

Investigation of the attitudes, needs, and expectations of the Saligny community

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ABSTRACT

Many countries encourage national forums for transparency, dialogue and participation with regards to radioactive waste disposal. However, the local actors (authorities, non-government organisations and the public) often note a lack of public participation in the decision making process. Civil society is often frustrated with its limited involvement in the consultative process. Participation is regulated by national laws and rules and the right to participate in environmental decision-making is covered by the Aarhus Convention. Continuous dialogue amongst stakeholders is seen as important in building sustainable solutions in radioactive waste management. In addition, understanding public concerns and needs can increase the trust between the partners and build confidence in the process.

Different national and local contexts have contributed to the development of quite a broad set of approaches and tools for stakeholder engagement. This paper describes the use of such tools in the engagement with the Saligny community in the siting process of a repository for low- and intermediate-level wastes in Romania. Some specific issues are highlighted such as: the low level of interest amongst the public in relation to long-term projects; over-estimation of benefits in comparison to the negative aspects of hosting a repository; lack of a coherent public voice; and a perceived lack of information on the project from the authorities and the implementer. The present study describes the setting up of the participatory approach to engage with the public and the different methods employed (including citizen juries, workshops, open days, etc.). A number of criteria were developed for evaluating the effectiveness of these methods particularly with regards to their adaptability to a local context such as Saligny. The paper then focuses on the results of one of these methods – the use of focus groups covering a cross-section of civil society – including members of the general public, a group of professionals and a group of local councillors. The study has resulted in a number of recommendations to the implementer on how to build a new programme for public participation.

KEYWORDS: transparency, radioactive waste disposal, Romania, public participation.

Introduction

The Institute for Nuclear Research, Romania, was involved as a partner in the Implementing Public Participatory Approaches (IPPA, 2014) project

developed under the Euratom Framework Programme 7 (FP7) with the aim of establishing a forum where stakeholders can discuss the issues involved in radioactive-waste disposal and also share information on their own national programmes (IPPA, 2014).

The work presented here was performed through IPPA and looked at the implementation of

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participatory approaches to public engagement in Romania. The main objectives were:

- to develop a methodological support for the local communities in order to ensure a local voice in the decision-making process in radioactive waste disposal and to create a framework for their participation throughout the disposal process;
- to enlarge the Romanian Stakeholder Group (RSG) formed in the framework of the COWAM in Practice project (Constantin and Diaconu, 2009) and to work with members of the RSG to ensure good governance of radioactive-waste disposal practices in Romania including the development of and participation in a national geological disposal programme;
- to increase the awareness at a State level as to the necessity of public involvement in the siting process and developing a means to ensure future public participation at a local or national level;
- to develope and implement a methodology to increase the participation of the general public in the decision-making process concerning

TABLE 1. Focus-group characteristics.

Composition	Group 1 (G1): Local Councillors –
	nine members of the Local Council +
	Mayor and Deputy
	Date and Place: 12 Nov 2012,
	Saligny
	Group 2 (G2): Local professionals –
	11 persons: four teachers, one family
	doctor, three priests, one policeman,
	one secretary, one architect.
	Date and Place: 14 June 2013,
	Saligny
	Group 3 (G3): Common citizens –
	nine people (five men + four women,
	adults, selected randomly)
	Date and & Place: 15 June 2013,
	Saligny
Stimulus	Selected sections from a brochure on
material	the LILW Saligny repository, edited by AN&DR in 2012
Recording	Audio-recording if the approval of participants was obtained
Recording	Audio-recording if the approval of participants was obtained
	Notes taken by the assistant of the moderator
Moderation	Experienced moderator able to
	stimulate an active discussion of the proposed issues

- radioactive-waste disposal at local level. A first application of this methodology was to the Saligny community and the possibility of it hosting the low- and intermediate-level waste (LILW) repository; and
- to review methods and tools developed and used in other Central and East European countries related to the involvement of the public in waste-disposal decisions.

