



EUROPEAN  
COMMISSION

Community Research

# ARGONA

## Arenas for Risk Governance

(Contract Number: FP6-036413)

***Evaluation, testing and application of participatory approaches  
in the Czech Republic***

**Application of the RISCUM model in the Czech Republic**

Author: Hana Vojtechova, Nuclear Research Institute Rez plc

Date of issue of this report: 30/10/2009

Start date of project: 01/11/2006

Duration: 36 Months

Lead contractor for this deliverable: Nuclear Research Institute Rez plc

Revision: Final

**Project co-funded by the European Commission under the Euratom Research and Training Programme on Nuclear Energy within the Sixth Framework Programme (2002-2006)**

**Dissemination Level**

<b>PU</b>	Public	X
<b>RE</b>	Restricted to a group specified by the partners of the ARGONA project	
<b>CO</b>	Confidential, only for partners of the ARGONA project	

## CONTENTS

<b>1</b>	<b>INTRODUCTION</b> .....	<b>3</b>
<b>2</b>	<b>MAIN PRINCIPLES OF RISCOSM MODEL</b> .....	<b>5</b>
<b>3</b>	<b>CURRENT SITUATION REGARDING WASTE MANAGEMENT IN THE CZECH REPUBLIC</b> .....	<b>8</b>
<b>4</b>	<b>RISCOSM MODEL APPLICATION IN THE CZECH REPUBLIC</b> .....	<b>11</b>
4.1	PRE-UNDERSTANDING - FIRST PHASE OF THE RISCOSM MODEL IMPLEMENTATION ...	12
4.1.1	<i>RISCOSM Reference Group</i> .....	13
4.1.2	<i>Working Group</i> .....	14
4.1.3	<i>The RISCOSM Reference Group activities for the period 2008 - 2009</i> .....	15
4.2	LEARNING PROCESS - SECOND PHASE OF THE RISCOSM MODEL IMPLEMENTATION ..	16
4.2.1	<i>Public Hearing</i> .....	16
4.2.1.1	Organisational aspects.....	17
4.2.1.2	Summary and conclusion of the discussion .....	18
4.2.2	<i>Feedback from public hearing</i> .....	19
<b>5</b>	<b>CONCLUSIONS RESULTING FROM THE RISCOSM APPLICATION</b> .....	<b>22</b>
<b>6</b>	<b>CONTINUING THE RISCOSM IMPLEMENTATION AND ACTIVITIES OF RISCOSM REFERENCE GROUP</b> .....	<b>24</b>
	<b>ANNEX NO.1</b> .....	<b>29</b>
	<b>ANNEX NO.2</b> .....	<b>34</b>
	<b>ANNEX NO.3</b> .....	<b>38</b>
	<b>ANNEX NO.4</b> .....	<b>42</b>
	<b>ANNEX NO.5</b> .....	<b>44</b>

# 1 Introduction

One of the tasks of the ARGONA Project is to test and apply approaches to transparency and participation in decision-making process within the participating countries. NRI's effort is focused also on implementation of the RISCUM model in the Czech Republic in the area of NWM. The principal aim of the RISCUM application in the Czech Republic is to increase common awareness on all aspects concerning the problems of the choice of a suitable site for a geological deep repository in order to increase active involvement of general public into the decision-making process. In connection with the first phase of the RISCUM implementation – Pre-understanding process, the Reference Group was established.

Establishing the RISCUM reference group meant a significant shift in the cooperation of all stakeholders in the management of nuclear waste in the Czech Republic. A well-functioning group consisting of all stakeholders has been established and a good milieu was formed for mutual dialogue and cooperation among "the parties" such as state institutions (e.g. Radioactive Waste Repository Authority and relevant ministries), NGOs and representatives of communities from selected localities. The role of this reference group was crucial for preparation of a public hearing on the topic "Siting of repository - recommencement of the siting investigation of the particular sites for deep geological repository".

On the basis of past experience, the RISCUM model proved to be a very suitable tool for launching a dialogue among all stakeholders in the area of nuclear waste management in the Czech Republic and could be used in this field also in other European countries, which are in similar situation as the Czech Republic.

It is important to continue the activities of the RISCUM reference group that was established in connection with the ARGONA project and RISCUM model application in the Czech Republic. Nevertheless it is necessary to consider the possible ways of securing "legitimacy/institutionalisation" of the RISCUM Working and Reference Groups outside the ARGONA project. The Reference Group's activities should not be orientated only to the fulfilment of the aims of certain research project. Establishment of a similar Reference Group comprising all stakeholders should be one of the requirements of the reworked Government Concept of the management with radioactive waste and spent nuclear fuel. This Reference

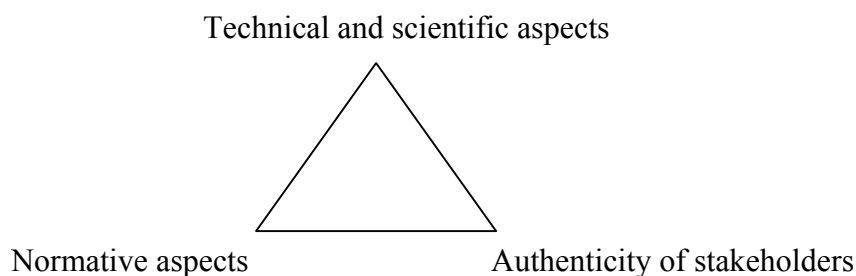
Group should be supported by the respective legislation or be shielded by a Government Declaration. The Reference Group could, for instance, develop its activities under the auspices of the Ministry of Industry and Trade or Ministry of Environment of the Czech Republic.

It is important also to continue in organization of various events such as seminars, science shops and hearings to ensure open and meaningful communication among NWM stakeholders.

## 2 Main principles of RISCUM Model

The thesis: “Transparency Requires Communication Action” is the gist of the RISCUM method. RISCUM approach is based on three basic elements:

- Technical/scientific issues can be clarified with scientific methods. They relate to questions like "Is this true?" or "Are we doing things right?"
- Normative issues reflect what is considered fair and acceptable in society, what is legitimate (“Are we doing the right things?”)
- Authenticity builds trust; it has to do with consistency between the actions of a person (or an organization) and who the person (or organization) is, or the role in the decision-making context.



The RISCUM approach extends rather substantially the former concept of transparency that was comprehended only as an explanation (e.g., in a simplified form) of the technical aspects to the stakeholders and general public. This concept of transparency is primarily orientated to increasing the clarity of issues in complicated matters by making the three corners of the “RISCUM triangle” explicit. In the RISCUM method the transparency is a result of a permanently proceeding (“infinite”) mutual cognitive process and mutual learning in the course of an act of communication. Generally, the requirement of transparency in the RISCUM concept is expressed by the thesis:

*In a given policy area, transparency is the outcome of an ongoing process which increases the stakeholders’ appreciation of related issues and provides them with channels to stretch the implementer to meet their requirements for technical explanations, proof of authenticity,*

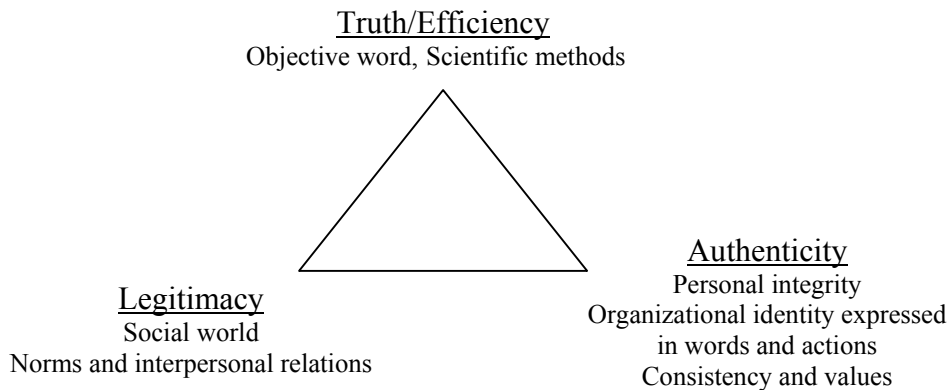
and legitimacy of actions. Transparency requires a regulator to act as guardian of process integrity.

Transparency is closely connected with the participation of general public – transparency requires participation of general public and *vice versa* as a meaningful involvement of the general public is impossible without transparent procedures. In principle, it concerns a mutual learning process between the implementer and stakeholders. This principle is summarized in two integral components of the RISCUM method:

- “Common sense” and “wisdom of people” – Point of view from which the stakeholders regard the everyday activities of the implementer and assess his authenticity and at the same time identify areas requiring explanation.
- “Stretching the implementer” – Steps that have to be made in order to provide for the sufficient demandingness of the implementer environment (of the proposed project) and administration bodies so that all relevant issues are considered and solved from various perspectives.

The RISCUM methodology is thus an attempt to apply transparency in (complicated) decision-making mechanisms concerning complex, long-term (or with long-term effects) and hazardous projects and activities as, e.g., nuclear power production (and the problems of nuclear waste disposal connected with it) and also handling with genetically modified organisms, biotechnologies, or chemical industry (handling with toxic materials).

