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ARGONA

Arenas for Risk Governance

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First annual activity summary

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Dissemination level

PU	Public	PU
RE	Restricted to a group specified by the partners of the ARGONA project	
CO	Confidential, only for partners of the ARGONA project	

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1 Background and objectives

The point of departure for the ARGONA project is that participation and transparency are key elements of effective risk governance. The project therefore intends to demonstrate how participation and transparency can be implemented in radioactive waste management (RWM) programmes. The project consists of a series of work packages that starts with an analysis of the policy-making structures that exist within the EU and in the participating countries, including EU directives as well as national nuclear safety and environmental legislation.

The acronym ARGONA stands for “Arenas for Risk Governance” and the project specifically addresses the three arenas of *transparency* (as provided by the RISCUM model), *deliberation* (which draws on a notion of procedural legitimacy), and *representative democracy*. It investigates how the approaches of transparency and deliberation relate to each other and also how they relate to the political system in which decisions, for example on the final disposal of nuclear waste, are ultimately taken. The project then turns to study the role played by *mediators*, who facilitate public engagement with nuclear waste management issues, and the *conduct of the conduct* of public consultations. By the latter is meant the communication of models used for deliberation and transparency. Furthermore, the project investigates how good risk communication can be organised taking cultural aspects and different arenas into account.

In a central part of the project major efforts are made to test and apply approaches to transparency and participation by making explicit what it would mean to use the RISCUM model and other approaches within different cultural and organisational settings. Finally, the ARGONA partners develop guidelines for the application of novel approaches that will enhance real progress in RWM programmes.

With this background the following **operational goals** have been specified:

- To map policy making structures within EU in general and in the participating countries in particular
- To clarify the roles of the deliberative and the transparency approaches in policy making structures
- To further implement the RISCUM model in Europe
- To test a number of approaches to stakeholder participation within the Czech system
- To disseminate good risk communication techniques and strategies across national borders, and to specify circumstances that require more specific and unique national or group considerations.
- To improve the understanding of how information systems, such as ERMOM, can be used for effective risk communication
- To develop a framework for how behavioural sciences findings and more technical approaches can be integrated in risk communication
- To improve the knowledge of how different approaches to stakeholder participation can enhance public engagement and involvement.
- To increase the awareness among decision makers and other stakeholders of the roles of “mediators” of public participation methods, so that their advices can be effectively reviewed before participation methods are implemented.
- To produce guidelines for strengthening existing policy making structures by the application of novel approaches to participation and transparency in nuclear waste management.

- To disseminate the ARGONA approaches and results to other policy making areas, such as biotechnology, oil industry and other energy related areas.

2 Project activities

The project is performed in six work packages:

WP1: Policy-making structures

WP2: Theoretical perspectives on participation and democracy

WP3: Mediators of issues and mediators of process

WP4: Risk communication

WP5: Evaluation, testing and application of participatory approaches

WP6: Guidelines for participation and transparency.

Policy-making structures (*Work Package 1*)

As a point of departure for the effort to clarify how participation and transparency link to the political and legal systems it is necessary to map the relevant laws, regulatory roles and guidance documents in the participating countries, as well as EU directives and international conventions. Differences in the implementation of directives and conventions are analysed. Structural differences between countries with respect to the responsibility for the management of nuclear waste and the role of regulators are clarified, as well the relations between formal and informal processes. The focus is to understand the requirements for participation and transparency and if there are any limitations to these.

The objectives of this work package are:

- to clarify the legal and structural frameworks within which processes of transparency and participation take place;
- to analyse what are the requirements for, but also if there are any limitations of, participation within these systems.

Theoretical perspectives on participation and democracy (*Work Package 2*)

Participative and deliberative processes are often advocated for instrumental, moral or knowledge grounds. A number of concepts are used in literature such as *participative*, *deliberative* and *discursive* democracy. The term “deliberative democracy” is sometimes used as an umbrella concept for them. The RISCUM model adds to the essentially free and unconstrained communication in the *deliberative arena* with the communications going on in a *transparency arena*. This should lead to transparency and insight in order for the system to work on the basis of a broader societal awareness. Both the deliberative and the transparency arenas have to find their places within the framework of the existing political process. This is called the *arena of representative democracy*.

In WP2, a theoretical analysis will be made of the relationships between the three arenas. The WP investigates how the approaches of transparency and deliberation relate to each other and also how they relate to the political system in which the decisions, for example on the final disposal of nuclear waste, are ultimately taken.