The methodology for the Romanian LILW repository at Saligny has been developed based on a stepwise process:

- information, consisting of continuation of the communication activities started some years ago by ANDRAD (now the Nuclear Agency & Radioactive Waste (AN&DR));
- (2) exploratory research based on focus groups;
- (3) implementing a new communication programme or a partnership based on the results of the outcomes of stages (1) and (2);
- (4) using interactive participation approaches such as public consultation meetings or panel debates; and
- (5) final decision based on referendum or final debate methods (panel, consensus conference etc.).

The proposed methodology was discussed and improved in the Reference Group (Constantin et al., 2013). The Reference Group was set up based on the existing Romanian Stakeholder Group (RSG) created under the FP7 Competitiveness and Innovation Framework Programme (CIP) project (Constantin and Diaconu, 2009). The RSG was enlarged with new stakeholders concerned with, or involved in, geological disposal in Romania (including the Ministry of Economy, Ministry of Environment, Ministry of Health, NGOs and politicians). Special attention was given to the recruitment of politicians as the previous activity of the RSG had highlighted the importance of political involvement as the most effective means of promoting local initiatives as well as structuring the local democracy.

Three focus groups were organized in order to investigate the concerns, needs and attitudes of the community from Saligny related to the siting of the LILW repository. Table 1 shows the characteristics of these groups together with the main features of the engagement approach.

Outcomes from the focus groups

A generic protocol for the focus groups was prepared in advance. Depending on the characteristics of each group, and the specific discussions, the protocol was adapted to elicit the opinions of the participants. The protocol began with an introductory session. Then, in a moderated session, the following issues were discussed: perception of the siting process; the importance of the investment for the community and the expectations of the community; and the concerns of local authorities/public, and recommendations for continuing the engagement process. The observations from the focus groups on specific issues are discussed in the following sections.

Perception of the siting process

- the siting process was familiar to G2 as "it started many years ago...", "we are reminded that three locations were selected: Dealul Turcului, Mireasa, Saligny", "the process was initiated 8 years ago when Mr. Nastasescu (the president of AN&DR) needed the acceptance of the owners in order to investigate the land";
- in order to build a fair process the G2
 participants said there was the requirement for
 "very well informed citizens", and "periodic
 meetings for citizens" were needed, and a
 "coherent information programme" had to be
 built:
- G3 participants said they had not received enough information about the future repository: "the majority of us don't know what a repository is", "... maybe ... two years ago some experts from Bucharest participated at a public meeting in Saligny...". However, the proposed location of the repository was well known: "the site is on the hill over the nuclear plant, on the territory of Stefan cel Mare village", "at a 1–2 km distance from the houses", "in the exclusion zone of the nuclear power plant";
- none of the participants in the G3 session knew the current status of the approvals needed for the site, moreover "it is questionable if the repository will be built or not...", "the investment remains in the interest of the implementer or not...";
- two G3 participants were well informed on the type of wastes to be disposed of: "filters, gloves, used overalls will be disposed in the repository...", "only wastes connected with operations, no nuclear fuel...". Some participants remarked that this was "such a huge investment for some gloves...." and did not have

- much confidence in the scope of the Saligny repository; and
- one G3 participant said that "they want to avoid the expenses with the transport of the wastes, this is the real motivation in the decision to site the repository at Saligny...";
- other participants were suspicious of what other waste types would be disposed of: "the repository will receive not only the wastes from Cernavoda, but all other wastes produced by industry, medicine...".

The general opinion of the three groups on the siting process was:

- the process is considered to be important by all groups: "siting is a complex and important issue for a local decision..." (G1), "the process is in our daily focus..." (G2), "each citizen should be involved in the siting since the decision is important for whole community..." (G3):
- the process is slow: "it is a slow one..." (G3),
 "...we have discussed the repository issue for 6
 years and nothing important has happened..."
 (G2), "...many discussions and no results..."
 (G1):
- there is insufficient information given to the public: "... some meetings were organized in the last years..., but I don't remember the organizers and the specific subjects", "something was organized at House of Culture..." (G1), "... most of us don't know what a repository is" (G3), (G3) "we don't know the current status ... is it a future project or a project that's already dead?..." (G3); and
- a communication programme is essential (adapted to the local context: level of education of the public, addressing specific public concerns etc.). It should be: "simple, significant, and easy to understand" (G1); "some difficulties are expected especially for citizens over 60" (G1); "fears for their health" (G1); "the process needs well informed citizens", therefore "periodic meetings should be organized", "a coherent information programme is needed" (G2); "we need meetings in order to obtain answers..." (G3).