Clear defining and understanding of the stakeholders' functions, e.g. in the management of HLW, is another prerequisite for the application of this method. Moreover, it includes also the identification of complexity the problem and demands (***recursion levels, recursion of meaning***) – this is one of the main prerequisites for meaningful communication between all stakeholders. However, it is also important to follow the relationships between the individual levels and to provide for the functioning of mutual links between them. At each communication level the following three aspects should be considered in the communication:



As illustrated by the Czech Republic example, the flexible structure of the RISCUM model makes possible to use it at various stages of the geological repository siting process. However, its implementation already during the earliest stage of the decision-making process is the most advantageous and most effective approach, which was already impossible in the case of the Czech Republic.

In the case of a stalemate situation the model offers also the possibility to return the discussion to its initial stage or to a point in which begins the mutual elucidation of opinions and approaches of the individual stakeholders to the given issues. At this point it is possible to start not only with the reassessment of the proposed aims and requirements on the basis of newly acquired knowledge and experience but also to the reformulation of own attitudes and requirements of individual parties with the aim to find answers to the following topics:

- *What do we wish to achieve?*
- *What are we willing or not willing to sacrifice to this purpose?*
- *Under what conditions we are willing to recede from our own positions?*
- *Under what conditions we are willing to continue the discussion of these issues?*

The continuation of a dialogue by this method is a long-term, time-consuming activity that cannot be hastened in any way. This is one of the RISCUM model aspects that the implementer should always keep in mind.

### **The role of mediator:**

For ensuring a meaningful communication between all stakeholders and for a successful outcome of the individual meetings it is very useful to use the so-called dialogue

mediator (namely in such controversial problems as the management of radioactive waste and spent nuclear fuel or the geological repository siting).

Primarily, mediator should be a “facilitator”. His role is to make the communication between all stakeholders with usually highly opposing opinions much easier. His only aim is to lead the participants to the meeting objective in spite of all pitfalls in the mutual communication between the stakeholders, in spite of all misunderstandings and uncertainties.

Mediator does not take part in the discussion itself; he does not assess the ideas of the group members. He only endeavours to keep the speakers' presentations at the given topic and to provide the same possibility for every discussant to express his opinion. He incites the activity of the participants, focuses the energy of the group to the given issue and makes thus the meeting more effective. For preserving his own neutrality the mediator should be personally neither interested in the dispute nor involved due to his professional position. It means, he should not be a defendant or consultant of the stakeholders.

As already mentioned above, we should have a dialogue mediator when the mediator works more with the emotions of individual participants than with the mere facts. He should strive to endeavour their active participation in the discussion and, partially, to avoid possible conflicts that could lead the discussion into a blind alley. However, in practice still another method of mediation is used: the method of mediation by demonstration – for instance, the mediation of scientific information to the general public by means of excursions to nuclear facilities as nuclear power plants, institutions with research reactors, radioactive waste repositories, underground laboratories, demonstration of models of developed facilities, etc. In this case we speak about the mediator demonstration that works with simple scientific facts and strives to communicate them to the general public in a comprehensible way.

### **3 Current situation regarding waste management in the Czech Republic**

The fundamental framework for radioactive waste management is formed by the Atomic Act (No. 18/1992 Coll.) and regulations of the State Office for Nuclear Safety. According to the Act the state is responsible for the safe disposal of all radioactive waste. To ensure the related activities the Radioactive Waste Repository Authority (RAWRA) was established in 1997. There are three LILW repositories in operation in the Czech Republic.



All relevant current activities are aimed mainly at increasing operational and long-term safety and optimising the whole system.

The long-term policy of the state is formalised in a basic strategic document “Concept of Radioactive Waste and Spent Nuclear Fuel Management in the Czech Republic”. According to the Concept, construction of a deep geological repository for the direct disposal of spent fuel and other high-level waste is considered as the only realistic option for a final solution based on the current state of knowledge; yet this decision on further development could be revised by a new evaluation of management options, expected in ten years’ time. In compliance with the Concept two suitable sites should be selected before 2015 and included in area development plans. In 2030 construction of a confirmatory underground laboratory should be started. According to the Concept, construction of the disposal facility should be started only after 2050 and operation is targeted for 2065.

Systematic survey of possible sites for deep geological repository started in the Czech Republic already in 1988 and until 2002 six relatively suitable sites: Lubenec-Blatno, Bozejovice-Vlksice, Pačejov, Lodherov, Rohozna and Budisov were selected for more detailed non/destructive geological research. All localities are situated in granite massifs, in seismically stable areas assuming an uncomplicated lithological composition of rocky environment and its stability at greater depth.

In the period 2003 – 2005 RAWRA carried out aerial geophysical measurements of these 6 sites, with attention being paid to tectonic segmentation of each locality. One or two smaller sites potentially suitable for the repository location were on each of six localities selected via multi-criterial analysis. It was found that a repository is potentially feasible in all localities, but further more detailed survey, verification of conditions in the deeper part of massifs and determination of geotechnical and other conditions is needed.

Since there was strong public opposition in all sites chosen against the potential future construction of a deep geological repository as well as against the exploration of sites, RAWRA, in agreement with the Ministry of Industry and Trade postponed in 2004 all site activities until 2009. Since this moratorium comes to its end, RAWRA tries to acquire consent of respective communities.

Meanwhile RAWRA started in 2008 the analysis of geologic data on military areas (MA) in Hradiste, Brdy, Boletice, Brezina and Libava on request of the government. The exploration of literature data showed potentially suitable geologic conditions in the middle

and northern part of MA Boletice (Region of South Bohemia) and at the eastern outskirts of the MA Hradiste (Region of Karlovy Vary). Now a more detailed exploration of these sites by means of non-invasive methods will be organized.

**Communication:**

Since its establishment RAWRA has striven to maintain good relations particularly with the local population of areas around operating repositories, and aims to good relations at the sites considered to be potentially suitable for further research. Since the identification of the sites significant efforts have been concentrated on communication and mutual understanding with local communities, with RAWRA's activities focusing on dialogue with local representatives and on providing comprehensive information to local people (through public meetings, information leaflets, offer of study trips to nuclear facilities, etc.).

Information is considered a necessary prerequisite for dialogue on nuclear issues. That is why RAWRA started to assist small communities with reconstruction of local libraries and established small RAWRA information centres in several villages (Lubenec, Rohozna, Dolni Cerekev, Milicov; further villages may be served). These projects were financed by RAWRA and aim to facilitate the availability of up-to-date information on radioactive waste disposal as well as to substantially improve the operation of the libraries themselves. Another attractive way to provide information is to organise visits of nuclear facilities related to final disposal or interim storage. RAWRA organised several excursions to low-level waste repositories or the interim store at the Dukovany NPP site. RAWRA has also organised a series of excursions abroad (2004 - Gorleben, Germany; 2005 - Grimsel Test Site, Switzerland; 2006, 2007, 2008 – Sweden; 2009 – Finland (Olkiluoto) is being prepared). The number of participants in these visits is about 50 and they are mostly local elected representatives, teachers, etc. During these visits participants usually have an opportunity to meet local representatives at nuclear sites and directly discuss with them issues of interest.

**Current communication aims and activities:**

During of the analysis of archive data in the MTAs RAWRA contacted the representatives of corresponding local and regional authorities and later informed them about analysis results and about potential further developments. RAWRA has been in written contact with mayors of communities close to the “perspective” MTA and also with local civic association and provided current information and offered personal meetings and more detailed information in case of interest.

As RAWRA aims to achieve local support or tolerance at the sites, where it will apply for the establishment of exploratory areas, it has contacted once again the representatives of the 6 sites and as a initiation of further dialogue proposed that it will cover the costs of independent experts (nominated by relevant community) to get involved in critical reviews of all works to be carried out by RAWRA (related to DGR development) in the future and to control the quality of works and review the works also from the perspective of local interests. RAWRA has also informed, that the negotiations with the ministries with the aim to provide financial support in regions at the stage of geological survey has been initiated (as such support from the nuclear account would require amendment to the Atomic Act). Finally before the selection of the two final sites in 2015 Environmental impact assessment process (E.I.A) is planned for each of the sites. This will provide a significant opportunity for an active involvement of local communities, local associations and the general public to address issues of local interest, which might have not been satisfactorily arranged up to this stage via earlier dialogue.

A very significant progress has been achieved in the framework of ARGONA project, where a number of meetings with representatives of people from localities have been realized. Particularly RISCUM approach covering establishment of a reference group composed of people from ministries, local politics, nongovernmental organizations and experts from research organization, turned out to be very useful. It initiated a debate, which could be considered as a starting point for transparent discussion with people from potential localities for deep geological repository. RAWRA wants to provide in future to people from communities funds on independent experts who will participate in dialogues and to continue in discussions started in the framework of ARGONA project.

## **4 RISCUM model application in the Czech Republic**

The RISCUM model was communicated with Czech stakeholders early in the process, e.g. by a project memo by Clas-Otto Wene, 23 September 2008. It was implemented in the Czech nuclear waste management mainly in the problems of deep geological repository siting.

