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# Lessons learnt from implementing participatory processes

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# **Table of content**

1	Introduction				
2	Methodological Approach				
2.1	Objectives of the of the review				
2.2	Selection of countries for review				
2.3	Development and content of questionnaires				
	2.3.1 Theoretical and empirical basis				
	2.3.2 Content of questionnaires	11			
3	Summary of waste management processes and				
	participatory approaches in reviewed countries	14			
3.1	Czech Republic	14			
3.2	Poland	16			
3.3	Slovenia	19			
4	Lessons learnt from implementing participatory				
	processes	23			
4.1	Objectives and management of stakeholder groups				
4.2	Function and impact on decision making				
4.3	Interaction with other players and the wider public				
4.4	Involvement of independent experts				
5	References	31			

### 1 Introduction

The EU IPPA-Project (http://www.ippaproject.eu) under the Seventh Euratom Research and Training Framework Programme (FP7) on Nuclear Energy of the European Commission aimed to support different stakeholders from five central and eastern European countries. Suitable approaches to risk communication and public participation in repository siting process in those countries had to be implemented. One of the main objectives of the IPPA project was to accompany these implementations and to provide as far as possible suggestions that would help to improve the dialogue and the further participation process.

For this reason, a review of public participation processes in three of the five involved countries was carried out within Work Package 5 of the IPPA project. The review should map the recent situation and trace the developments in the processes, to identify the good practice and potential improvements and if possible to develop suggestions for future activities. Two surveys within a time period of approximately 12 months were conducted. The first round of surveys was conducted in winter/spring 2011/212 and the second one approximately a year later. The questions were related to stakeholders' experience and expectations regarding the participation process in their country. The evaluation of the surveys considered the stakeholders' views in the back of the past and recent developments in the respective country. The results of the surveys were published within short reposts (Minhans et al. 2012; Minhans et al. 2012b, Ustohalova et al. 2012, Akinsara-Minhans et al. 2013, Akinsara-Minhans et al. 2013b, Ustohalova et al. 2013) and discussed with the IPPA project partners in the respective countries. The reports on the results can be downloaded under: http://www.ippaproject.eu/

Within the IPPA project on the one hand the stakeholder groups in the respective countries could use the experiences of the whole project team (in total 17 organisations from 12 European countries). On the other hand the scientists of the other countries involved in the IPPA project got detailed practical insights in the developments, achievements and problems of the processes.

This report summarizes the lessons learnt from the surveys done in Poland, Slovenia and Czech Republic.

The work done under Work Package 5 of the IPPA project was performed in cooperation with the other work packages of the IPPA project. The experiences of the three countries Poland, Slovenia and Czech Republic in which the surveys were conducted were then also included in the online toolbox (<a href="http://toolbox.ippaproject.eu/index.">http://toolbox.ippaproject.eu/index.</a>) for participation as case studies.

The following Chapter 2 involves information about the review and the development and content of the questionnaires. A brief description of the siting and the participation processes in the three countries is provided in the Chapter 3. The Chapter 4 presents the lessons which could be learnt from the review.

# 2 Methodological Approach

This chapter encompasses the description of the main objectives of the review done within the Work Package 5 (subchapter 2.1) and describes the selection of the three countries that were involved into the review and in which the two surveys were carried out (subchapter 2.2.). Further, subchapter 2.3 presents the development of the questionnaires in which the theoretical and empirical background was considered. The questionnaires were also adapted depending on the situation in the respective countries.

# 2.1 Objectives of the of the review

The IPPA project initiated – in dependence on the phase of siting – an implementation of a suitable public involvement approaches in the different countries. Several forms of stakeholder groups/platforms were established or accompanied within the IPPA project. The review followed the developments in repository siting in the respective countries and considered how far the stakeholder groups could achieve their goals under the given conditions within the duration of the IPPA project. The objectives of the review of the public involvement approaches were:

- to gather feedback from stakeholders involved in the participatory processes initiated within the IPPA project,
- to trace the developments in the participatory process
- · to provide feedback on a country specific basis to the participatory processes,
- to feed into the tool box of approaches and methods for public participation prepared within the IPPA process.

### 2.2 Selection of countries for review

In the IPPA project, five central and eastern European countries were included, namely Czech Republic, Poland, Romania, Slovenia and Slovak Republic. In order to select three of the five countries for review by surveys, they were compared with regard to the differences in the status of the national nuclear waste disposal programme, national and local factors and the issues of the discussions. Furthermore the suitability for survey was evaluated by considering the status of participatory measures with regard to their preparation, implementation and development. In the following the selection procedure and the selection criteria are described.

Initially a mapping of the current situation (status quo) was carried out in all the five countries based on following information:

- · Number of nuclear power plants in country
- Current stage of repository development
- · Current status of participation process

- Chosen approach for public participation (RISCOM, COWAM etc.)
- Basic criteria for the selection of the countries were the diversity of chosen public participation approaches and experiences with the public participation in the past, and
- the diversity with regard to the stage of the waste disposal project.

The agreement of the respective country has also been considered.

Secondly, the suitability for the survey was evaluated as far as possible to assure that the survey could successfully be conducted and fulfil its aim to trace the developments in the participatory process. For this reason, ancillary issues beside the criteria above were taken into account as boundary conditions:

- How far the identification of the stakeholders or a stakeholder group had been carried out already, and
- how far the realisation of participatory activities could be expected to be in line with the time schedule expected by the IPPA partner of the respective country in the planning phase of the IPPA project.

The selection criteria together with boundary conditions were entered in a selection matrix. The progress made by the candidate countries in meeting the boundary conditions was evaluated with the help of a scale from 1 to 3 in the matrix and then linked with the selection criteria:

- · Mark 1: Stakeholders not identified, disagreement with IPPA time schedule
- Mark 2: Possible stakeholders identified, IPPA schedule plan can be fulfilled
- Mark 3: Stakeholder group formed within IPPA or national programs, already in accordance with IPPA time schedule.

A simplified version of the selection matrix is shown in Table 2.1. Since all countries agreed to take part in the survey, this criterion was not considered further in the matrix.

