. For instance, in Belgium, the local partnerships have addressed health and environment issues. Governance issues were also addressed. Thus, as a part of its final "integrated project", the Dessel partnership has issued recommendations concerning the organisation of the

decision-making process in the future steps of the siting process (including continuous stakeholder involvement). In Slovenia, Krško and Brežice partnerships have both set up a working group on the implementation of the Aarhus convention.

The structure and provisions of the local dialogue process (e.g. specialised working groups, training and capacity building activities ...) may facilitate the investigations of specific issues of particular importance for the local community. In Belgium, the local partnerships included four specific working groups: "Implementation and design", "Environment and health", "Safety" and "local development". In Slovenia, the local partnerships have also set up specialised working groups. The ORDIMIP in France also included specific working groups which investigated key issues (e.g. assessment of industrial waste flows in the region, technical, economic and judicial analysis of the available technical options for industrial waste management ...). The progress of these working groups was discussed during the meetings of the Administration Board of the ORDIMIP as well as during its General Meetings. Finally, in the UK, the White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" stresses the functions of a Community Siting Partnership include "building the capacity of its membership to enable it to effectively carry out [its] roles".

Beyond these specific structural and organisational aspects, the availability of means supporting the access to expert resources (e.g. agreements with research laboratories, commissioning of expert studies ...) is a key factor for the development of local actor's skills and know-how. All four studied cases include specific provision to support local access to expert resources. In Belgium, the local partnerships have specific funding dedicated to external expert studies. In Slovenia, the local partnership's annual budget agreed between the local communities and ARAO includes the commissioning of independent expert opinions and studies. In the UK, the White Paper includes into the "engagement package" intended to support local dialogue and "commissioning specialist advice". Finally, in the case of the ORDIMIP in France, the budget of the ORDIMIP included funds for technical studies. Moreover, the membership of the ORDIMIP included a group of "qualified personalities", mainly composed of academics and researchers, thus integrating specific technical expertise capacities within the dialogue structure.

Finally, the participation of local actors to dialogue processes organised at higher decision-making levels (e.g. regional, national or European level) is also a factor of empowerment and capacity building for local actors. For instance, in France, the ORDIMIP is an ad hoc body through which multi-stakeholder dialogue on industrial waste management was organised prior to the choice of a site. This first round of dialogue at regional level helped the participating local actors developing their understanding of industrial waste issues before they were involved in a site-specific local dialogue process. Moreover, this site-specific local dialogue process was supported by the ORDIMIP, which acted as an expert in industrial waste issues and in multi-stakeholder dialogue methodology.

3.2. Upkeep of the local skills and know-how on the longer term

Beyond the issue of siting, the development of local actors' skills and know-how is also a condition for an effective and sustainable contribution of the local actors to the vigilance exerted over RWM facilities and its operation on the longer term. The upkeep of local

expertise skills and know-how over decades however necessitates specific mechanisms to preserve local expertise and pass it on through future generations.

In Belgium, STOLA (local partnership in Dessel), in its 2004 report, advocated maintaining the nuclear expertise gathered over the years in the area" and setting up a "continuous, representative and independent structure" that must "ensure RWM follow-up in Dessel". In France, after the licensing of the regional industrial waste repository, the ORDIMIP maintained its existence, reframed its missions (which include support to local dialogue on the repository) and addressed other types of industrial waste (e.g. asbestos). As an organisation, the ORDIMIP contributes to the maintaining of the collective expertise of its members.

4. Capacity of local communities and actors to influence other decision levels

One of the key motives for local actors to engage in dialogue processes is to influence decisions that are taken at least partly at other governance levels and that will have an impact on the living conditions on the territory. Lack of actual influence is likely to trigger serious frustration amongst the stakeholders who engaged in the dialogue process, resulting in stakeholder fatigue or even jeopardise the whole siting process. Moreover, the local dialogue process is not developing in isolation, but as part of a broader decision-making process. The actions, tools and resources developed by local communities during the local dialogue process are thus impacted by decisions taken at other governance levels (regional, national or international levels). Keeping control of, or at least an influence on, external events that are impacting the process therefore represents a key stake for the actors participating in inclusive governance processes.

The capacity of local communities to interact with these governance levels is therefore an important factor to take into account while assessing the capacity of a local community to sustainably contribute to the safety of a radioactive waste management site.

Articulating several levels of dialogue and giving local actors the opportunity to take part in dialogue processes organised at upper decision levels (e.g. regional or national level) is a possible means for developing local influence over upper decision levels. Thus, in the case of the ORDIMIP in France, the dialogue process articulated two different levels of dialogue: the regional level (which is, in France, the decision level at which industrial waste management policies are developed) and the local level. A first dialogue process was organised at regional level through the ORDIMIP to build a diagnosis on industrial waste production and management in the region, issue proposals for a regional industrial waste management policy, and draft specifications for a repository for ultimate industrial waste. This regional dialogue included local actors, in particular local elected representatives of candidate municipalities. Local actors were thus given the opportunity to have upstream influence on the regional industrial waste management policy.

This regional dialogue phase was followed by local dialogue on a repository project in Graulhet, structured by a Local Information Commission. This local dialogue was focused on the technical characteristics of the repository and its economic, environmental and social impacts. During this phase, the ORDIMIP continued its works at regional level and ensured follow-up and support of the local dialogue process. Conversely, in the case of the Belgian and Slovenian partnerships, the absence of a dialogue forum with the authorities at the national level is identified as a weakness in the SWOT analysis of both processes.