The RISCUM model application consists of two main steps:

- Preparatory phase with pre-understanding of learning process:
  - Creation of the Working and Reference Groups – Cooperation agreement

- Pre-understanding and organisation – The RISCOP Reference Group discusses the activities and sets principles into action
- Learning process – public stakeholders, decision makers:
  - Knowledge building activities
  - Hearings with stretching
  - Documentation – e.g. strategy for involvement of the public in the process of selecting a location for the deep geological repository

#### ***4.1 Pre-understanding - first phase of the RISCOP model implementation***

In the first phase of the RISCOP model application, the RISCOP Reference Group was established with the participation of all main stakeholders in the Czech nuclear waste management process. In addition to the nuclear industry and government bodies (Ministry of Industry and Trade, Ministry of the Environment, State Office for Nuclear Safety and Radioactive Waste Repository Authority) it includes representatives of potential siting communities and NGOs (CALLA), sociology scientist and foreign experts from Sweden from Karita Research and Wenergy, who have experience with the implementation of this communication model in their country.

As concerns the selection of the NGOs representatives, all main non-governmental organizations working in this field, e.g., Greenpeace, Hnutí Duha (The Rainbow Movement), Bezjaderna Vysocina (Non-nuclear Highlands), Calla, Jaderný odpad – děkujeme nechtáme (Nuclear waste – thank you, we do not want it) were invited by a written form to participate in the Reference Group (letter and e-mail) and in some cases by means of a telephone call. In consequence, the NGOs decided to nominate one collective representative.

A similar approach was adopted also in the case of the general public representatives – all mayors of the communities in the territory of the six proposed localities were invited to participate in the Reference Group by a written invitation form (letter and e-mail), by telephone calls or, in some cases, using personal contacts with the individual mayors (representatives) of the respective communities. They were asked to elect two or three representatives who would represent and defend their interests in the Reference Group. Finally three representatives of local administrative bodies from the respective localities were nominated and elected.

The following critical moments were faced in the establishment of the Reference Group:

- At the very beginning of the selection of the Reference Group members its organizers encountered a rather substantial disinterest of the general public and NGOs with regard to their participation in the given RISCOP Reference Group.
- Finally it turned out that in spite of the endeavour of the main organizers the selection of the Reference Group members was not fully transparent from the point of view of NGOs.
- A higher publicity was lacking as well as the official invitation from the responsible state bodies. The reason was in the fact that the Reference Group was established in the connection with the activities made within the framework of the EC Project ARGONA in order to test and apply the RISCOP communication model under the conditions of the Czech Republic. Hence, it was not an official action of the respective state administrative bodies responsible for this field as RAWRA, Ministry of Industry and Trade, or Ministry of Environment.

The main tasks and objectives of the RISCOP Reference Group were defined and on the basis of the discussion, members of the reference group prepared an agreement on cooperation that covers, in addition to the objective, its organisation, activities to be performed, reporting act. The Agreement was confirmed during the second reference group meeting that was in September 2008. The full version of the Cooperation Agreement is set out in ANNEX No.1.

#### **4.1.1 RISCOP Reference Group**

The Reference Group supervises the RISCOP application in the Czech Republic with the purpose of making it as equitable as possible. The role of the Reference Group was crucial for pre-understanding the learning process in the first phase of the RISCOP process. It is entitled and takes responsibilities for decision especially in the following areas:

- Search of methods for inciting an interest of the general public and responsible organizations on the problems of the radioactive waste and spent nuclear fuel management, particularly on the choice of a suitable locality for the geological repository siting in the connection with transparency and active involvement of the general public into the decision-making processes.

- Identification of the possibilities and methods for the application of the Swedish communication model RISCOM under the conditions of the Czech Republic – the identification of legislative and social differences given by the different historical backgrounds of the Czech Republic and Sweden.
- Establishment of communication means for mutual open communication between all stakeholders.
- Establishment of information channels for mediating dialog with the general public – to enhance the knowledge of general public of the radioactive waste and spent nuclear fuel management issues and, furthermore, in the field of the search for a suitable locality for the geological repository of radioactive waste siting. Organizing of various activities in order to increase the knowledgeableness/awareness of the general public (e.g. seminars, public hearings).
- Elaboration of topics for the future discussions:
  - Safety issues – securing the radiation safety
  - Choice of a suitable locality for the geological repository siting
  - Available technologies
- Definition of possible solutions of controversial issues and their clarification
- Decision-making processes – finding of methods and ways by means of which it would be possible to increase the transparency and participation of the general public in the decision-making processes in the field of the geological repository of radioactive waste and spent nuclear fuel siting in the Czech Republic territory.

#### **4.1.2 Working Group**

In the context of the RISCOM Reference Group the Working Group was also established. The members of this group are representatives of NRI, RAWRA and foreign experts from Sweden from Karita Research and Wenergy. The Working Group provides analysis and proposals to the Reference Group, which after discussion provides guidelines for the continuing work of the Working Group to design and set up the arenas for increasing transparency and public participation in the decision-making process.

#### **4.1.3 The RISCOP Reference Group activities for the period 2008 - 2009**

- Discussion of group of main stakeholders on possibilities of application of RISCOP model has been fulfilled by means of RAWRA board seminar, which has been held on January 2008.
- During the first meeting on May 13, 2008 in Prague the Czech reference group was established with participation of all main stakeholders and its main tasks and objectives were defined.
- On the basis of the discussion, the working group that was established within the frame of the reference group prepared the Agreement on Cooperation, which covers the objective, its organisation, activities to be performed, reporting act. Agreement was confirmed during the second reference group meeting in October 7, 2008.
- During the third meeting on November 3, 2008, the Reference Group took decisions on the Working Group recommendations for organisation of the first public hearing within the frame of RISCOP model application on the topic "Siting of repository - Resuming of geological survey in localities selected for the geological repository". It was defined range of issues for discussion and the main objectives of the public hearing.
- The Working Group sets up details for the hearing - organizational aspects of the hearing such as venue, time, programme, way the debate, actors, stretching, moderator, advertising etc. These details were discussed within the Reference Group during the 4th Reference Group meeting on February 10, 2009 and then the decision was taken on organisational aspects and specific form of public hearing.
- The public hearing on the topic "Siting of repository - Resuming of geological survey in localities selected for the geological repository" was held on May 23, 2009 in the Chateau Stirin.
- During the 5th meeting on July 23, 2009, the Reference Group discusses the results and gives feedback to the public hearing, Czech programme and to the RISCOP Group. The Reference Group also discussed the possibilities of continuing its activities after the end of the ARGONA project.

Establishing the RISCOP Reference Group meant a significant shift in the cooperation of all stakeholders in the management of nuclear waste in the Czech Republic. A

well-functioning group consisting of all stakeholders has been established and a good milieu was formed for mutual dialogue and cooperation among "the parties" such as state institutions (e.g. RAWRA and relevant ministries), NGOs and representatives of communities from selected localities.

The fact that the Reference Group was established in the connection with the ARGONA Project within the framework of the RISCUM model testing so that it worked on a project basis was and will be even in future a limiting factor of the group activities. The period of its activities was restricted to the period of the ARGONA Project duration and it focused mainly to the solution of assignments and objectives specified in this project. The Reference Group was formed as a non-formal group of the representatives of all stakeholders and there was no "guarantor" – e.g., the Ministry of Industry and Trade under the auspices of which the Reference Group would be established – who would vouch for its "legitimacy/institutionalization". This fact had no impact on the RISCUM model testing purposes but in the possible continuation of the Reference Group activities it would be otherwise (see Chapter 3).

## ***4.2 Learning Process - second phase of the RISCUM model implementation***

In the second phase of the RISCUM model implementation in connection with learning process, the RISCUM Reference Group decided to organise the first public hearing in the Czech Republic on the topic "Siting of geological repository – Resuming of geological survey in localities selected for the geological repository".

The main objective of this public hearing was to start an open and meaningful discussion of questions concerning the selection of a location for a deep geological repository with participation of representatives of all stakeholders, including the representatives of the general public from the localities pre-selected for a deep geological repository.

### **4.2.1 Public Hearing**

The public hearing was held on May 23, 2009 in the Chateau Stirin with the participation more than seventy persons. The following topics were discussed:



- 1) Why the Czech Republic and its inhabitants need the geological repository of HLW and SNF? What process of selecting the repository site shall guarantee the fairness and protection of rights of the affected communities?
- 2) What is the present situation of the geological repository siting process? What activities should proceed in the selected localities, what should their time schedule be, and what effect they will exhibit on the life in these localities (particularly in the period of survey and in the period of the actual building of the geological repository)?
- 3) What are the apprehensions and expectations of the representatives of the localities?

#### **4.2.1.1 Organisational aspects**

Venue – Chateau Stirin was chosen as the venue of the public hearing as a neutral meeting place for all interested parties. It was located outside of all the six localities selected for the deep repository siting.