With regard to the continuation of the process, all of the groups, especially G1 and G3, expressed the need for a protocol to define a partnership between the implementer and the local community:

 "written agreement between community and AN&DR in order to define the necessary steps, the rights and the obligations outlining the responsibility of each partner" (G1); and • "we want a written agreement with authorities in order that they respect their promises" (G3).

Economic perspective (sessions G2 and G3)

- the repository should help to stimulate local development by having a Programme of Local Development which should include: "road modernization (asphalting), stations for environmental monitoring, infrastructure for water and sewage, health centre..." (G2);
- the G3 group wanted well defined benefits for hosting the repository with measurable effects in their quality of life: "we want infrastructure in the form A to Z...", "roads, asphalt, water supply, sewage system, wastewater treatment plant...", "reduced price for electricity" (note that the nuclear power plant (NPP) is seen as a waste producer), "centralised heating based on the heat by-produced at Cernavoda NPP... similar to the Cernavoda town", "public lighting,... roads..." (G3);
- lobby actions are expected at a county or national level, projects aimed at improving the local development of Saligny "until today, any lobby hasn't appeared for the project, despite our repeated requests..." (G2);
- the attitude of G3 was pessimistic compared with G1 and they have little trust that their needs will be met: "we'll be as always, the cow that will be milked by others, and we will be left with the droppings" (G3);
- in terms of the potential for the number of new jobs the repository will create, group G2 were convinced that: "the number of employees will be small, and consequently the contribution to the local budget", "it is difficult to predict the evolution of the economy as in the case of the factory for screws" (a local enterprise in Saligny that became insolvent), "what we have obtained? Only a depression in the local economy and a lot of unemployed... with associated problems for the local budget...";
- G3 were also sceptical on the issue of creation of work: "I don't believe they need too many new jobs...", and also in terms of the local labour market "the jobs will not be for local people...";
- a clear opinion was expressed on the expected benefits that the repository should produce: "we want clear benefits from the hosting of the repository" (G2), "we want a Local Development Programme, at least like in case of Cernavoda NPP" (G3);

- the needs of the community were well defined by the groups: "we need funds, money for development..." (G2), "all citizens want money in the budget, I think 90% agree with me..." (G2), "nowadays the municipalities are in danger of insolvency...", "we are aware that the municipality must have local sources of money; that which comes from the County level is only an added amount..."(G2), "a stable source for local funds is a crucial issue for the community..." (G3); and
- compensation should be in the form of a Local Development Programme, with the exception of particular restrictions in the use of cultivated land: "there should be compensation only for restriction of cultivation of land, but only in special cases, which have clear proof..." (G2), "a Local Development Programme is preferred to individual compensation" (G2), "...even if some compensation was available for the owners of the land, these should be transferred for community development, since people like ex-Mayor bought land in the area with the aim to obtaining compensation in the future..." (G3).

The general opinion of the three groups on the economic impact of the LILW repository on the Saligny community was:

- the repository is seen as an important investment for local economy: "stable source for the local budget" (G1), "a long term function – a strategic unit", "improvement of the local economy", "the repository should stimulate the local economy" (G2), "local taxes are important to build a stable budget and create independence from County financing sources with respect to the current economic crisis" (G3), "creation of new jobs; increase of local competencies" (G1);
- the biggest impact would be on local development (roads, water supply network, sewage, waste water treatment plant, etc.). Benefits included in a Social and Economic Local Programme have yet to be agreed with the Implementer of the repository. There was a desire for the "development of the whole community" instead of localized development in the area immediately surrounding the repository;
- in case of financial compensation the groups had very specific opinions: "no individual compensation, except in those few cases related to land" (G1), "only financial compensation for owners based on evidence of an effect

- on the use of land" (G2), "even if some compensation was available for the owners of the land, these should be transferred for community development since people like ex-Mayor bought land in the area with the aim of obtaining compensation in the future" (G3); and
- future employment arising from the repository was met with a degree of scepticism: "the repository should stimulate the local economy... but... the direct effect may be poor, the existing experience is not good" (G2), "the number of jobs created will have a low impact on the occupational structure of the village" (G2), "only a few jobs will be created, and not for the citizens of Saligny" (G3).