Table 2.1: Selection matrix

	Criteria			Ancillary issues		
Country	Stage of repository development	Experiences with public participation in the past	IPPA selected approach	Stakeholder identification	Expected time Schedule can be realised	Mark
CZ	HWL first pre-selection	ARGONA	RISCOM or accompanying current stakeholder group	Stakeholder Group established	yes	3
PL	Siting LILW repository started	No	RISCOM approach adapted on Poland	Possible stakeholder identified	yes	2
RO	Modified COWAM2 and COWAM in practice (CIP)	CIP with elements from RISCOM /Local Partnership (LP)	RISCOM approach adapted on Romania	Relaunching of Stakeholder Group created within CIP	rather yes	2
SK	HWL site-selection stage planned	No	RISCOM approach adapted on Slovakia	Not identified	rather no	1
SL	LILW Site Vrbina selected	Mixed-mode ap- proach/ local partnership LP	Mixed-mode ap- proach/ local partnership LP	Stakeholder identified	yes	3

Based on the matrix the selection was carried out with following result:

Czech Republic: **National Working Group for Dialog on** Repository (since November 2010)

- site selection for HWL repository
- experience from ARGONA project (RISCOM approach)

Poland: **RISCOM Reference Group** (since 1<sup>st</sup> of July 2011)

- · site selection for LILW
- · no experience from former public participation

Slovenia: planned **Stakeholder Group** (first meeting October 2011)

- · site for LILW selected
- experience from former local partnership (2006-2009)

# 2.3 Development and content of questionnaires

The reviews of the participatory processes were based on country specific questionnaires which were used for gathering the view of the members of the stakeholder groups. In order to trace developments in the participatory processes two rounds of surveys have been performed in each country. In order to ensure high value of the review for the reviewed processes themselves and with regard to the European knowledge base on participation processes the development of the questionnaires was performed taking into account

- the experience from research and international initiatives on public participation and stakeholder involvement.
- the country specific situation regarding the stage of implementing nuclear waste disposal and current situation of the participation process, and

The theoretical and empirical basis is summarised in the following. The country specific situations and conditions are presented in Chapter 3.

# 2.3.1 Theoretical and empirical basis

In the last decade several research projects on governance in the context of nuclear waste management have performed on the international and European level as well as in national contexts. Furthermore the activities of the Forum on Stakeholder Confidence (FSC) of the OECD Nuclear Energy Agency and the International Atomic Energy Agency (IAEA) as international initiatives have to be considered. An overview of results from European and international governance project and initiatives is given e.g. in (Bergmans and Schröder 2012).

As the review of the participatory processes performed in IPPA is focussing on the performance of the stakeholder groups, the surveys does not cover the whole spectrum of issues which are relevant for governance systems. It rather focusses on the aspect of stakeholder involvement into the decision making and how this is facilitated in form of stakeholder groups meeting in an organised, regular context. This means that aspects like the national waste management policy and framework setting, the roles and responsibilities of the main actors or the provision of information are only considered as far as they directly influence the performance of the stakeholder participation groups form the point of view of their members.

With regard to the stakeholder's views on the performance of their stakeholder participation group the following issues were found to be of main importance:

- The organisation and management of a stakeholder participation group
- · Objectives and activities regarding the content-related work
- · Function and impact on the decision making
- · Interaction with other players and the wider public
- Involvement of independent experts

These issues were derived from scientific and practical experience of the team of scientists involved in the development of the questionnaires as well as from publications of the above mentioned international initiatives and European projects. The following statements show exemplarily how stakeholder participation is reflected in

these publications. They are also considered as criteria for the evaluation of lessons learnt in Chapter 5 of this report.

The relevance of the **organisational framework** is stressed in various publications; see e.g. (FSC 2004b, COWAM 2007, Jonsson & Anderson 2010, IAEA 2011). Kallenbach-Herbert & Brohmann 2007 summarise a supportive organizational framework as follows based on an evaluation of several European research projects:

- · "An institutionalised cooperation based on:
  - an agreed target and understanding of perspectives and goals of all actors;
  - regular working context assuring integration of all relevant stakeholders with clear accountabilities;
  - inclusive working context assuring integration of all relevant issues;
  - overall coordination of the whole process (e.g. by institution of an intermediary) assuring focussing and transfer of results."
- Integration of the governance process into the formal decision-making procedure
- Transparent roles and responsibilities of all actors in general and a clear definition of the specific stakeholders' roles in the decision making process."

Already in the early European projects on public participation (TRUSNET, COWAM or RISCOM, IAEA 2011) it is pointed out, that participatory approaches provide the opportunity and should strive for the **objective** to integrate stakeholders views and needs into the decision making process and to enhance the quality of decision making. (FSC 2003) and others stress that it is important that all issues which are of interest for stakeholders and the public can be addressed without restrictions in an open dialogue. They point out that "procedural equity" requires the acknowledgement and adequate representation of all viewpoints.

With regard to these objectives a set of potential **activities** can be collected from (COWAM 2007) which comprises the following issues:

- "raise the local voice in the national debate and provide an integrated vision of the several dimensions of RWM at territorial level
- shape and monitor the RWM process, from the preparation of a national policy framework to its implementation
- play an active role in the site selection process (design and implementation)
- monitor the local waste management facility now and in the long term (directly or indirectly)
- develop a strategy for local development now and in the long term (hosting communities)
- transmit to future generations the means, procedures and know-how they will need for long term active participation in RWM"

In order to enable stakeholder groups to achieve their objectives and fulfil their tasks various publications stress the relevance of

- · sufficient resources and
- access to expertise for all stakeholders / Involvement of independent experts

as necessary conditions for informed participation in decision making processes. In this context (COWAM 2007) is pointing at the "stakeholders' need for building capacities".

Going even beyond the requirement of stakeholders' capacity building (FSC 2003), (Kallenbach-Herbert & Brohmann 2007) and others recommend a "culture of mutual (or social) learning" that implies a common, multi directional learning process that includes also implementers and decision makers.

There is broad agreement in literature on public participation that stakeholder involvement measures should have an **influence on the decision making process** which has to be clear to all actors right from the beginning. The highest level of influence is the community's right to withdraw from a repository siting or planning process within a certain time frame or under certain conditions, see e.g. (FSC 2004).

In order to ensure a meaningful outcome of a participation process, (Jonsson et al 2010) recommend the involvement of political representatives:

"It is essential to encourage participation of representatives of state institutions such as Ministry of Environment and Ministry of Industry and Trade, and also representatives of government parties. This is one of the most important prerequisites for discussion to be relevant and meaningful for the practical application of conclusions." (Jonsson et al 2010)")

With regard to the **interaction of decision makers and politicians with stake-holder groups** (Jonsson et al 2010) point out the need for an intense exchange in order to be able to clarify questions of distribution of roles, details of the decision making procedure etc.:

"Politicians and other relevant decision-makers should be involved in or invited to participation processes to clarify or sort out the framework and the rules for the process, so that questions about mandates and goals for e.g. partnership discussions, veto-rights, etc., are sorted out by the correct party on the correct level within the societal structure at hand."

Besides the role of decision makers and politicians the interrelation with the implementer is an issue in several publications. On the basis of experience with so called "local partnerships" (FSC 2004) states:

"The building of a long-term relationship between the local communities and the waste management facility is one of the most important contributors

to sustainable radioactive waste management solutions. Building such relationships can be facilitated by designing and implementing facilities in ways that **reflect the values and interests of local communities**."