Panel Discussion: The meeting's aim was to achieve as equal as possible participation of protagonists as well as antagonists to the building of geological repository in the territory of the Czech Republic. The composition of the panel participants was following:

- Representative of the Ministry of Industry and Trade
- Representative of the Ministry of Environment
- Representative of RAWRA
- Independent expert – geologist
- Representative of NGOs
- 2 representatives of the municipalities from the localities (mayors)

#### Moderator:

In this case the moderator fulfilled also the function of the mediator (see Chapter 2). The choice of a suitable moderator played an important role for the successful realization of this public hearing. A personality, well known from the media and working in the statutory television and broadcast, was chosen. The moderator was able to orientate himself in the given problems and managed to coordinate the hearing well, contributing to a successful progress of the whole discussion. His presence was also one of the factors of a high turnout of the public in the hearing

Chosen format of the public hearing - discussion was proceed in preset steps:

- 1) Formulation of the problem by the discussion moderator
- 2) Introduction of the general public representatives into the issue by a short presentation of the selected representative of the panel discussion on the given topic
- 3) Participants of the panel discussion shall pose their questions to the lecturer and they can also present their possible objections
- 4) Time for questions or presentation of their opinion by the general public representatives present among the panel participants, they can aim their questions to all members of the panel discussion
- 5) Closing of the discussion by the moderator
- 6) Opening of another issue (repetition of steps 1 - 5)

During the public hearing this format was violated several times in order to provide a sufficient space for opinions of the general public representatives present in the auditory (panel discussion (step 3) was left out – mainly in the issue No.1).

#### **4.2.1.2 Summary and conclusion of the discussion**

All participants of the public hearing, NGO and representatives of communities inclusive, agreed on the necessity to build a geological repository of HLW and SNF but they disagreed on the methods of the selection of a suitable location for its siting.

At present the Czech Republic is in the period of characterization of the localities selected for the geological repository, i.e., in the period in which the geological survey in the localities for the repository should start. The execution of the survey is at present subjected to the consent of the respective communities in the given localities.

However, a majority of communities would not issue their consent with this survey that should take place in the years 2009-2015 and should result in the selection of two localities, the main one and a reserve one. Thus the process ended in a blind street. Some of the possibilities of further steps that were presented during the public hearing are as follows:

- A greater involvement of general public in the dialogue of all stakeholders and in the decision-making process using the following means:

- a) Participation of the general public by means of a comprehensive open communication and full information – a well understandable language is a prerequisite.
  - b) Participation on the check-up of the geological repository siting process by means of independent experts chosen by the communities – RAWRA already offered this method of participation to the communities.
  - c) To behave to the communities as to the partners – to respect the opinions of inhabitants, to ensure the right of the communities to withdraw from the process in any of its stages – one of the main NGO requirements.
- The problems of the geological repository siting involve many branches – along to the safety criterion, on which the greatest emphasis is placed, also the sociological and economic aspects should be taken into consideration. Along to the technical experts and geologists also philosophers, sociologists, etc., who are able to prognosticate the development of the society from a long-term point of view, not only from the point of view of the period between the elections, should be integrated into the discussion.
  - A development of motivation programs – compensation of the negative impacts of the selection and construction processes of the geological repository into the community and region lives.
  - To strengthen the political responsibility of state institutions and political parties in connection with this issue - long-lasting guarantees and long-term consistent and clear political attitude of the government and government parties concerning the problems of the final disposal of spent fuel.
  - To reconsider the Concept of Radioactive Waste and Spent Nuclear Fuel Management – to incorporate into it the principles mentioned above.
  - To change to respective legislation – to include the possibility to draw financial means from the nuclear account for the payment of financial compensations in the connection with the geological survey and construction of the geological repository.

#### **4.2.2 Feedback from public hearing**

The Public hearing was very positively received by those who did attend and indicated the beginning of a closer cooperation among all stakeholders. The hearing opened dialogue on the issues relating to deep repository siting on the national level. So far the discussion proceeded only at the level of the Radioactive Waste Repository Authority versus the

inhabitants of the individual selected localities, or possibly also with the participation of non-governmental organisations.

All participants of the public hearing, NGO and representatives of communities inclusive, agreed on the necessity to build a geological repository of HLW and SNF. It is the main precondition for dialogue on this issue.

The hearing has shown that the process of selecting the locality is presently in the stage of the NIMBY effect. It is therefore necessary to continue in the activities that have been launched so that a transition from the first phase “Yes, we need a deep geological repository, but not at our place”, to the second phase “Yes, we need a deep geological repository and it may be even at our place.”

With the progress of the discussion, it also became clear that some of the participants with really strong opinions – mainly representatives of municipalities – were not quite willing to listen to the opinions of others, but came just to express their disapproving attitude towards deep geological repositories, which they are not willing to change in any way in the present situation.

An important role is played by politics - a relatively high level of citizens' distrust in top politicians and in governmental bodies responsible for resolution of these issues. A lack of willingness on the part of political parties' representatives and the Government to discuss these issues, to participate in meetings with the public regarding this topic and to answer their questions has clearly emerged from this public hearing. Citizens need to be given long-term guarantees and a consistent attitude of government representatives in the questions concerning the issues of deep geological repository and disposal of radioactive waste and spent nuclear fuel in general, which would transcend individual electoral terms.

Another reason why citizens show low willingness to listen/cooperate, which emerged in the discussion, is represented by the very parameters of the process of selecting the locality for a deep geological repository. According to the opinions of NGOs' and municipalities' representatives, the situation is going to change at the moment when people feel that they have a chance to take part in the decision-making process more intensively and that they are treated as equal partners to the negotiations.

It has been proven that a solution cannot be found solely on the basis of a dialogue between the Radioactive Waste Repository Authority and the representatives of municipalities of individual localities, and possibly also NGOs. It is necessary to get other officials involved

as well, such as individual ministries, government representatives and research institutions both of technical as well as of sociological/philosophical/political science specializations.

It has emerged that the Radioactive Waste Repository Authority (RAWRA) is not considered as an organization primarily bringing together experts, but rather as an organization of "bureaucrats", which results in a certain mistrust to the facts and argumentation presented by this authority. It would be therefore useful to get involved in the discussion with the public such institutions as e.g. NRI Rez plc, FNSPE-CTU, CGS etc. The citizens would thus have the feeling that they are debating with independent experts who are not under the influence of any governmental institutions. This was the case also of this public hearing.

All participants appreciated the selection of the moderator and his role in the management of the progress of the hearing.

Thanks to the presence of the media (press and television) the public hearing received adequate publicity. The information that a public hearing was going to take place as well as information about and its progress thus reached the wider public (not only the residents of the pre-selected localities) who had an opportunity to get acquainted with the issue of selecting a location for a deep geological repository and disposal of radioactive waste and spent nuclear fuels in general.

The following objection regarding the organization of the public hearing was raised: The presentations given at the beginning of the discussions concerning individual issues were very extensive and brought a great amount of information. It might thus have occurred that some participants of the hearing, mainly the representatives of the public, were overloaded with such an amount of information and were unable to analyse all this information properly and to respond to it accordingly. In the present atmosphere of distrust, it seems to be more important to listen to the opinions of the public and to deal with their objections, rather than to attempt to provide the greatest amount of information possible. Provided the debates are managed in this way, maintaining control over the progress of the discussion will become more difficult, but on the other hand, more relevant and detailed information as to what the people really want and what their real attitudes towards the issue of selecting a location for a deep geological repository really are will be obtained.

## 5 Conclusions resulting from the RISCUM application

On the basis of past experience, the RISCUM model proved to be a suitable tool for launching a dialogue among all stakeholders in the area of NWM in the Czech Republic.

It is important to continue the activities of the RISCUM reference group that was established in connection with the ARGONA project and RISCUM model application in the Czech Republic and in organization of various events such as seminars, science shops and hearings to ensure open and meaningful communication among NWM stakeholders.

Main conclusions and findings obtained by the RISCUM model implementation in the field of the deep repository siting and nuclear waste management are, in the opinion of the vast majority of the members of reference groups, as follows:

- NIMBY effect - It is not possible to conclude that all the opposition of the public against the construction of a deep geological repository (approx. 90% of the localities' residents) in their territory or in its vicinity can be explained by means of the NIMBY effect - it is not possible to over generalize the NIMBY factor. This would be too simplistic and a somewhat problematic attitude towards opposition. This may result in a dismissive view of opposition as such and its degradation in the eyes of proponents of the construction of a deep geological repository. There are various motives and reasons for the residents' refusal of the construction of a deep geological repository in their locality. The past events (seminars in the localities, public hearing) as well as public opinion surveys have shown that there are great differences among the attitudes of individual localities as well as among the citizens within these localities. Some representatives of the municipalities express the opinion that they will – under certain conditions – agree with the geological survey in their territory, other say strictly NO. However, the residents of those municipalities whose representatives are saying a strict No often have diverse opinions, motivation or incentives, which may be further developed. This provides space for further discussions and negotiations. It is necessary to analyse these incentives and to hold further dialogue and negotiations on the basis of these findings.
- It is also crucial to focus on the development of motivation programs – compensation of the negative impacts of the selection and construction processes of the geological repository into the community and region lives. It is important to prepare clearly defined

motivational programs, which will have support in appropriate legislation - they shall be embedded in the Atomic Act.