Health, environment and construction

- the main concern was related to the "radiation and release of radiation from the repository"
 (G2), "it is difficult to evaluate the risks associated with radiation..." (G2). At the same time it was recognized that "the amount of radiation is lower than in case of the plant..." (referring to the NPP) (G2);
- the statistics for cancer show no added risk, but the confidence in the data are low: "usually we receive global data from the media, wonderful graphs with cases of cancer in the area...but are the statistics any relevance?" (G2), "the effects of radiation lead to the pollution of water, soil, atmosphere, and also... our crops" (G2), "it offers us results on the cancer statistics, but... from my experience... it is nothing ... my wife died from cancer..." (G3);
- an important concern was the potential contamination of phreatic water: "normally ... all the drilled wells must be closed... and the company responsible for the repository must supply the water from a safe source" (G2), but in this case "the costs will increase" (G2), "it should distribute the water free of charge..." (G2):
- long-term risks introduce ethical aspects and a
 great responsibility in making a decision on
 hosting the repository: "the responsibility for
 the future is a great concern" (G3), "our
 decision is not only for tomorrow.... it is for a
 very long term" (G2);
- impact on property was a concern of G3 participants: "the owners may lose their land from the stipulation of the national importance of the repository";

- surveillance and monitoring of the repository was a general concern to all groups: "it will be difficult for the public to understand monitoring data" (G2), "they will display their data, what about our trust in their data ...?" (G3), "in the longer-term, migration of population from this area is possible and this may lead to the loss of local information on what was deposited..." (G2), "the poverty of some citizens may result in thefts from the repository. How efficient will be the level of surveillance?" (G2), "how can the local community maintain long-term surveillance?", "it is clear that the configuration of repository and its immediate neighbourhood must be systematically controlled" (G2);
- the repository seemed not to propose a danger in comparison with the NPP: "there are greater dangers in the area, for example the nuclear plant and DICA" (the interim storage for spent fuel) (G2), "only wastes which are less dangerous will be stored in the repository..." (G2), "the risks are greater from Unit 1 and Unit 2" (G3);
- the possibility that agreed benefits would not be honoured was a concern: "our previous experience is not good... for example, the investors in a wind plant promised benefits, but after they obtained our agreement ... we didn't receive anything" (G2), "moreover... they installed their wind mills and destroyed our roads with heavy transportation..." (G2), "no money, and no local development... only their interests" (G3), "in the case of the nuclear plant the authorities promised many things, but they don't respect these promises..." (G3);
- the citizens were also afraid that "the number of construction and operational jobs created will be small and will not be occupied by the inhabitants of Saligny village..." (G2) "what jobs can they offer us...? maybe guards..." (G3):
- the relation between benefits and risks was another concern: "for the repository... the waste will remain here, in our village..."

 (G2), "the benefits from the electricity produced was for others... the worst case is for future units when foreign investment will be involved, the money will go abroad... and we'll obtain the wastes..." (Unit 3 and Unit 4 of the NPP are planned for construction within the next 10 years) (G2);
- group G2 queried the slow speed of implementation: "it seems that the implementer AN&DR

- does not have an immediate interest in finalising the project..." (G2), there was "a lack of transparency related to the overall timing and the progress of each step of the siting process..." (G2), "we don't know what is being done and what will be done in the next period..." (G2);
- use of the repository (the type of wastes and the operational lifetime): "we want a clear limitation on the use of the repository... only the wastes produced in Cernavoda should be deposited here" (G2), "we want to know clearly how many years the repository will be operated..." (G2);
- the construction phase: "will destroy our roads"
 (G3), "they need heavy equipment to be transported and our roads are already in a bad state..." (G3). They wanted "good access roads to the area to be built before to start the construction of the repository itself ..." (G3), "we don't want to repeat the experience of the wind plant construction..." (G3); and
- in terms of the quality of the repository build itself: "if a private company wins the bid for construction… we'll have problems since their interest is in making profit…" (G3), "the quality of works may be not so good as was planned…" (G3), "strict control is needed in all steps…" (G3).