The importance of **interacting with and informing the public** and supporting it in gaining a better understanding of the radioactive waste management issue has been considered as a key subject of participatory process in literature (e.g. FSC 2003, FSC 2013, COWAM 2007, IAEA 2006). (Kallenbach-Herbert & Brohmann 2007) emphasises in the context of continuous exchange and communication that dissemination of knowledge from working groups to the common public shall be assured by official representatives as well as by the involved laypeople. In the context of communication the authors highlight that

"Improving public understanding of performance assessment affords clear explanations why it is done, who it is for and how it fits into the decision making process."

(IAIA 2006) emphasizes as one of the basic principle of contemporary public participation that they

"...should be supported in their will to participate through an adequate diffusion of information"

The **involvement of independents experts** is seen as one of the pillars of transparency that can strengthen the role of stakeholders and representatives of the public in participatory processes

Within the scope of the further development of RISCOM Model, several practical experiences were proposed to be taken into account like the evaluation of the experts (RISCOM 2003):

"Stakeholders and the public must have options to evaluate the credibility of experts, especially in fields where they do not have the qualification to understand (very technical) issues in every detail."

The "COWAM in Practice" Project (CIP 2010) called attention to the "development of the necessary skills and know-how for follow-up" that can be facilitated by:

- "Opening up expertise choosing issues to investigate, engaging own experts, stretching institutional experts.
- "Availability of a diversity of external expert resources to support the investigations carried out by the community and foster the development of local skills and expertise"

# 2.3.2 Content of questionnaires

In order to reflect the findings described above the questionnaires were structured in the topics listed below. Exemplary questions which were asked related to these topics are written in italics.

- Function/role (Refers to the function of the stakeholder group in the participation process from the perspective of the members of the group and their personal role within the Group)
  - What is the main function of the group? What do external players expect from the stakeholders` perspective from the group? What is the personal role of the stakeholder in the group`?
- Content-related work (the stakeholders` perceptions and expectations on the objectives and activities of the stakeholder group and information transfer to the wider public by the Group)
  - What are the main objectives? Are they comprehensive and meaningful? Satisfaction with activities, special issues to be discussed in the group? Satisfaction of information transfer to the wider public which communication channels are used?
- Organisation and management (stakeholders` opinion as to whether the organisational structure of the stakeholder group and how it is managed allow the effective working of the group)
  - Satisfaction with the composition of the group, missing expertise/opinions, satisfaction used for selection of the members of the group satisfaction with the coordination and organisation of the group, has the group sufficient resources (time, personal, organisational support, budget)?
- Interaction (internal and external) (stakeholders` judgement on the interactions between the group members and in relation with external players)
  - Interaction between the members of the group, Interaction with government, regulator, implementer, local administrations, interest groups, wider public
- Expected outcome (expected effects, incorporation of outcomes in the formally decision making process, suitability of the stakeholder group)
  - Expected effects (e.g. finding better solutions, achieving higher level of transparency, improving trust and understanding, enhancing feeling of responsibility, increasing knowledge, achieving higher level of interest among the wider public), impact on decision making, appropriateness of the group to be an instrument (for e.g. fulfilling its objectives, providing adequate information to the wider public, including relevant stakeholders, informing relevant stakeholder, getting feedback from the relevant stakeholders, discussion controversial issues, finding acceptable solutions, influencing the decision making), additional instruments

Furthermore the questionnaires were adjusted under consideration of the country-specific conditions. In the Slovenian case, in the first questionnaire was divided in two parts: first the stakeholders' experiences with the former local partnerships in the past and second their expectations for a future stakeholder involvement. Both parts asked about the topics mentioned above with some extra country specific questions e.g. the stakeholders' suggestion about a potential form for a future stakeholder group, their opinion as to whether smaller villages in the vicinity of the selected site should be more heavily involved in a future process or the their about the end of the local partnership.

The second round of questionnaires focused on the development since the first round. Generally, the questions were orientated on the topics explained above. Questions were for example:

- Have the members of the group developed a common understanding about its function? Is the function sufficiently defined?
- Has the information transfer to the general public and local communities improved?
- Do the agreements reflect all objectives? Do the objectives need to be adjusted?
- What were the most important activities in the past?
- Do you have special issues for discussion in future
- Organisation, atmosphere and results of the group (Satisfaction with the number and type of represented stakeholders, the topics chosen for discussion, the organisation, the working atmosphere, the discussion culture, the results.
- Did the interaction with government, implementer, local administration, interest groups improved?
- The group's success in improving trust and understanding, achieving higher level of transparency, increasing knowledge, achieving higher level of interest among the regional wider public, finding better solutions, enhancing feeling of responsibility
- Impact on decision-making: Does the group have an impact? Is it sufficiently defined how the outcomes feed into the decision making process? What was the most important impact of the group?
- Appropriateness of the group to fulfil its objectives, to provide adequate information to the wider public, to include relevant stakeholders, to inform relevant stakeholder, to get feedback from the relevant stakeholders, to discuss controversial issues, to find acceptable solutions, to influence the decision making
- Additional instruments: What had been implemented? What is needed in future?

The questionnaire of each country was adapted to the country specific situation and issues which had been coming up in the first round of questionnaires:

13

In <u>Poland</u> special questions were e.g. asked on the involvement of NGOs and the measure to approach them.

In <u>Czech Republic</u> special questions on the decision of the Ministry of Industry and Trade (MIT)<sup>1</sup> and its influence on the work of the group and the stakeholders` expectations from MIT, (Radioactive Waste Repository Authority) RAWRA and state enterprise DIAMO for the uranium, ore and coal mining were included in the questionnaire. Specific questions also focussed on the involvement of independent experts.

In <u>Slovenia</u> no established stakeholder group could be initiated, but several stakeholder workshops have been realised within the IPPA project to which a wide spectrum of all potential stakeholders had been invited. The second round of questionnaire therefore focused on the stakeholders` experiences with those stakeholder workshops but orientated on the same topics as in the other countries. Specific questions on the stakeholders` opinion about a transfer of the IPPA-supported activities to a future stakeholder group and the influence of EU-projects on the national developments were added in the questionnaire.

Besides the general topics explained above questions on Added Value were also asked in the questionnaire. The analysis was done under work package 4 of the IPPA project. Results can be seen in the respective deliverables (Download under: <a href="http://www.ippaproject.eu/content/project-deliverables">http://www.ippaproject.eu/content/project-deliverables</a>)

Aspects of multinational solutions were analysed in work package 3 of the IPPA projects. The results can be seen in the respective deliverables (Download under: <a href="http://www.ippaproject.eu/content/project-deliverables">http://www.ippaproject.eu/content/project-deliverables</a>). Such aspects were also part of the discussion in the different stakeholder groups but have not explicitly been asked in the questionnaires.