The objectives of this work package are:

- to carry out a detailed analysis of the RISCUM model philosophy through a confrontation with other philosophical frameworks;
- to make a theoretical analysis of the links between the three ‘arenas’;
- to make practical recommendations for the improvement of the RISCUM framework;
- to provide a link with the other work packages in order to be able to give a concrete application for the research results.

Mediators of issues and mediators of process (*Work Package 3*)

The complexity of RWM issues has made it necessary for key stakeholders to introduce *mediators*, who facilitate public engagement by translating complex technological concerns into matters of immediate practical concern for individual and collective actors in society. Their roles will be studied in ARGONA by case studies with focus on the Swedish example. Furthermore, the project studies *the conduct of the conduct* of public consultations. By this is meant the communication models used, the organisation of consultation exercises, selection criteria of participants, forms of interactions between participants, and finally the various outcomes in terms of reports and policy outcomes. This conduct of conduct, which typically takes place at the interfaces between the three arenas of deliberation, transparency and politics, is facilitated by a new type of expertise, the *mediators of process*. Also their role in RWM will be investigated in this part of the project.

The objectives of this work package are:

- to carry out a detailed case study of the design, conduct and outcome of public consultations on the siting of a deep geological repository for spent nuclear fuel in Sweden;
- one focus is on the role played by *mediators*, who facilitate public engagement with nuclear waste management issues by translating complex technological concerns into matters of immediate practical concern for individual and collective actors in society;
- a second focus is on *the conduct of the conduct* of public consultations - the communication models used, the organisation of consultation exercises, selection criteria of participants, forms of interactions between participants and finally the various outcomes of in terms of reports, and policy outcomes.

Risk communication (*Work Package 4*)

This part of the project explores different meanings of risk, and investigates how good risk communication can be built taking cultural aspects into account. The insight that risk on the one hand can be defined in a technically precise manner, and on the other hand in a wider, and from a political point of view a more relevant, context, leads to frustration among both experts and policy makers. There is thus a need to develop better possibilities for risk communication thereby providing a systematic and comparative basis for the selection between risk management options.

WP4 will address this need for an integrated approach to improved risk governance with two methods. The first approach, conducted by Stavanger University, is to compare and summarise different countries’ approaches to, and utilisations of, risk communication strategies in the managing and storing of nuclear wastes. This will be done by two years of data collection using interviews and focus groups that will include scientific expert groups, central and local

authorities, as well as specific interest groups. Then, during the third year, discussions will be organized to get feed-back on preliminary findings before the final analysis is made.

The second approach seeks to find ways to communicate risk assessment with lay people using technical software tools. The results of the different approaches to risk communication explored in WP4 will be integrated to create a carefully planned programme aimed at improving public awareness about risks associated with nuclear waste with a systematic approach to risk communication.

The overall objective of this work package is thus to create a carefully planned programme aimed at improving public awareness about risks associated with nuclear waste.

Evaluation, testing and application of participatory approaches (*Work Package 5*)

One of the tasks of the ARGONA project is to test and apply approaches to transparency and participation within the participating countries. This includes using methods like consensus conferences and other participatory methods as well as the RISCUM model in “dry runs” but also in the real environment of RWM programmes, especially in the Czech Republic. The RISCUM model will also be tested in the Swedish case. Furthermore, we will carry out a review of the design, conduct and outcome of public consultations for the establishment of waste management projects including a new low level waste facility (Dounreay) in Scotland. Another activity will be to investigate the role of local referenda and compensation in the siting of nuclear waste repositories. All these activities together will make it explicit what are the possibilities and limitations of various deliberative approaches and what it means to apply the RISCUM model.

The objective of this work package is to demonstrate how a structured framework for transparency and participation can be designed for a real process (of e.g. site selection) by transferring the theoretical principles explored in other work packages to practical working arrangements.

Guidelines for participation and transparency (*Work Package 6*)

The ARGONA research activities will result in guidelines for the application of new approaches in the radioactive waste sector taking account of national differences, such as culture, history, legal and administrative regimes. The guidelines will be grounded in the theoretical achievements and practical experiences made in the project and in active communication with national and local authorities as well non-governmental organisations.