The general opinion of the three groups on health, environment and construction was:

- there were clear concerns about the potential release of radiation from the repository, the possibility of transfer of radionuclides into the atmosphere, soil, and especially into water and crops. It was recognized that a larger amount of radioactivity would be released into the environment in the case of an accident at a nuclear plant than from a repository;
- there was little confidence about the quality of the reported data about disease and future monitoring activities around the repository, especially for G3 (the public);
- another worry was related to the expected benefits once the repository had been built. There was little trust that the community would see any benefits given the negative experience of both the NPP and the installation of wind plants in the village, together with the failure of political promises. Therefore, all the groups expressed the need to have contract/agreement guaranteed (if possible) by the Government;
- another concern was about the slow speed of the process including the loss of the

- opportunity of hosting and benefitting from the repository (especially for group G1); and
- the public (G3) feared that their properties will be affected and the owners dispossessed due to a national decision being taken on siting the repository.

Public involvement

- a programme of public engagement is needed to inform the public and to involve them in the decision-making process "we need to obtain answers before making a choice..." (G2), "the citizens should be very well informed on all aspects of the repository and radiation risks..." (G3), "the choice of the citizens should be made once they are able to judge the situation" (G2);
- public engagement was seen as a need from all groups: "public meetings may produce real information" (G3), "it should discuss all problems, advantages, risks and drawbacks... related to the repository in our village" (G2);
- communication and supply of information was seen to be the responsibility of the implementer: "AN&DR should organize the information programme" (G2), "AN&DR can and must answer our questions..." (G3) and the programme must be adapted to the local needs "it should give us similar examples from other countries..." (G3), "movies and mock-ups... in order to understand..." (G3), "numerical data such us what is the influence of repository at 100 m, 1000 m, etc..." (G3). Also the public wants "posters, booklets and other printed materials" (G3) some of them "to be posted in the most visited places in the village, e.g. at the church, shops, House of Culture, etc...." (G3) since they need time to reflect and to absorb the information:
- group G3 stressed that "a contract between the two parts (community and implementer) should be compulsory..." and moreover the benefits should precede the investment firstly for local development and only after... the repository...", "after some progress in the development we may approve the site ... otherwise they get what they want and we'll get nothing...";
- the current low level of public involvement is because of "a lack of a political decision aimed at continuing the repository project" (G2), and also the fact that "the public is not informed enough about repository aspects" (G3). The groups thought that this may increase the influence of anti-nuclear organizations;

- the need for public participation was expressed by group G2: "without it... we remain as before... with no rights and benefits...". The citizens from G3 want to participate "we see our role in the siting...", but at the same time they have reservations about the process "we don't know who will be our partner in the negotiations...", "we don't know what they can really offer...";
- there was an overall concern about benefits: "all money must go to the community needs" (G2), "we should be able to decide how we'll use the money for local development..." (G3); and
- groups G2 and G3 agreed a formalized partnership was needed which would be a written agreement with AN&DR or another appropriate national institution underpinned by Government guarantees: "we don't want to be tricked as in other situations when the authorities went to the notary with a group of uninformed people... for example, as with the feasibility studies" (G2).

The general opinion of the three groups on public participation was:

- all groups were very interested in participation in the decision making process, but the confidence in the process was lower for G2 and G3;
- there was an agreed need for a formalized partnership, a written agreement with AN&DR or another appropriate national institution underpinned by Government guarantees;
- a communication programme must be implemented before any decision in order to facilitate public participation; and
- an appropriate approach to involve the public are public meetings where people can receive adequate information, ask for new information or further details.