The way the dialogue is organised at upper governance levels also impacts the degree of influence of local actors. Networking with other local communities concerned with RWM issues and having the possibility to forge common positions as local actors and communities is likely to reinforce the position of local actors in dialogue processes at upper levels. Thus, in the case of the ORDIMIP in France, local actors from different local communities had the opportunity to discuss the regional industrial waste policy before entering into local dialogue on specific sites.

5. Integration of RWM activities into a broader sustainable development project for the territory

As shown by the outcomes of COWAM 2 on the issue of long-term governance, the capacity of a local community to exert sustainable surveillance of a radioactive waste management site also depends on the integration of the radioactive waste management activities in the socio-economic life of the territory. The inclusion of radioactive waste management activities and their surveillance into an overall socio-economic development strategy for the local community in the long term is therefore a factor that contributes positively to the development of a sustainable capacity of vigilance of the local community.

The role of local actors in the governance and operation of the site is also an important aspect. In particular, the involvement of local actors, rooted in the territory in both the governance of the management of the site and in the practical operation of the facility will positively influence the capacity of the local community to develop know-how and expertise on radioactive waste issues and to develop a robust and sustainable memory of the site. Finally, the capacity of the local community to interact with the affected neighbouring local communities is another element to take into account with regards to the governance of the site.

The analysis of the four case studies identified three cross-cutting issues concerning the integration of RWM activities into a broader sustainable territorial development project: the definition of the concerned communities and actors, the existence of a dialogue on the development project associated with the RWM site, and the cooperation between local communities and between local actors.

5.1. Definition of the concerned territory and actors

The definition of the concerned communities and actors in the context of a RWM facility siting decision may not correspond to traditional local communities. The degree of concern of local communities or actors depends not only on institutional criteria like the administrative borders of municipalities, districts, boroughs, regions ... or their formal role in the decision-making process. It also depends on a broad range of geographical, hydrological, ecological, economic, social, cultural and other factors¹⁰.

Thus, in the UK, the White Paper "Managing Radioactive Waste Safely – A Framework for Implementing Geological Disposal" clearly distinguishes three different types of communities: the "host community" i.e. "the community in which any facility will be built", the "decision-taking body", which are the different local governments (e.g. county, district and borough councils) having decision-making authority for the host community, and the "wider local interests", which are the other communities, outside the host community, that "have an interest in the development of a facility in the host community" and which should be allowed to become involved in the process. In Belgium and Slovenia, the partnership approach has been focused on the municipalities where a facility could be built. In the case of Belgium, the regional authorities and administration were not excluded from the partnership proposition, but their role was limited to an advisory one.

¹⁰ see CIP research brief "Defining an affected community" for more details on this issue

5.2. Local dialogue on the sustainable development project associated with the RWM site

While assessing or co-developing a RWM site project, local actors do not only consider the RWM site in isolation but as part of a more global development strategy for the community. It is then essential for local actors to be able to feed this development strategy into the debate. Local dialogue on the economic and social aspects of a RWM site project (including the possible "community benefit package") thus allows local actors to evaluate the consistency of the RWM project with the global sustainable development project of the territory. It also enables local actors to build an integrated view of the project which incorporates economic stakes and health & environment protection stakes and consider the economic and social aspects of a RWM site project. It finally gives the local actors an opportunity to contribute to the quality of the sustainable development project in their community, whatever could be the final choice of the local community as regards RWM activities.

Thus, in Belgium, the local partnerships have issued an "integrated project" which includes complementary activities in addition to the RWM facility (e.g. development of an Information and Communication Centre and creation of a "sustainability fund"). In the case of the ORDIMIP in France, the municipality of Graulhet, in which the regional industrial waste facility has been built, had partly based its development strategy on waste management activities like a wastewater treatment plant and a planned waste incinerator.

5.3. Cooperation between local communities and between local actors

The territory affected by a RWM site is likely to exceed the limits of the host community and several local communities are likely to be concerned by a RWM site and, later on, with the follow-up of the site operation. These communities can be located in the immediate vicinity of the RWM site or can be more distant communities (e.g. communities crossed by radioactive waste transport, communities belonging to the same hydrological basin ...).

The way local (or regional) dialogue processes are structured may favour (or hinder) cooperation between the local communities concerned by a same RWM site project. In the UK, the White Paper recommends setting up "a formal Community Siting Partnership such that the 3 types of [concerned] communities will work with the NDA's delivery organisation and other relevant interested parties"¹¹. Moreover, the White Paper leaves the possibility for several neighbouring local communities to make a combined expression of interest to take part in the siting process. In the case of the Belgian partnerships, a joint partnership was created for the two neighbouring municipalities of Fleurus and Farciennes. The neighbouring communities of Mol and Dessel however formed separate local partnerships. In both Belgium and Slovenia, the local partnerships were focused on municipalities and distinct local partnerships were created in neighbouring municipalities (Mol and Dessel in Belgium, Krško and Brežice in Slovenia). The resulting competition between neighbouring municipalities, which would

¹¹ The UK White Paper defines three different types of concerned communities: the "host community", the "decision-taking body" and the "wider local interests" – see section 5.1. for more details.

both be affected if either municipality would be chosen for hosting the RWM site, has been identified as a weakness in the SWOT analysis of the Belgian¹² and Slovenian¹³ partnership approach. In Belgium, in order to overcome this situation, a joint committee was set up between the two neighbouring local partnerships of Mol and Dessel after the decision of the Belgian federal government to choose the site of Dessel for the LILW repository. Mol and Dessel however kept two separate local partnerships.

¹² see the research brief "Belgian case study: local partnerships for the siting of a LILW repository" for the SWOT analysis of the Belgian local partnership approach.

¹³ See the minutes of the 2nd and 3rd meeting of the Slovenian NSG for the SWOT analysis of the Slovenian local partnership approach.