Issues that will be addressed are “best-practice SEA¹ and EIA²”, how they can be umbrellas for participative and stretching activities, how various processes can ensure fairness and contribute to trust, as well as what are the roles of stakeholders, such as implementers, regulators, NGOs and communities. A key issue is to what extent transparency, combined with tailored participation, can be made efficient not only from a democratic perspective, but also from the perspective of RWM programmes. Advice will be given how to link “the three arenas” of transparency, deliberation and representative democracy.

¹ Strategic environmental assessment.

² Environmental impact assessment.

The objective of this final work package is thus to provide the European Union with guidelines for participation and transparency in nuclear waste management programmes.

3 Status of the ARGONA project at the end of the first year

The work of the ARGONA project is largely in progress towards the objectives described in the DoW and there are no deviations from the project work programme expected to have any significant impact on project results. A kick-off meeting was held in October 2006 and a first project meeting in Petten, the Netherlands, in October 2007. Furthermore, meetings have been coordinated between the participants of the different work-packages, in particular WP2 and WP3. Some changes in staff have occurred during the first year, most notably, a change in lead participant from NRI REZ in the Czech Republic. Furthermore, there is a change in the lead participants from JRC, and a revision in the JRC's input to the project.

Coordination with other EU projects that deal with the governance of radioactive waste management has been launched, including a common web-portal for the ARGONA, CIP and OBRA governance projects (www.radwastegovernance.eu). Furthermore, a liaison committee meeting between the ARGONA, CIP and OBRA projects was held in Prague on October 3, 2007.

Regarding the progress of the ARGONA project according to the DoW the main steps of the work include the following aspects:

- The surveying/mapping out of the institutional framework for process of transparency and participation in the field of management of nuclear radioactive waste has been started as a part of WP1, a questionnaire to assemble information on which the status report is based has been designed and distributed, and the analysis has been started.
- As a part of establishing a theoretical basis for the project, based upon the RISCUM model philosophy, a literature review on risk governance, decision making with special focus on deliberative democracy and participation and complex dynamic systems, was conducted as a part of WP2. The results of the review were presented in a first report at the end of 2007.
- As a part of the study of the actual conduction of public consultations, including the role played by different actors, evaluations have been carried out on theoretical elaboration of concepts on the evaluation of methods of mediation of processes. Actual events, i.e. the GM national series conducted in the UK in 2003, were evaluated and the public mediation process with regard to the disposal of nuclear waste in Sweden and the UK was studied. A first report, *Mediators of issues and mediators of process: A theoretical framework* (Deliverable 4, WP3) is to be produced at the end of 2007.
- As a part of the work on the practical experiences and future application of communication strategies in managing and storing of nuclear wastes. As a part of this work, literature was reviewed and interviews were conducted in UK, Slovakia and Sweden. As a part of this work, a sub work package (WP4.2) was revised and the new objectives were to contribute to bridge the gap between scientists' and other stakeholders' perceptions on safety of repositories for nuclear waste.

- Work towards transferring the theoretical principles explored in other work packages to practical working arrangements has been carried out in three countries in parallel, the Czech Republic, UK, and Finland. As a part of this work, interviews have been conducted, opinion polls carried out as well as future participatory events, testing different elements of the process, have been developed.

4 Participants

The participating originations in the ARGONA project are given in the table below. The project is coordinated by Josefin Päiviö Jonsson, SKI, and managed by Kjell Andersson, Karita Research. During Mrs Jonsson's maternity leave, 8 October 2007 to 1 May 2008, Holmfridur Bjarnadottir acted as coordinator.

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Project website: <http://www.argonaproject.eu>.

Part- ner N ^o	Partner organisation name	Short name	Country	Project entry month	Project exit month
1	Swedish Nuclear Power Inspectorate	SKI	Sweden	1	36
2	Karita Research AB	Karita	Sweden	1	36
3	Göteborg University	UGBG	Sweden	1	36
4	Nuclear Research Institute Rez plc	NRI REZ	Czech Re- public	1	36
5	University of Tampere	UTA	Finland	1	36
6	DECONTA	DECONTA	Slovakia	1	36
7	SCK.CEN	SCK.CEN	Belgium	1	36
8	University of Lancaster	ULANC	UK	1	36
9	RAWRA	RAWRA	Czech Re- public	1	36
10	Stockholm University	SU	Sweden	1	36
11	Joint Research Centre	EC-JRC-IE	The Nether- lands	1	36
12	Galson Sciences Ltd	GSL	UK	1	36
13	University of Stavanger	UiS	Norway	1	36
14	Wenergy AB	WENERGY	Sweden	1	36