<sup>&</sup>lt;sup>1</sup> In December 2012 the MIT decided to stop the approach for siting followed by RAWRA to date which included the approval of communities for starting investigations at the selected sites, but to commission a new company DIAMO for doing the investigations without being bound to RAWRA's promises (see chapter 3 for more details).

# 3 Summary of waste management processes and participatory approaches in reviewed countries

As described in section 2.2 the participation processes in Czech Republic, Poland and Slovenia were chosen for review. In order to enhance the understanding of country specific response and results from the survey a short description of the situation in these countries is provided below.

# 3.1 Czech Republic

There are two nuclear power plants, at Dukovany and Temelín, in operation in the Czech Republic. Three repositories for low and intermediate radioactive waste (LILW) exist. A siting process for a deep geological repository for high-level waste (HLW) is underway.

Initial efforts to site a geological repository for high-level waste (HLW) were started in 1991. The Radioactive Waste Repository Authority RAWRA was established as the responsible authority for radioactive waste management by the decision of the Minister of Industry and Trade (laid down in the Czech Atomic Act in 1997). The "State Concept of Radioactive Waste and Spent Nuclear Fuel Management" was approved by the government in 2002. The "State Concept" defines the government's and state authority's policy on radioactive waste management for the period up to approximately 2025 (Concept 2002, Government 2012). According to the Concept, high level waste and spent nuclear fuel generated at Dukovany and Temelín will eventually be disposed of in a deep geological repository. Such a repository should commence operation in 2065. According to this document, RAWRA is responsible for finding two suitable sites by 2018 (one main and one reserve site).

RAWRA conducted the first site selection activities throughout the whole territory of the Czech Republic, using a set of safety-related (geological) and administrative criteria (NEA 2010) and proposed six potential sites for further investigation at the beginning of 2003. The six potential sites comprise 32 individual communities. The site investigations were interrupted in 2004 and subjected to a five year moratorium because of local public opposition. RAWRA therefore postponed all its activities involving geological investigations at these sites (ARGONA 2009, ARGONA Riscom 2009). RAWRA used the moratorium time for dialogue with several stakeholders and local communities' that resulted in a signing of memorandum with four concerned communities on their involving into to discussions how to develop locally accepted repository. Some citizens understood the signing as approval for the repository which in the consequence public led to public resistance and three communities withdrew from the contract (NEA 2010).

As a consequence of all these events the establishment of some neutral platform for discussion among a broader spectrum of stakeholders were seen necessary (NEA 2010). An important step in reaching this goal was made through involvement in the

ARGONA research project (Arenas for Risk Governance) within the EC 6<sup>th</sup> Framework Programme (ARGONA 2009). Within the framework of the ARGONA project the RISCOM model was applied (ARGONA 2009) with the intention of actively involving relevant stakeholders, including the local public. A reference group was established. The ARGONA reference group ceased to exist after the end of the ARGONA project in 2009.

A new siting programme, including public participation, was initiated by RAWRA in 2009 after the end of the moratorium. A "Working Group for Dialogue about Geological Repository" (WG) was established under the auspices of the MIT and the Ministry of Environment (ME) as their advisory body in November 2010, within the relaunched siting program. Many members of the new WG had previously been involved in the ARGONA project and used the gained experiences within the further work. The WG consists of representatives of the government, the parliament, the implementer and the regulator as well as national and local NGOs and of the six potential host sites (altogether 28 members). The WG formulated a statute (Statute 2010) within its first meeting where its main objectives were defined: ensuring transparency and active public participation in the decision-making process, proposing recommendations and possible changes in the regulatory framework and their submitting towards responsible organization and ministries. The statute was revised in September 2012 (Statute 2012), and the representatives of additionally involved potential site Kraví hora became members. Kraví hora was additionally selected in 2011 by RAWRA because it is located in the neighbourhood of a former uranium mine operated by state enterprise DIAMO, has well investigated geology and the citizens are familiarly with geological works.

The main efforts of the WG were focused on strengthening the communities' rights within the repository process by making proposals for changes in the relevant legislative framework. The WG also made sure to inform the public about its work and several issues of siting using different methods like e.g. discussions forums and public debates and seminars.

In 2011, the WG elaborated the first proposal of a new paragraph that should be included in the Atomic Act (Act 1997). This proposal contented the financial compensation during the geological exploration works and the binding of two central decisions on the acceptance of the concerned communities ((Minutes 2011a) and (IPPA 2012)). The WG presented the proposal to the parliamentary commission but only the financial compensation proposal passed first reading in May 2011. Many members saw this result as a failure (IPPA 2012).

In the time between September 2011 and November 2012, the WG elaborated a new proposal in the form of a specific law, independent on atomic act. Also, two options how that law proposal could be adapted within the legislature framework as a part of the Atomic act were considered. The proposal contented a two-stage procedure of public involvement and strengthening the communities' rights that was

preferred by the WG members and defined the role of several stakeholders (Proposal 2012) along the siting. The subject matter of the law also called attention to week points in the current legislative framework that increase or could increase risks leading to failures in repository siting. The WG started negotiation with ME and MIT towards application of that law but the MIT showed lacking interest on that discussion and didn't made a clear statement how far it will supports the law's application.

Besides that, the WG also organized many activities for public information such as round table discussions, discussions forums and public debates and seminars.

Parallel to the activities organized and/or consulted with the WG, RAWRA – being under pressure to select two final communities until 2018 - also conducted some public debates of its own and tried to negotiate with several communities that they agree with geological pre-investigations towards defining the most suitable areas for further repository. RAWRA promised that it will not carry out these investigations without communities' agreement. The negotiations were mainly promising in Kraví hora and one other site but due to increasing conflicts and controversial discussions between repository opponents organizing polls and repository proponents the prepared contract signing with the mayors failed.

As regard the MIT, the later ministers didn't follow the siting developments, rarely communicate with the Workings Groups and didn't take a notice about the progress in siting and/or partly changed their approach (also in relation to the WG).

Influenced by events in Kraví hora, the MIT and the current minister respectively decided at the end of December 2012 - in order to accelerate the siting process - that the activities towards further geological investigation works at the potential site "Kraví hora" should be conducted by the state enterprise DIAMO/GEAM (Bulletin 2013). MIT did not involve RAWRA in its decision process as a partner, nor did it officially inform the WG about this planned decision, or discuss it with the concerned communities. This course of action greatly increased disappointment and distrust amongst its members and the public generally and affected the further siting process. The WG expressed officially its dissatisfaction and in May 2013 interrupted its activities for further 8 months.