- It is necessary to create a long-term conception with clearly defined rules and requirements concerning the process of selecting the locality for a deep geological repository. These conceptual materials should be prepared on the basis of a dialogue and agreement of all parties involved. The conception should have support in legislation so that it may not be easily interfered in, as it would be binding on individual governments changing with individual electoral terms. A clearly defined strategy for getting the public involved in the process of deep geological repository siting should be part of the conception as well.
- It is necessary to define a suitable communication process - to create a structured dialogue between individual stakeholders. The selected format of communication should be flexible enough to enable a gradual unblocking of positions and attitudes of individuals with strong opinions who have a tendency to keep their opinions away from the arguments of the opposition. This should be one of the main tasks of the Reference or Working Group.
- It is essential to retain the existing structure of the Working and Reference Groups, as the Working Group prepares all necessary materials for the operation of the Reference Group and subsequently puts the resolutions adopted by the Reference Group into practice.
- The Reference Group as well as the Working Group were formed and functioned within the ARGONA project of EC as a test of the RISCUM communication model. Their activities were based on voluntary and non-committal membership of stakeholders' representatives. Thus it has been specified in the cooperation agreement signed by all members of the Reference Group. Even though individual members were delegated by their organizations, it was not always possible to consider their statements or attitudes as a binding declaration and an official standpoint of the ministry or organization in question. However, this did not have the same significance for the purposes of testing the RISCUM communication model, as it will have for prospective continuation of the activities of the Reference Group. The practical impact of adopted conclusions and recommendations would be thus very limited.
- It is necessary to secure "legitimacy" of the RISCUM Reference and Working Groups outside the ARGONA project, as part of the process of selecting the location for the deep geological repository. All delegated members should be authorized to express the official

standpoints of their organizations and to propose possible solutions, which would be subsequently discussed at higher levels. At least the Working Group should be legalized/institutionalised; it should be provided with a certain institutional background, e.g. by means of an organization such as RAWRA or the Ministry of Industry and Trade or the Ministry of the Environment. The Reference Group could then remain on the basis of a voluntary association of representatives of individual parties involved.

## **6 Continuing the RISCOP implementation and activities of RISCOP Reference Group**

Possibilities of further continuation of the process of implementation of the RISCOP model and the activities of RISCOP Reference and Working Groups:

- An international EC project linked up with the ARGONA project which could take place within the 7<sup>th</sup> Framework Program of EURATOM
- National project supported by affected organizations (RAWRA, the Ministry of Industry and Trade, the Ministry of the Environment, CEZ plc, NGO)

### Possible orientation of the future project:

Application of the RISCOP model in the Czech Republic – structured dialogue at several levels:

1. level – discussion concerning with the re-evaluation of the government conception or legislation changes – particularly with the aim to the motivation or compensation programs
2. level – organization of information actions and discussion forums (seminars, hearings, public forums, discussions of experts, public discussion of intentions)
3. level – communication with media

### Possibilities of continuation of RISCOP Reference and Working Groups:

It is necessary to consider the possible ways of securing "legitimacy/institutionalisation" of the RISCOP Working and Reference Groups outside the ARGONA project. The possibilities include:



- Institutionalisation of the RISCUM Working Group under the patronage of the Ministry of Industry and Trade, the Ministry of the Environment or RAWRA and maintaining the Reference Group as an informal group of the stakeholders' representatives, e.g., as an advisory body of the RAWRA director for the communication with general public in the issues of the geological repository siting.
- Institutionalisation of the whole RISCUM Reference Group under the patronage of the Ministry of Industry and Trade, the Ministry of the Environment or RAWRA

It would be desirable to consider potential enlargement of the Reference Group e.g. by representatives of political parties, in particular MPs and senators – such as members of the sub-committee for power engineering of the Committee on Economic Affairs of the Chamber of Deputies of the Parliament of the Czech Republic, where conceptual matters of power engineering are discussed.

The main objective of the activity of the RISCUM Reference Group for the next few years should be starting communication and continuing in a meaningful dialogue among all parties involved, including the general public, concerning the issue of selecting a location for the deep geological repository in the Czech Republic, mainly by means of organizing events such as specialized seminars, public hearings, national forum, seminars in the Chamber of Deputies or the Senate of the Parliament of the Czech Republic etc. Creating a secure space for open and meaningful communication should remain the main objective of these activities.

Another important part of future activities of the RISCUM Reference Group is also cooperation of the Reference group with the Radioactive Waste Repository Authority on preparing information material for the Government of the Czech Republic regarding the process of selecting a location for the deep geological repository – what stage the given process is in and what steps are necessary to secure the fulfilment of the nearest aim set in the Conception of disposal of radioactive waste and spent nuclear fuel which is constituted by the selection of two localities (one main and one reserve) for the deep geological repository by 2015. This information material should critically assess what has been achieved in this area until 2009 and how to proceed with the process so that it remains transparent and the public is involved in it. The outcome should be a proposal of a strategy for involvement of the public in the process of selecting a location for the deep geological repository. Three main pillars of the strategy should be:

- participation of independent experts selected by the municipalities in the course of the process of selecting a location for the deep geological repository
- public hearings and other forms of dialogue with the public
- motivational programs

This strategy should be approved by the Government and backed up by a government resolution.

The main activities of the Reference Groups should include:

- Preparation of a structuralized dialogue based on current experience
- Organization of particular communication activities (national public hearing, 6 public hearings in individual localities etc.)
- Proposal of a strategy for involvement of the public in the process of selecting a location for the deep geological repository. This strategy should become a part of the Concept of Radioactive Waste and Spent Nuclear Fuel Management or it could be taken into account in its future re-assessment.

Program of activities of the Reference Group for the nearest period:

- 6<sup>th</sup> Meeting of RISCUM Reference Group – another meeting of the Reference Group should take place in October 2009. At this meeting organizational matters such as the following should be discussed:
  - possible ways of “institutionalisation” of the RISCUM Reference and Working Groups
  - possibilities of funding of the RISCUM Reference and Working Groups
  - specification of the Reference Group working topics – a proposal of a structured dialogue (national public hearings, public hearings in the six selected localities, etc.), proposal of the extent in which the strategy of the geological repository siting choice and the involvement of general public into the geological repository siting process inside the Reference Group should be solved. A discussion concerning the elaboration of the information material for the Office of the Government of the Czech Republic.
- The sixth meeting of the Reference Group should be preceded by an official meeting of representatives of the Ministry of Industry and Trade, the Ministry of the Environment or

RAWRA – at this meeting the question of how to secure legitimacy of the RISCOP Reference/Working Group and its funding should be discussed.

- 7<sup>th</sup> Meeting of RISCOP Reference Group – the meeting of the Reference Group should take place in November 2009. The proposal of a structured dialogue and the proposal of a public hearing at the national level that is planned for February 2010 should be discussed at this meeting.

A more detailed critical assessment of the RISCOP model application under the conditions of the Czech Republic in the problem of the geological repository siting from the point of view of sociology was made by Mrs. Zdenka Vajdova of the Institute of Sociology of the Academy of Sciences of the Czech Republic, who was also a member of the RISCOP Reference Group. Her materials present also a critical assessment of the RISCOP Reference Group activities and an outline of the possibilities for its further continuation even after terminating the EC ARGONA Project. Its full text is given in ANNEX No. 2.

Another critical assessment of the RISCOP model application in the problems of the geological repository siting process from the point of view of NGOs and the Ministry of Environment (MoE) were provided by other members of the RISCOP Reference Group, namely by Mrs. Hana Gabrielova for NGOs and Mr. Dalibor Strasky for MoE. Their assessments are presented in ANNEXES No 3 and 4.

In ANNEX 5, Kjell Andersson (Karita Research) and Clas-Otto Wene (Wenergy) give their comments on the report and the application of the RISCOP Model in the Czech Republic.

Abbreviations used:

SNF – spent nuclear fuel

HLW – high-level waste

RAW – radioactive waste

NWM – nuclear waste management

SONS – State Office for Nuclear Safety

RAWRA – Radioactive Waste Repository Authority

CTU-FNSPE – Czech Technical University - Faculty of Nuclear Science and Physical Engineering

CGS – Czech Geological Survey

NRI Rez plc – Nuclear Research Institute Rez, plc

CEZ plc – Czech Electricity Company

ITA Process: The Institutionalised Transparency and Accountability Process<sup>1</sup>

---

<sup>1</sup> Andersson, K., and Wene, C-O. The ITA Process<sup>TM</sup>. The Institutionalised Transparency and Accountability Process for clarity in policy making. Karita R: 08:01. ISBN 978-91-976858-1-8. Taebý 2008.

## **ANNEX No.1**

### **Agreement on Cooperation**

We (the parties concerned) made an agreement to become members of the RISCOS Reference Group that will be established within the framework of the program “The RISCOS model application in order to increase the transparency and active involvement of general public into the decision-making processes concerning the geological radioactive waste repository siting” (henceforth only: “The RISCOS model application”) that is a part of the EC project ARGONA – FP6-036413. The activities of the RISCOS Reference Group are scheduled for the period from June 1, 2008 to November 30, 2009. This agreement specifies the aims, organization, activities, financial resources, and documentation of “The RISCOS model application” program that will meet the requirements of the EC project ARGONA – FP6-036413 and of the ITA process (Institutionalised Transparency and Accountability Process).