Decision-making perspective

- with regards to the perceived risks and benefits of the repository, participants in G2 and G3 thought: "the expected benefits are important ... in comparison with the potential negative effect on health and environment" (G3), "everyone knows that the repository is well designed and the construction will be to a good standard..." (G2), "we want this repository, but will we get the promised benefits?" (G3);
- there was concern that it would be a difficult decision process (long and unpredictable) and will lead to a change in location: "the repository must be built somewhere... we'll have no

- benefits..." (G3), "it is better to have it here, we'll obtain something..." (G3). At the same time, there is a fear that the decision may be forced "under pressure and in a short time" (G2), "poverty in the local area may result in a hasty decision..." (G3);
- a sustainable decision may be obtained only by "correct information being given to the public, before participation" (G2), "independent and trustworthy specialists to explain issues to us, at our level..." (G3);
- a final decision must made through a public consultation exercise, "probably by referendum..." (G2), "all people should participate to say either yes or no..." (G3);
- a clear "list of needs and exigencies" (G2) of the local community should be produced for negotiation purposes, but also "a prioritization of the needs" (G2) is important;
- some decisions which are clearly a responsibility of the Local Council and which have a major impact on the siting process are yet to be resolved "without the approval of the Local Urbanism Plan an authorization for the repository construction is impossible" (G2);
- the participants were aware that "public meetings are not devoted to produce decisions"
 (G2), "it is difficult to have a decision with a lot of participants" (G3);
- the decision process may be supported by a building of confidence in the process: "small and safe steps, such as the access road... are important" (G3); and
- the people understand the reasoning behind the need for a repository: "the nuclear plant is here; the repository needs to be somewhere ..."
 (G2), "the state is responsible through AN&DR and a repository has to be built..." (G3), "it is an opportunity ..." (G2), "if you do not have a choice to make or if you refuse to choose, you remain an old maid..." (G3).

Conclusions

This paper gives an outline of focus-group discussions with the Saligny community with regards to the siting of an LILW repository. Based on the results of these discussions a number of recommendations can be made to the implementer (Constantin *et al.*, 2013):

 The community generally seems to agree to the siting of the LILW repository in the area of Saligny village on the condition that it will bring a number of real benefits. These benefits

- are expected to take the form of a Programme for Local Development aimed at improving local infrastructure, creating jobs, increasing the quality of life, and contributing via taxes to the local budget.
- (2) The final decision for approval of the site should be by a public consultation exercise; however, it should be preceded by a communication and information programme to inform the public beforehand.
- (3) A written agreement is needed between the community and implementer and backed by the authorities to form an effective partnership based on mutual trust and to instil confidence in the process.
- (4) A stepwise approach is necessary to build confidence in the repository development process and the robustness of the approach needs to be evaluated at each step in conjunction with the national authorities. This is vital for the community to see progress with the project.
- (5) Financial compensation is a minor issue; however, limitations to land use around the repository should be compensated.
- (6) The Saligny community has limited experience in the negotiation process and this should be taken into account in order to avoid any misunderstanding and disappointment.
- (7) Local councillors and some members of the public consider that there will be positive benefits in hosting the repository; the rest of the public were sceptical, however.

- (8) A communication programme should be developed by the Implementer. It must be adapted to the local context (level of education of the public, addressing specific public concerns etc.). It should include audio-video applications, public meetings, accessible printed material etc.
- (9) The people want to participate, they see their role in the decision process as important and they understand that the project involves many uncertainties; hence, continuous communication is crucial to provide the public with adequate information to enable them to come to a decision.
- (10) The community needs assistance in the development of local infrastructure and any support offered by the implementer or policymakers will help build public confidence in the process.

References

- IPPA (2014) Implementing Public Participation Approaches in Radioactive Waste Disposal. http:// www.ippaproject.eu/.
- Constantin, M. and Diaconu, D. (2009) Prospective Case Studies: Country Reports on the Cooperative Investigation Romania, Euratom-FP7-Cowam in Practice. www.cowam.com/IMG/pdf_D1-9 FINAL ROM ENG.pdf.
- Constantin, M. and Diaconu, D. and Constantin, A. (2013) Methodology for public involvement in local decision making processes. Euratom-FP7-IPPA, D2.14.