In the beginning of 2014, the ME has announced that the minister of ME accepted the recommendation of its advisory commission and did not approve DIAMO's application for determination of an exploration area in Kraví hora. This was the consequence of the resistance to the initiative by several stakeholders (5plus2 2014). The WG restarted its activities and organized meeting in the end of January 2014 where it further role should be clarified.

### 3.2 Poland

In Poland, there is currently no commercial nuclear power plant in operation, although there is one research reactor (Maria) owned by the National Centre for Nu-

clear Research. A second research reactor Ewa was decommissioned in 1995. In 2009, the Polish Government announced a new nuclear power programme. At least two new nuclear power plants are foreseen, one should start operation in 2020 (PAA 2012). The PGE Polish Energy Group SA is responsible for the construction of these nuclear power plants. The necessary nuclear energy legislation and regulatory infrastructure still needs to be established.

A near-surface storage facility for low and medium level radioactive waste (LILW), constructed in an old military fort, has been operational in Rozan since 1961. It is operated by the Radioactive Waste Management Plant (ZUOP). A Polish national plan for the management of radioactive waste and spent fuel has been prepared by a Special Working Group initiated by the Ministry of Economy, and expected to be ready in August 2013 but is still waiting for approval by the Government (Zakrzewska 2013). The plan should describe the activities connected with the closure of the Rozan facility in 2020 and the siting and construction of a new near-surface facility. The construction of the facility should start in 2016 and begin operation in 2020 (Lewinski undated)) according that plan. Also consideration of a deep geological disposal for possible HLW should be involved.

In the late seventies, a study aimed at identifying localities for a LILW repository was initiated in Poland. Several potential sites in different host rocks were preselected for a deep geological repository, a shallow underground waste repository and a near-surface repository (Witherspoon 1996). At the end of the 1990s, seventeen potentially suitable localities for a near-surface repository were identified by a project carried out as part of the European PHARE-programme. The Rozan community was not on this list of potential siting areas, anyway, the mayor of Rozan emphasized during an IPPA project site visit in April 2012 the wish of the community to host any new repository, mainly due to the expected financial benefits. The Polish Government planned that within 2012 an institution will be named as responsible for carrying out a site comparison.

In spring 2013 a consortium of scientific institutions - many of them are also members of the Reference Group - has been chosen as the most competent companies to develop a "methodology to assess the safety and the selection of the potential site of the repository for low and medium radioactive waste" (Szczygłów et al. 2013). The consortium currently works on three tasks:

- conception of the implementation of the plan,
- analysis of the legal status and the results of previous studies for 15 locations of the repository plus 3 locations of NPP,
- · reinterpretation of the existing geophysical data (for 15+3 locations)

According to the time schedule a location should be chosen within three years. The consortium has the role to analyse the selected 'sites in the past and to name the "three most safe and appropriate ones" based on the geological conditions of the

sites. The local societies will be asked for agreement. At the end one site shall be selected. The plan is to finish the site selection by 2015.

Within the IPPA Project, a RISCOM Reference group was established in 2011. Its Cooperation Agreement states that the "principal objective of the implementation of the RISCOM Process in Poland is to increase awareness of all aspects concerning the choice of a suitable site for a new repository for low and medium level radioactive waste in order to improve the conditions for transparency and active involvement of the general public into the decision-making process." In the Agreement it is further explained: "This is to be seen within the context of the plans to introduce nuclear power in Poland, thus possibly making the low and medium level radioactive waste repository part of a larger radioactive waste management system including the possibility of deep disposal of high level waste and spent nuclear fuel in future". But in the cooperation agreement it is also said, that "the collaboration between Reference Group members is only for clarification of issues and creating mutual understanding and not for any material or procedural joint decision making (outside the scope of IPPA itself) thus making it possible for a very wide spectrum of organizations to take part without jeopardizing their autonomy and independence of each other" (Cooperation Agreement 2011).

The activities agreed in the cooperation were:

- "search for methods to interest the public and relevant organizations on the problems of the radioactive waste management, particularly on the choice of a suitable locality for the repository siting based on transparency and active participation of the public into the decision-making process,
- establishment of means for mutual open communication between all stakeholders,
- identification of the possibilities and methods for the application of the Swedish communication model RISCOM under the conditions of Poland taking the example of Czech Republic into account
- planning an open and systematic programme for the IPPA activities in Poland including RISCOM hearings seminars, workshops and training activities,
- planning the format and contents of RISCOM Hearings in accordance with the RISCOM Model,
- clarification of possible solutions of controversial issues,
- finding of methods and ways to increase the transparency and public participation in the decision-making processes for the radioactive waste repository in Poland,
- establishment of information channels for dialogue with the public to broaden
  the knowledge of the public on the radioactive waste and spent nuclear fuel
  management issues and siting for the repository of radioactive waste, organizing of various activities in order to increase the knowledge of the public."

These could be completed with other activities after decision by the Group.

During its existence, 5 meeting of the Reference Group took place; the group also organized several meetings with and educational workshops for public or strived to assure further education of its members.

The composition of the RG changed partly with the time as follows:

- The mayor of Różan entered the group.
- One institution (NGO) laid down its mandate. Reasons were that they do not agree on the plans of Poland to build new nuclear power plants, but fear that the RG will be misused for manipulation to support the new-build. Additionally they thought that the RG is not representative and cannot replace reliable consultation, dialogue expertise and scientific research. The Polish Ecological Club - Upper Silesia District participates now as an observer.
- Newcomers: The Institute of Environmental Protection, Warsaw University of Technology, Faculty of Mathematics and Physics from Szczecin University entered the group
- · General Directorate of Environmental Protection withdrew after the last survey
- · The Reference Group has been strived to find ways how to involve the NGO's.

### 3.3 Slovenia

Slovenia has one nuclear power plant at Krško and one research reactor of the TRIGA Mark II type. There is currently no operating disposal facility for any type of radioactive waste; an interim storage facility for radioactive waste at NPP Krško and central interim storage for radioactive waste from small producers in Brinje near Ljubljana is in operation.

In 1997, ARAO, the national waste management agency, restarted the site selection process for a LILW repository after earlier attempts between 1990 and 1993 had failed, mainly due to "strong opposition at the local level but also because there was no political support" (CIP 2009). The aim of the new siting procedure was to include the public within a so-called mixed-mode approach, which combined both technical screening and the search for public acceptance.