#### **Project Aims:**

The principal aim of the sub-project (program) “The RISCOS model application” is to increase our common awareness on all aspects concerning the problems of the choice of a suitable locality for the RAW and SNF repository in order to increase the conditions for transparency and active involvement of general public into the decision-making process in compliance with the ITA process. An attention will be also paid to providing the general public with the possibility to inspect the project activities and the results obtained.

#### **Organization:**

The working group will prepare an actual plan of activities. The RISCOS Reference Group meetings will be called down for the program fulfilment examination, assessment of the events already accomplished, and discussion concerning planning of the forthcoming activities.

The RISCUM Reference Group Chairperson

Ing Hana Vojtechova – Nuclear Research Institute Rez, plc

The RISCUM Reference Group Vice Chairperson

Mgr. Lucie Steinerova – Radioactive Waste Repository Authority

Host Organizations for seminars and public hearings

Nuclear Research Institute Rez plc, Radioactive Waste Repository Authority

Working Group:

Representatives of NRI Rez, plc, RAWRA, Karita Research and Wenwrgy AB (Sweden) who are involved in the EC project ARGONA activities, any member of the reference group interested to be actively involved in the organization of individual activities.

Conditions for the incorporation of new partners (parties) and observers:

- willingness to participate in an open communication;
- willingness to participate actively on the fulfilment of the activities and aims agreed upon in the project “The RISCUM model application”.

Other organizational aspects:

- 1) Regular meetings of all RISCUM Reference Group members
- 2) Direct cooperation of all participants in regular meetings called down in reasonable time intervals – the individual representatives will thus have a better opportunity to know each other
- 3) All activities will be conducted in an independent and critical manner
- 4) All participants will be able to freely and openly present their attitudes and ideas, to put questions and comments
- 5) All accessible information will be freely available to all participants
- 6) The decision-making processes and the optimal variant choice of the geological repository siting will be conducted logically and transparently

- 7) The citizens are equal participants of the decision-making process of the given issues and will be able to affect both the discussion form (program, rules, moderation) and the decision-making process itself.

The last three conditions are important mainly for organizing the possible public hearings on the geological repository issues.

**Activities:**

- Search of methods for inciting an interest of the general public and responsible organizations on the problems of the radioactive waste and spent nuclear fuel management, particularly on the choice of a suitable locality for the geological repository siting in the connection with transparency and active involvement of the general public into the decision-making processes.
- Identification of the possibilities and methods for the application of the Swedish communication models RISCUM under the conditions of the Czech Republic – the identification of legislative and social differences given by the different historical backgrounds of the Czech Republic and Sweden.
- Establishment of communication means for mutual open communication between all stakeholders.
- Establishment of information channels for mediating dialog with the general public – to enhance the knowledge of general public of the radioactive waste and spent nuclear fuel management issues and, furthermore, in the field of the search for a suitable locality for the geological repository of radioactive waste siting. Organizing of various activities in order to increase the knowledgeableness of the general public – seminars, public hearings, etc.
- Elaboration of topics for the future discussions (seminars, public hearings, etc.):
  - Safety issues – securing the radiation safety
  - Choice of a suitable locality for the geological repository siting
  - Available technologies
- Definition of possible solutions of controversial issues and their clarification
- Decision-making processes – finding of methods and ways by means of which it would be possible to increase the transparency and participation of the general public

in the decision-making processes in the field of the geological repository of radioactive waste and spent nuclear fuel siting in the Czech Republic territory.

### **Financial Resources**

Costs associated with participation of individual stakeholders in the RISCOP Reference Group meetings, seminars, and public hearings, etc, will be usually covered by the individual stakeholders. Nevertheless, the project budget should provide for a small financial support assigned for covering the given costs of financially less strong parties. In cases when some of the parties will ask for this financial support, the project team will decide on its provision after consulting the other members of the RISCOP Reference Group. Other costs connected with the organization of individual activities will be funded from the project ARGONA – FP6-036413 resources in cooperation with NRI Rez plc and RAWRA.

### **Presentation of Results:**

The project team will decide on the extent and form of documents after an agreement with the RISCOP Reference Group in dependence on the financial resources available. The final aim of the project is not a recommendation or decision concerning the choice of the given locality for the geological repository or whether a certain technology should or should not be adopted, but rather the elucidation of all questions concerning the given problems, which is also the gist of the ITA process. Nevertheless, the conclusions could provide information how to achieve a high level of the decision-making process in the given field, the elucidation and assessment of the actual consequences of the alternative decisions. The information obtained could be also used for the identification of those aspects that are seemingly insufficiently publicly discussed.

Presentation of results will usually proceed in the form of minutes from the individual sessions – meetings, seminars, public hearings, etc. The project will be closed with a final report.

The working group is responsible for the preparation of documents. Proposals of individual documents (minutes or reports) will be presented to the individual participants for inspection and comments. Individual participants can submit maximum two pages of texts (comments) that will be incorporated into the final report in the form of an Appendix.



**Approval:**

This Agreement on Cooperation is a part of the minutes from the meeting held in Prague on May 12, 2008, and will be approved in the next meeting of the RISOCM Reference Group scheduled for October 2008.

**Members:**

<b>Organization</b>	<b>Contact Person</b>
Ministry of Industry and Trade	Pavel Novotny
Ministry of Environment	Peter Palensky Vladimir Dadak Dalibor Strasky
State Office of Nuclear Safety	Peter Lietava Karel Jindrich Martin Brezina
Radioactive Waste Repository Authority	Lucie Steinerova
Nuclear Research Institute Rez, plc	Hana Vojtechova Antonin Vokal
Institute of Sociology of the Academy of Sciences of the Czech Republic, R&D institution	Zdenka Vajdova
Calla – NGOs`	Hana Gabrielova
<i>Local municipalities representatives:</i>	
Dolni Cerekev	Zdenek Jirsa
Rouchovany	Vladimir Cerny
Lubenec	Bohumil Peterka
<i>Foreign participants:</i>	
Karita Research, Sweden	Kjell Andersson
Wenergy AB, Sweden	Clas-Otto Wene

**Comments**  
**to the ARGONA project report**  
**„Application of the RISCUM model in the Czech Republic“**  
**(henceforth only “report”)**

*Mrs. Zdenka Vajdova, Institute of Sociology of the Academy of Sciences of the Czech Republic, v.v.i., member of the RISCUM Reference Group*

The Report presents comprehensive information on the model application, it is properly structuralized, and an adequate space is devoted to the basic aspects of the model application. As such I consider both the transparency of the Reference Group (RG) activities and the realization of the public hearing in May 2009. The public hearing organization was executed by the Working Group (WG) with sufficient respect to the public hearing aims that were defined as “to make the repository siting process more comprehensible and to find or increase the mutual understanding between the process participants”. In this formulation of the aim it is possible to recognize a change that was achieved in the geological repository siting process in connection with the RISCUM model application. I see this change in the step aside from the former siding with the state institutions to the attitude of stakeholders. It is a step from persuasion and single-sided explanation to the attempt to mutual listening and eventual mutual understanding of all stakeholders. It became evident that the present situation in the geological repository siting process has under the Czech conditions, similarly as elsewhere, its technical and socially-political aspects. The RISCUM model application revealed the socially-political side of the problem and its negligence was fully exposed in the public hearing results. The socially-political aspect of the process is thus a problem for the solution of which it is necessary to search a key <sup>1)</sup>. I assume that some kind of continuation in the RISCUM model idea, further existence and activities of RG, could be such a key.

It became evident that an event such as was the public hearing in Stirin could be only a very first action in the communication between the participants of the geological repository siting process. Again it concerned the explanation and presentation of important information from

the side of state administrative bodies and declaration of the already formed attitudes and opinions of the representatives of the respective localities. However, if the negotiations should proceed with respect to the democratic principles and if the siting process should not be terminated by one-sided decision that will be enforced by power (this concerns both the state administration bodies and localities), communication should continue in the same spirit as that started by the RISCUM model. The activities of RG and WG are decisive for the future continuation of the structured dialogue of stakeholders. The assessment of the public hearing and conclusions given in the report under scrutiny are a good starting point for the contemplation how to proceed.

### **1. Professionalization and institutionalization of the WG**

For the preparation of communication process activities and for their actual realization a team of various professionals who would be WG employees is a prerequisite *sine qua non*. It concerns people with good knowledge of the geological repository technical parameters as well as people educated in social sciences. The latter ones should be specialists in the field of management risks and deliberation as in the social process of communication. An open undertaking of transparency and demonstrability of their work should be their common and primary qualification. Their activities should be manifold and orientated to the clearly defined target groups. Not only to the population of the respective localities but also to the population from the broader vicinity and to all citizens of the Czech Republic. NGOs working in the respective territory and NGOs with interests in nuclear power and issues connected with it should also be a target group. The politicians of various levels (community, region, parliament) constitute another target group. It is evident that the designing of effective activities or obtaining information how the problem is solved abroad and what they do in it is not a work for few people the main interests of which are elsewhere. I am not sure to which of the already existing institutions such body should belong. The Academy of Sciences of the Czech Republic or, in the last resort, the Ministry of Industry and Trade could be a suitable solution. The financial balance could be inferred at least partially from the costs of the ARGONA project.