In 2001, as a first step, potentially suitable areas were identified by means of desk studies using different criteria, mostly related to the integrity and safety of the repository. Suitable territories were indicated and In order to find suitable sites, negotiations began with potential host communities, facilitated by an independent mediator. The negotiations were accompanied by an information campaign via the media and meetings with communities (see Kralj undated) and also included the issue of compensations. In 2004, all potentially suitable municipalities (over 190) were invited to volunteer either as a site or as an area for further investigation. In April 2005, 8 mayors of local communities signed the application but 3 withdrew soon after. In the

remaining 5 communities potential sites were identified, but which needed to be confirmed by the community. This resulted in 12 potential sites which were then ranked based on public acceptability and passive safety, technical functionality, and economic, environmental and spatial aspects, with the intention of proposing 3 sites for further investigation. This pre-feasibility study ended in October 2005 (see CARL 2006 for more detail).

At the end of the study, Local Partnerships (LP) were established in three communities: Sevnica, Brežice and Krško. A formal LP Agreement was signed by ARAO and each municipality. However, after local resistance in Sevnica, which ended in the decision of the council to withdraw from the procedure in March 2006, only the two neighbouring municipalities, Brežice and Krško, remained. Both sites were compared considering the level of local acceptance as well safety criteria. In summer 2006, prior to a local election, the community council of Brežice decided to withdraw the intial location, but wanted to stay in the local partnership with the aim of identifying a new potential location within their municipality. Later, Brežice withdraw completely. Finally, in December 2009, the Vrbina site, in the municipality of Krško, was selected (see IPPA Del. 2.11 for more detail) and confirmed by a Governmental Decree. Since then, detailed site investigations have taken place (for more detail see ARAO 2012).

Besides the Local Partnerships, a National Stakeholder Group (NSG) was established within the EU CIP Project (COWAM in Practice), and existed from 2007 to 2009. The goals of the NSG were to evaluate the existing practice of participation management in Slovenia and to identify problem areas, hindrances and challenges. An analysis of the strengths, weaknesses, opportunities and threats (SWOT) was carried out within the NSG. Recommendations for the subsequent public participation process were put forward in the CIP report (see CIP 2009 for more details).

After the site selection, the Local Partnerships were dissolved according to the Agreements signed at the beginning of the Local Partnership, but many stakeholders did not agree with this decision and are demanding further involvement.

New options for reactivating public involvement in the next steps of the siting process are currently being investigated within the IPPA project. A first meeting to which all potential stakeholders were invited took place in November 2011 in Ljubljana.

As regard the construction of a LILW repository in Krško/Vrbina, currently the project in Vrbina documentation is under preparation (Železnik 2013). A preliminary design of the repository project is completed and safety analyses were undertaken. An investment program was prepared and submitted to the responsible ministry. It describes technical, financial and scheduling aspects of the repository project. An approval from the ministry is required to continue with the project development (NEA)

2013). The construction license is planned for 2016 and the start of operation scheduled for 2018 (Železnik 2013).

Since the site selection no more activities for involving stakeholders besides the IPPA- initiated Stakeholder meetings have taken place. For those stakeholder meetings a wide circle of stakeholders from all over the country have been invited. The former Local Partnerships were dissolved right after the site selection which was according to the agreements signed at the beginning of the Local Partnership, but many stakeholders did not agree with this decision and are demanding further involvement (Železnik 2013).

Despite their formal termination the local partnerships in Brežice and Krško aim want to continue their work e.g. by cooperating with NGOs and communities, by having press conferences or due to the participation at the GLOBE meeting in Slovenian Parliament in 2010 or the involvement in IPPA organized work or via the formation of Civil Initiatives.

The repository project is progressing at a slower pace than it was planned. Reasons were governmental crisis and new elections, lack of coordination between involved ministries and an overall weak support of the project (NEA 2013). The trust in state and political institutions has rapidly decreased (Polič et al. 2013). End of 2012 and in the beginning of 2013, a lot of civil protest related to the global economic crisis and against political elites took place all over Slovenia (Polič et al. 2013).

In Deliverable 2.12 Polič et al. have reviewed the public participation in the repository siting process in Slovenia (Polič et al. 2013). According to them "the participation did not appear as a way of continuous community functioning, but as a single event limited to a certain period with the aim to satisfy international comparison, to reduce the potential citizens opposition and to cover the local authorities in decision making when needed." Unfortunately the basic goal of LP - increased trust - was not realized, mainly due to communication and procedural errors during the past period. Local inhabitants do not trust state as well as local community institutions, though lack of trust is mutual." (Polič et al. 2013). In their report Polič et al. also gave several recommendations for an effective and legitimate formation and work of a new Local Partnership.

With the aim to reactivate a participation process and supported by the IPPA Project three stakeholder meetings took place, the first on November 10 2011 in Ljubljana, the second on June 6, 2012 in Brežice and the third on April 11, 2013 in Krško. within that meetings, IPPA project and the surveys (also added value) and the situation with the LILW repository were presented and discussed. The participants of the three meetings were more or less the same.

The IPPA partner - the University of Ljubljana, Slovenia - invited all potentially interested stakeholders to these meetings including representatives of the implementer and the Government. But the latter two did not participate in any of the meetings

without giving further information of their reasons. Anyway, the intention of the organiser to invite as many stakeholders as possible to the meetings was to keep the circle as wide as possible, because some part of the future process will be of national wide interest e.g. the amendment of the Environmental Impact Report or at least to a wider area besides the selected site Krško e.g. issues of compensation.

Furthermore several meetings with particular stakeholder groups such as the Local Partnership Dol pri Ljubljani, representatives of local communities Krško, Brežice, and some villages in them (Spodnji Stari Grad, Šentlenart), and NGOs (ZEG, Focus, Greenpeace, Umanotera) took place within the IPPA project during 2013. Topic of discussion was the public participation in nuclear issues.

These are signals that the local representatives have started to organize themselves in order to ensure a regular exchange among each other even if no participation process is initiated by the official actors/competent authorities. Some stakeholders (two from Krško, one from former LP Krško and one from ZEG, an environmental NGO) took part in the IPPA European workshop on Aarhus and Nuclear Issues from 20-21 September, 2012 in Szentendre, Hungary.

# 4 Lessons learnt from implementing participatory processes

In the following section, we present five lessons that we could learn from the reviews in the Czech Republic, Poland and Slovenia. The lessons are related to the following topics:

- The organisation and management of a stakeholder participation group
- Objectives and activities regarding the content-related work
- Function and impact on the decision making process
- · Interaction with other players and the wider public
- · Involvement of independent experts

Taking into account the theoretical and empirical basis as introduced in the section 2.3.1, we summarise the knowledge available in the publications which is related to the respective topic, describe the experience that we made within the reviews and derive the lessons learnt.

# 4.1 Objectives and management of stakeholder groups

According to (Kallenbach-Herbert & Brohmann 2007) a supportive organizational framework requires an institutionalised cooperation based on an overall coordination of the whole process. They emphasize the importance of clarifying the roles and responsibilities of all actors and also the specific stakeholders roles in the decision making process. This is also central in the context of the establishment of stakeholder groups. (IAEA 2011) highlights that the question which stakeholder shall be involved into the group should be clarified in the beginning and it is an important prerequisite for the further progress of the participatory process. It is further crucial that the objectives and planned activities are clear to all actors who are involved in participatory measures right from the beginning and are regularly updated.

### Experience from country reviews

The organization of the stakeholder groups in the Czech Republic as well as in Poland was evaluated positively. The Czech stakeholder group (Working Group for Dialogue about Geological Repository, in the further text Working Group) was seen by its members as an appropriate instrument to include several stakeholders and for discussing controversial issues. Similarly, the Polish stakeholders emphasized a well-functioning organisation together with a good working atmosphere and discussion culture. In both cases the basic organizational and managerial questions were clarified right at the beginning. In the Czech case experience from the ARGONA projects which supported the implementation of a RISCOM Reference Group of relevant stakeholders could successfully be transferred to the current Working Group. The then Reference Group successfully launched a mutual dialog and cooperation

among the stakeholders. The evaluation of ARGONA suggested institutionalizing of the group like shielding by the Government and/or to be active under the auspices of the Ministry of Industry and Trade or Ministry of Environment of the Czech Republic. This was realized by the establishing of the current Working Group. In Poland favourable conditions for establishment of a RISCOM Reference Group were created with the assistance of the IPPA project and the group activities intensively accompanied.

In Slovenia the stakeholder meetings were valued for their good organization. Well-chosen topics for discussions and reasonable opportunity for discussing controversial issues, obtaining feedback from and informing relevant stakeholders were emphasized by the involved stakeholders in this context. The meetings were prepared and carried out in close cooperation with the IPPA project.

Regarding the agreement on objectives and activities, the surveys in Poland and Czech Republic showed that it worked well in both stakeholder groups. Both groups had prepared a Cooperation Agreement in which the involved stakeholders agreed on the working rules, objectives and activities. In the Polish case the stakeholders saw the necessity to adjust the objectives after some time.

In Slovenia the agreement of objectives of the former local partnerships had been a crucial issue. Nearly half of the respondents thought that the objectives of the Local Partnerships were not achieved, although more than half thought that the Local Partnerships were an appropriate instrument to fulfil their objectives.

### Lessons learnt

Thoughtful preparatory activities towards establishment of the stakeholder group and clarifying how the group should be organized and managed during its existence are basic prerequisites for its successful work. The experiences from the past with participatory approaches substantially contribute to early identification of the stakeholders and successful establishment of the stakeholder group. The attendance of an experienced partner like e.g. the supporting assistance within the IPPA projects can facilitate the planning and implementation of an adequate organizational framework of a stakeholder group.

The examples from the countries also indicate that it is important to fix the objectives and activities of a stakeholder group in an agreement. The country reviews reveal that the objectives and activities of a stakeholder group cannot be defined once for the whole life-time of a stakeholder group but have to be updated repeatedly. In order to avoid confusion and disappointment it is recommendable to always have clarity among all actors about the particular status.

# 4.2 Function and impact on decision making

As explained in chapter 2.3.1 there is a broad agreement in literature on public participation that stakeholder involvement measures should have an influence on the decision making process. However, it is also acknowledged that there are different degrees of influence and ways of putting this into effect. It is thus crucial that these issues are clear to all actors who are involved in participatory measures right from the beginning.

With regard to the lessons learnt from the participatory processes in the three countries it is therefore being considered

- if clarity and agreement about the function and the level of influence of the stakeholders groups existed among the actors, and
- which influence a lack of clarity may have on the stakeholder groups, there individual members or the participation process in general.

### Experience from country reviews

In the Polish case both surveys revealed that neither the function nor the influence on decision making was sufficiently clear among the participants of the Reference Group. There was broad agreement, however, that the role of the group might be strengthened if NGOs and representatives of further local communities were becoming members.

In the Slovenian and the Czech case the function and influence of the stakeholder groups were mainly discussed by their members with regard to the relation of the groups to the state authorities and the implementer. Both groups experienced that it was difficult to come to agreements with the responsible state institutions on the role that the stakeholder group may play in the decision making process. This finding was independent of how the role of the group was defined. In the Czech case the Group had the function of an advisory body of the ministries with defined task; in Slovenia the Local Partnership was dissolved and the stakeholders have been attempted to form new group. Although there was agreement among the members of the group that there should be opportunities of influencing the development of the repository projects a solution for overcoming the dilemma of lack of support was found in neither group. Recent discussions in Slovenia were considering the option of acting as an independent stakeholder group that bundles regional interests without official support from state authorities.

#### Lessons learnt

Experience from the Polish case highlights the close interrelation of the involved actors and the potential function of a participatory process. Finding a coherent solution may be an iterative process in which "missing" members might join a stakeholder group over time or the potential function and impacts have to be adjusted to the

available, interested institutions. Defining the function and influence of a stakeholder group is therefore an issue which cannot be settled once for the whole life-time of a stakeholder group but has to be updated repeatedly. In order to avoid confusion and disappointment it is, however, recommendable to always have clarity among all actors about the particular status.

Unsurprisingly the key actors, especially responsible ministries and state institutions or the implementer, have a strong influence on the potential impact of a stakeholder group. Coming to an agreement regarding the stakeholders' potential influence in case of clashing interests of state institutions on the one hand and stakeholder groups on the other hand seems to be one of the greatest challenges in the context of setting up participation measures. In case that no compromise can be reached an open dialogue on any issue of the repository project is significantly hindered.

Local representatives and stakeholders are often highly motivated in bundling regional interests even if they face lack of support from responsible institutions regarding their influence on decision making. There is, however, no literature dealing with approaches of stakeholder engagement under conditions of conflicting views on its influence. Considering that the constructive intervention of stakeholders enhances the quality of decision making (see e.g. FSC 2003) such "independent" stakeholder groups are to be considered as valuable back-up solutions. Within the IPPA project none of the stakeholder groups took the final decision to organise itself and act independently of the state institutions so that no practical lessons learnt can be derived. Implementing options for exchange between concerned stakeholders from different countries in the future may support the development of suitable ways to realise stakeholder participation under unfavourable conditions.

For a stakeholder group which acts independently of the implementer and the decision makers the question of sufficient financial resources and access to information and expertise may be more challenging than in the case of close interrelations between stakeholder groups and key actors. It is beyond all questions that these elements of stakeholders' capacity building are necessary prerequisites for meaningful participation (in this context see e.g. (COWAM 2007)) no matter how closely a stakeholder group is interrelated to key actors. It would thus be advantageous if issues of capacity building were negotiated between stakeholder groups and decision-makers and implementer independently of the questions regarding the impact on decision making and the interaction of stakeholder groups with decision makers and / or the implementer.