## **2. Institutionalization of RG**

At present RG is a group of the representatives of several organizations. Its commission is to ensure that the communication between the repository siting process stakeholders is transparent in maximum degree. In order to make this commission in a sufficiently transparent way, RG should be trustworthy with respect to all stakeholders and within the RG to all its members. Nothing in its role should be changed if RG should continue its works even after the ARGONA project termination. Its existence and activities are imaginable in the form of an institution of one the Government Councils or, eventually, of a Parliament Committee. However, we should pose the question what should be its composition to fulfill the trustworthiness condition. Are the institutions represented in RG trustworthy? Or is the trustworthiness of the institutions derived from the work and activities of their employees? On what does the RG trustworthiness depend? This rather complicated question need not be solved at present. The present composition of RG was usually able to ensure trust inside the group. This means to assume that the motivation of opinions presented by each individual participating on the meeting complies with the RG's commission.

The present RG is composed of the representatives of state bodies interested in the management of waste (Ministry of Industry and Trade, Ministry of Environment, State Office of Nuclear Safety, NRI, and RAWRA), one of the non-profit organizations (CALLA), one academic institution (Institute of Sociology of the Academy of Sciences of the Czech Republic) and of the representatives of some of the respective communities. The number of members allowed efficient meetings. The participating institutions represent an entire spectrum of interests connected with the geological repository and at least one institution outside these interests. For the eventual further continuation of RG's activities it would be propitious if the representatives of all respective localities, and possibly also a representative of the NGOs Center for Community Works, are the members of RG.

## **3. Research Project (e.g., in the form of RISCOP application continuation)**

Within the framework of such project both groups, WG as well as RG, could pursue its works. The institution that would be the implementer of the project would be the institutional background for both these groups. A question arises whether it is possible to find a topic for such a project in one of the European or Czech research projects. It should be taken into

consideration whether the research project background would be able to provide for the necessary activities, namely of WG, for ensuring a more effective siting process in terms of transparency and adhering to the deliberation rules.

---

**Note.**

*<sup>1)</sup> Both sociology and politics know these issues under the term deliberation. In the Czech language no adequately good term has been so far found. Until now, the deliberation practice in public matters is weak in the Czech milieu. The term *rokování* (debate) could possibly be a good substitution for the English term. For this occasion I shall use the term *deliberation* and I shall only shortly mention what is understood under this term in the published literature that is now rather extensive, even with its own electronic periodic. It means such social process of mutual communication that implies*

- *that its every participant (stakeholder, everybody involved by the action) would be given the same opportunity to speak;*
- *this approach assumes that everybody has right to understand what are the other participants speaking about (the discussion is made in a comprehensible language and there is enough time for it) and also an obligation to take into consideration the opinions of other participants – both these conditions mean that all participants attentively listen to each other;*
- *and a mutual respect.*

*The aim is to achieve a mutual consensus of the participants.*

**Comments  
to the ARGONA project report  
„Application of the RISCUM model in the Czech Republic“  
(henceforth only “report”)**

*Mrs. Hana Gabrielova, Calla (NGOs), member of the RISCUM Reference Group*

The report recommends further existence of the Reference Group established on the ARGONA project basis. From the point of view of the selection of the representatives of this Group it cannot be recommended for the future works. Neither the representatives of communities nor those of NGOs have been elected transparently into this Group. The non-profit-making organizations usually elect their representatives by means of the Green Circle platform. Also the elections of the self-governing bodies' representatives must proceed in a democratic way, with the full participation of all respective communities.

The present governmental conception of the nuclear waste management peters out and it is necessary to work out a new one that will take into consideration the development of this process since 2002 and will also contain binding recommendations for future steps. It should comprise a proposal for establishing an independent working group, the members of which would be chosen transparently and democratically. The group should be formed not only by the representatives of experts, representatives of stakeholders (of communities as well as of NGOs), sociologists, forecasters, but also of the representatives of the parliament, senate and parliament committees. The group need not be institutionalized. RAWRA and its Board of Directors are already institutions authorized to solve these issues and to establish other structures seems to be superfluous. The aim of the new working group should not be the choice of the locality siting but rather the involvement of general public and an attempt to start a dialogue of all stakeholders. Therefore, the group should not be charged to prepare materials concerning the repository siting for the Government. The working group should work in the general public interests, should continuously inform on the locality siting procedure, and it should verify the critical comments of the public on the basis of the right to

have an access to all basic documents. It should transmit expert and independent recommendations resulting from the two-sided dialogue to the responsible authorities. The activities of this group should be financed from the nuclear account.

Inspiration can be found in Germany, where a similar group denoted as AkEnd (Arbeitskreis Auswahlverfahren Endlagerstandorte) was established in January 1999 by the Federal Ministry of Environment. This group was designed to elaborate a procedure and criteria for the search of the best locality for the repository of all radioactive wastes in Germany but not to make the choice itself. Germany decided for this approach due to the failure of the single-sided method of an administrative decision (decision – announcement – defending). This method is so far still applied in the Czech Republic in spite of the fact that it also does not bring any results. Unfortunately, the five-year moratorium on the exploration works was not used for the reconsideration of the unsuccessful approach and for the development of a better one. This erroneous approach resulted in the fact that the geologically really suitable localities are “depreciated” as the local administrative bodies are bound to adopt the results of the local referendums<sup>2</sup> for rejecting any activities aiming to the locality siting. The public refusal is considerable and the responsible authorities are thus inclining to use an “enforced” solution.

The public hearing in Stirin can be appreciated as beneficial because any dialogue in this little discussed field is an asset. However, only the change of the approach to the rights of stakeholders will constitute an actual benefit in the entire process of the geological repository siting. The unequivocal undertaking of RAWRA that the geological survey will be made only with the consent of all 6 localities was surprisingly positive. It is not necessary to demur to some more emotional opinions of the representatives of the localities or to their unwillingness to listen to the opposite opinions. They should be considered as a natural reaction to the period when the stakeholders had no opportunity to express their attitudes to the planned intention to build a repository. The report's statement that all participants of the public hearing, including the representatives of communities and NGOs, agreed upon the necessity to build the geological repository in the territory of the Czech Republic is slightly misleading. In Stirin there were also representatives of localities who strictly oppose the existence of a repository in their territories or who extend the discussion to the possibility to build a

---

<sup>2</sup> Table 1: The results of the referendums on the siting a deep repository

collective European repository or who look for another solution. It can be unambiguously agreed with the Report's statement that in the present situation it is more important to listen to the opinions of the general public and to deal with their objections than to provide them with the highest possible amount of information.

The formulation of a compensation (motivation) program is also a step forward as the construction and operation of such facility will bring forth certain difficulties and it is understandable that the party that causes an injury attempts to compensate it. However, it is not possible to motivate the local population for agreeing with a project in the execution of which they will not have the possibility to enforce their own rights.

Already for many years the respective communities struggle for the possibility to participate on the activities connected with the search for a suitable siting of the geological repository. By means of memorandums<sup>3</sup> they ask for such changes in the Atomic Act that will give them the possibility to reject the siting of a nuclear facility and will ensure them the recognition of their negative attitude. In 2009 in their general meeting in Bozejovice the representatives of all localities signed a collective appeal requesting the recognition of referendums, a change of the Atomic Act and Building Act, and a revision of the concept of the spent nuclear fuel management. Simultaneously they request not to increase the amounts of the high level waste until a finite and concrete solution is found. Their further production connected with the plans for building new reactor units is under the present situation highly irresponsible and means another fundamental worsening of the already hardly solvable situation with the existing radioactive waste.

The points-of-view of communities should be respected already in the period of the geological survey planning in their territory. In this respect the situation is more complicated as it is subject to the Mining Act of 1988. This act was amended already many times, however, it still does not stipulate the agreement of the landowners in the geological surveys.

The Czech Republic, in contradistinction to some EU countries, does not consider the official approval of communities as a legal prerequisite for a nuclear facility siting. For instance, in

---

<sup>3</sup> Memorandum took place in 2007 in the localities Pacejov, Lodherov and Nadejkov.



Sweden, the country of the RISCUM communication model origin, the principle of voluntariness as well as the right of veto is applied. The communities can withdraw from the project at every new phase of the process. This fact disagrees with the thesis that the condition of the community agreement with the repository will mean the blocking of the project. Just the opposite, the right of the local population to veto the repository made the process more civilized and reduced the collisions between the administrative bodies and locals.

Table 1: The results of the referendums on the siting a deep repository

Municipality	Lokality	Date	Number of eligible voters	Participation [%]	Yes [%]	No [%]	invalid votes [%]
Oslavicka	Budisov	13.9.2003	80	80,0	1,5	98,5	0
Nadejkov	Bozejovice-Vlksice	15.11.2003	584	67,5	2,8	95,7	1,5
Prestenice	Bozejovice-Vlksice	15.11.2003	221	76,4	0,6	99,4	0
Bozetice	Bozejovice-Vlksice	15.11.2003	300	73	2,8	97,2	0
Hodov	Budisov	6.1.2004	230	72,5	4,0	96,0	0
Rudikov	Budisov	24.1.2004	517	71,9	4,0	95,7	0,3
Budisov	Budisov	31.1.2004	903	59,1	12,1	81,8	6,1
Naramec	Budisov	31.1.2004	297	71,7	5,2	93,4	1,4
Lodherov	Lodherov	31.1.2004	470	84	0,6	99,4	0
Destna	Lodherov	31.1.2004	525	63,4	1,8	93,1	5,1
Zhor	Bozejovice-Vlksice	7.2.2004	217	69,1	0	99,3	0,7
Jistebnice	Bozejovice-Vlksice	17.4.2004	1 606	51,25	1,8	97,3	0,7
Pacejov	Pacejov	24.4.2004	630	80,8	1,75	95,5	2,75
Manovice	Pacejov	24.4.2004	38	89,5	0	97,1	2,9
Olsany	Pacejov	24.4.2004		95,1	0	99,4	0,6
Rohy	Budisov	12.6.2004	112	65,2	9,6	89	1,4
Hojkov	Rohozna	28.4.2007	131	92,4	0	98,3	5,9
Nový Rychnov	Rohozna	29.9.2007	809	47,2 % - invalid!	5,2	94,8	0
Opatov	Rohozna	10.11.2007	160	67,5	2,8	95,4	1,8
Dusejov	Rohozna	24.11.2007	329	65,3	3,7	95,8	0,5
Jedlov	Rohozna	24.11.2007	150	68,7	1,9	98,1	0
Milicov	Rohozna	8.12.2007	103	86,4	1,1	95,5	3,4
Dvorce	Rohozna	15.12.2007	150	73,3	4,5	95,5	0
Hubenov	Rohozna	15.12.2007	115	82,6	1,1	98,9	0
Cejle	Rohozna	22.3.2008	347	72,6	15,1	79,4	5,5

Results so far made local referendums on the issue:

“Do you agree with the building a deep repository of spent nuclear fuel and high-level waste on the urban area?”

The Rohozna locality question was:

"Do you agree that the community (*the council of the municipality*) use all its legal powers to prevent the building a deep repository of spent nuclear fuel and high-level waste in the Rohozna locality?"

**Comments  
to the ARGONA project report  
„Application of the RISCUM model in the Czech Republic“**

*Mr. Dalibor Strasky, representative of the Ministry of the Environment, member of the  
RISCUM Reference Group*

The RISCUM model is certainly a suitable tool for the solution of problems as those that we are faced with. However, I have to state that its application is coming with the delay of about 7-8 years. The model is applied in time and in situation when, speaking metaphorically, the game is already long being played. My opinion is that the model strength lies in the fact that it is put into operation at the beginning of the game or already before its onset when the game's rules are defined. Today we are in a situation of an already existing conflict, the participants of which have more or less their own, precisely defined opinions and formed their own position from which in many cases they cannot recede. Now, minimum two possibilities do exist – either to look for another model more suitable for the solution of conflict situations or to try “to reverse” the situation into the phase when the RISCUM model application would be ideal.

One of the reasons for the present state of the affair is the document bearing in its title the word “conception”, which – however – does not meet even the formal attributes of a conception. In spite that it brings out a description of the authors' ideas on the target state, it does not elaborate the ways how to achieve this final state. To speak in concrete terms – the document does not say how to seek a locality suitable for the construction of the repository, how to work with the general public during this process, how to involve in it all subjects that perhaps only believe that they might say something to the given issues. Thus, it is not possible to blame the respective authorities that they had chosen a method that brought the solution of the problem into a blind alley. Unfortunately there is a danger that the method that can be denoted only by a schema administrative decision – enforcement of its realization already

“depreciated” localities most suitable for the repository siting. The extension of the search of the locality into the military areas (Boletice and Hradiste) indicates that the safety criterion might be substituted by the criterion of the enforcement easiness. Instead of a locality suitable from the point of view of geology a locality suitable only politically may be chosen – as our German colleagues use to say. It is undisputable that a real conception of the spent nuclear fuel management should be elaborated that will comprise also the methods how to achieve the given aim. To my mind the Reference Group offers a possibility for the involvement of the stakeholders into the solution of this issue. It would be thus very apt to use this opportunity to include – if necessary – the representatives of other branches into the present Reference Group with the aim to prepare a proposal of the conception in question. Naturally, such a conception should apply the principles of the RISCUM model.

**Comments**  
**to the ARGONA project report**  
**„Application of the RISCUM model in the Czech Republic“**  
**(henceforth only “report”)**

*Kjell Andersson, Karita Research, ARGONA project manager and Clas-Otto Wene, Wenergy,  
both members of the RISCUM Working Group*

We recognize that the RISCUM application in the Czech Republic within the ARGONA Project is judged by Czech partners as an important step towards improved dialogue. One reason for this may be that participants agreed on the principles and philosophy of the RISCUM Model and that this gave a platform for the design of activities. Another reason may be that the Reference Group provided a “safe space” for discussions in the meaning of a process where different stakeholders could move forward together to increase their understanding of the issues and also of their respective views without being felt like hostages for a certain purpose. The fact that they together had the task to form the hearing held on May 23, 2009 in the Chateau Stirin added a certain amount of fairness to the process.

### **Room for improvement**

A number of factors implied that certain features of the RISCUM Model were only used to a limited extent. Among these factors were the novelty of the approach (meaning it took time to be communicated) and the limits that they were given by the ARGONA Project in terms of time and resources. For example, only one public hearing could be organized within the constraints given.

The main events in RISCUM are hearings with *stretching*, where stakeholder arguments are challenged from different angles to clarify claims to truth, legitimacy and authenticity.

This is a tailored hearing format to gain transparency. It should be noted that the stretching is for all stakeholders, not just the implementer. The actual hearings may be combined with other kinds of dialogue formats including group-work activities. The hearing held in Stirin had elements of stretching but this could be more fully developed for future RISCUM activities in the Czech Republic.

Decision processes must often deal with different levels of discussion. For example, in selecting a site for high level nuclear waste, the expert work at the ground level (geological investigation, risk assessment, etc.) takes place within a broader framework for managing the program at the national level. However, the site-selection program itself depends on a waste management method decided at a higher societal level. The RISCUM Model can help bringing organization and order into the debate, since claims of truth, legitimacy and authenticity are made at each level of debate. This eliminates the tendency to “talk about everything” at the same event because if the Reference Group has agreed on the level structure, everyone can trust that his or her issues will be subject for discussion at specified points in time.

We fully understand that these features of the model could only be experienced at a limited scale in ARGONA, given the circumstances, but they can be used in a more systematic and comprehensive way in a longer term effort.

### **The EU research context**

Obviously the EU ARGONA project provided a framework within which it was possible to apply RISCUM in an “experimental way” but still having the possibility to make a difference for the Czech programme. The EU research context may have given the RISCUM application certain positive effects such as a level of legitimacy but also a sense of an experimental situation making it “less risky” for stakeholders to join than would otherwise had been the case, and finally the EU funding. There are also possible negative factors such as restricted time limits and a less legitimacy as part of the Czech repository programme. Nevertheless, one can say that EU research in this case had a role of catalyst, while at the same time the work gave feedback to the European Union as a whole.

## **Future work**

The report makes the statement that “it is necessary to consider the possible ways of securing legitimacy/institutionalisation of the RISCUM Working and Reference Groups outside the ARGONA project” and the report explores ways for how this can be done. At the Stirin hearing we could observe that some participants had taken rather blocked positions with regard to repository siting. It seems crucial that further blocking of stakeholder positions can be counteracted, and instead an atmosphere of trustful dialogue loosening up such blocking should be stimulated. This will be up to all stakeholders to accomplish and the RISCUM Model application can provide a framework. For this continuing work to design the future arenas for fair dialogue, the RISCUM Model foresees provides tools for a deeper understanding of the organisational framework managing the nuclear waste; its authenticity, its different functions and its constraints.

The pros and cons of the EU research context given above will still be valid for future implementation, and it is up to Czech partners to make the appropriate considerations. In any way, it seems evident that national implementation cannot rely on EU research as funding cannot be taken for given, any EU research project has a given life time, it requires certain “extra” efforts etc. On the other hand, an EU research project can give added value such as empowerment by exchange of experiences with similar partners in other countries, new impulses, a broader theoretical base, etc. so maybe the ideal situation would be the combination of an autonomous national RISCUM platform taking advantage of the added value an EU project can give.

One issue raised in the report itself as well as by commentators is the appropriate level of institutionalisation of a RISCUM Reference Group and Working Group. The report explores different possibilities and it is up to Czech stakeholders to agree on this. Here we can only say that a certain amount of formalization and rules may be necessary to avoid the risk that the Reference Group with time abandons its core principles and develops to a “discussion group”. The ARGONA project results support the idea of “formally organized transparency arenas as a way to make regular intermediate 'checkups' of the status of factual and value-laden issues as well as of the actors’ intentions and interests”. On the other hand, ARGONA also makes the conclusion that in general there are institutional settings at hand that can be used for the

purpose of participation and transparency and that there is a high degree of freedom inside the current legislation for participation and transparency initiatives and improvements. This is, however, a broad statement which needs to be scrutinized in each national context.