An independent stakeholder group needs to seek new ways of influencing the decision-making process. They might include social and political networking and active relations with media. One important objective of an independent stakeholder group could be the regular transfer of information to the public provided that the necessary financial and personal resources are available.

# 4.3 Interaction with other players and the wider public

The interaction of stakeholder groups with other players comprises different aspects. (Jonsson et al 2010) highlight the relevance of interaction with politicians and decision makers with regard to defining the "rules of the process" like mandates and roles. This aspect was considered in the section "Function and impact on decision making".

(FSC 2004) is stressing the relationship between local communities and the implementer. Inspired by the concept of "Local Partnerships" that has first been realised in Belgium the FSC sees such relationships as an important contribution to "sustainable radioactive waste management solutions". Reflecting the values and interests of local communities in the design and implementation of a waste management facility could support these relationships.

Thirdly the interaction with key actors has a direct influence on certain objectives and activities of a working group: Tasks like "shaping and monitoring the RWM process", or "developing a strategy for local development" (COWAM 2007) can only be fulfilled if concise information about the process and the project is available and can be discussed with the responsible key actors. "*Procedural equity*" requires the acknowledgement and adequate representation of all viewpoints (FSC 2003). Certainly also the mutual (or social) learning is only possible if actors with different interests and backgrounds exchange and discuss their views on a regular basis in an open atmosphere.

Another important aspect is the interaction with the wider public and information transfer to them. The public has right to be informed, it shall be supported due to adequate diffusion of the information (IAIA 2006). Public information is seen as one of main duties of decision maker to enhance the transparency in decision making process (COWAM 2007). Effective communication of information and direct interaction are one of the core activities supporting participation; this is closely linked with the knowledge transfer and clear explanation of the several project steps to common public (IAEA 2006). In (FSC 2003) the information is generally seen as a basic prerequisite for public dialogue. It lays the basis for dialogue and mutual exchange between different actors and stakeholders. Information facilitate together with consultation and education the understanding of the project importance and the confidence into the decision making process by the public (FSC 2013).

### Experience from country reviews

In Poland and Slovenia the reviews revealed continuing difficulties in finding an adequate mode of exchange with representatives of the government and the decision-maker. From the stakeholders' point of view the interest and participation in the

meetings of the stakeholder groups were insufficient and no improvement could be reached over time. The reasons for the reserved behaviour of governments and decision-makers could not be clarified in the context of the IPPA reviews. They also seem to be unclear to the stakeholders, who tend to interpret the behaviour as lack of interest.

In the Czech Republic members of the stakeholder group expressed a positive opinion on the exchange with representatives of the state government. This positive approach could, however, not be continued after recent elections, changes in political majorities and of the responsible minister.

Independent of the satisfaction with the situation within their own group the members of stakeholder groups in all three countries emphasise the importance of regular exchange and open discussions with representatives of the government and the decision-maker. From Poland and the Czech Republic indications exist that the exchange with the implementer was working adequately at least in some phases of the participation process. While it enhanced overtime in Poland it was influenced negatively in the Czech Republic under the regime of the new government towards the end of the reviewed period.

The country examples show that the information transfer to the wider public was seen as one important objective of the stakeholder groups. It will enhance the public perception of the stakeholder group and its role as communicator of relevant developments in the repository project. In Slovenia the stakeholders demanded that information to them and the wider public should be transferred regularly, clearly, correctly, comprehensively, in a timely fashion, and be presented independently. Furthermore in Poland the stakeholders emphasized the importance of starting a discussion with local communities.

### Lessons learnt

Besides the high relevance that state governments or decision-makers have for defining the influence of a stakeholder group on decision making (see section "Function and impact on decision making") they play an important role in providing information and discussing (controversial) issues of a repository plan or project with stakeholder groups. There is high attention of members of a stakeholder group if and how state institutions fulfil this role. According to the stakeholder groups one of their central tasks was to discuss with and assure the information flow towards the wider public which resulted in an enhanced interest and trust of the wider public. A reluctant behaviour of state institutions is interpreted as a sign of lack of interest as long as no other reasons are provided by the respective representatives. This behaviour also affects negatively the trust of the wider public despite the efforts of stakeholder groups to assure information exchange and discussions platforms.

The interaction with the implementer was partly working better than with state institutions and the information transfer about the development of a project works well in these cases. But the feedback of the stakeholders reveals that the relations with the implementer cannot replace an adequate interaction with the state institutions.

With regard to the more generic objectives of participatory approaches like "procedural equity" (FSC 2003) or mutual learning there is no evidence in any of the participation processes that these could be achieved.

# 4.4 Involvement of independent experts

In order to enable stakeholder groups to achieve their objectives and fulfil their tasks various publications stress the relevance of access to expertise for all stakeholders and also the concerned public. It is seen as a necessary condition for an informed participation in decision making processes. Experience evaluated in literature (CIP 2010) shows that the involved stakeholders and concerned public need to improve their expertise in order to understand the respective decisions and to be involved into the discourse on a disposal project as an equal partner with sufficient background. The independent experts could provide them with the sufficient knowledge base. The involvement of independent experts may also help to clarify controversial questions, and to enhance transparency and traceability (CIP 2010).

# Experience from country reviews

The involvement of experts was an issue in Poland and in the Czech Republic. The Polish RISCOM Reference Group is the first stakeholder group established in Poland and aimed to enhance the participants' knowledge on several modern approaches and models for participation in decision making and dialogue because of lacking experiences with such approaches in the past. For this reason the Reference Group organized several seminars and workshops with foreign lectures and experts.

In the Czech case the siting process has faced several controversial discussions between the concerned communities on the one hand and the implementer and the decision maker on the other hand. Also many questions concerning technical and other issues have not been sufficiently treated in the past. The involvement of independent experts was therefore estimated as a considerable help with regard to receiving objective and precise information and views, improving discussions on technical and other issues, and supporting the solution of conflicts. They might also act as reviewers of the activities planned by the implementer.

#### Lesson learnt

The involvement of independent experts in several phases of a repository project plays a key role in enhancing the participants' knowledge. It can be supportive with

regard to solving of conflicts between involved parties and reviewing technical solutions, geological investigations or reliability of information. These are in particular reasons affecting the trust between the decision maker, implementer and the concerned stakeholders or public.

The involvement of independent experts in the early phase is an important "educating" element that supports the laypeople to understand several aspects of repository implementation and helps them to be equal partners in the discussions.

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