SKI Report 2004:12

Research

Transparency, Citizen Participation, Organisations and Roles

Report from the Third RISCOM II Workshop

Kjell Andersson
Josefin Päiviö

October 2003

ISSN 1104–1374
ISRN SKI-R-04/12-SE

SKI

Foreword: RISCOM II project overview

RISCOM II is a project within EC's 5:th framework programme. The RISCOM model for transparency was developed earlier within a Pilot Project funded by SKI and SSI. RISCOM II, which is a three-year project, started in November 2000.

Objectives

The overall objective is to support the participating organisations and the European Union in developing transparency in their nuclear waste programmes and means for a greater degree of public participation. Although the focus is on nuclear waste, findings are expected to be relevant for decision making in complex issues in a much wider context.

Description of the work

The project has six Work Packages (WPs). In WP 1, a study is undertaken of issues raised in performance assessment to better understand how factual elements relate to value-laden issues. There is also an analysis made of statements made by the implementers, regulators, municipalities and interest groups during actual EIA and review processes within Europe. In WP 2 an organisation model (VIPLAN) is used to diagnose structural issues affecting transparency in the French, the UK and the Swedish systems. In WP 3 a special meeting format (Team Syntegrity) is used to promote the development of consensus and a "European approach" to public participation.

In WP 4, a range of public participation processes are analysed and a few are selected for experimental testing. A schools web site will lead to greater understanding of how information technology can be utilised to engage citizens in decision making. In WP 5 a hearing format has been developed, that should allow the public to evaluate stakeholders' and experts' arguments and authenticity, without creating an adversarial situation. To facilitate integration of the project results and to provide forums for European added value, two topical workshops and a final workshop have been held during the course of the project (WP 6).

The current workshop report

This workshop was the final one in a series of three workshops within the RISCOM II project. It was an event where the RISCOM group of researchers disseminated the results to a wider circle of the nuclear waste management community in Europe with the focus on their own "peers" in participating countries. However, the aim was not just to present RISCOM II results but also to see them in the context of adjacent projects. Especially, the workshop was set up in co-operation with the NEA Forum on Stakeholder Confidence (FSC) since this was seen as a good opportunity for exchange of experiences between the two activities. There was also participation by representatives from the EC COWAM Concerted Action and one presentation was devoted to this activity. There was thus an opportunity to discuss the three activities together.

The first part of the workshop addressed *Transparency and citizen participation,* the second part dealt with *Outcomes of the RISCOM Project* and the third part dealt with *Organisation and roles.*

Participants in RISCOM II

Swedish Nuclear Power Inspectorate, SKI, Sweden (co-ordinator)
Swedish Radiation Protection Authority, SSI, Sweden
Swedish Nuclear Fuel and Waste Management Co., SKB, Sweden
Karinta-Konsult, Sweden
Nirex Ltd, UK
Environment Agency, UK
Galson Sciences, UK
Lancaster University, UK
Electricité de France, EDF, France
Institut de Radioprotection et de Sûreté Nucléaire (IRSN)
Posiva Oy, Finland
Nuclear Research Institute, Czech Republic
Syncho Ltd, UK (sub-contractor)
Diskurssi Oy, Finland (sub-contractor)

Project information

The European Community under the Euratom 5:th framework programme supports the RISCOM II project, contract number FIKW-CT-2000-00045.

Magnus Westerlind at SKI is the co-ordinator for RISCOM II.

SKI reference 03047

SKI Report 2004:12

Research

Transparency, Citizen Participation, Organisations and Roles

Report from the Third RISCOM II Workshop

Kjell Andersson[1]
Josefin Päiviö[2]

[1]Karinta-Konsult
Box 6048
S-187 06 Täby
Sweden

[2]Swedish Nuclear Power Inspectorate
S-106 58 Stockholm
Sweden

October 2003

EC contract FIKW-CT-2000-00045

RISCOM II Workshop No 3

Time: September 10-11, 2003
Venue: Olympik Hotel, Prague

This workshop was the final one in a series of three workshops within the RISCOM II project. It was an event where the RISCOM group of researchers disseminated the results to a wider circle of the nuclear waste management community in Europe with the focus on their own "peers" in participating countries. However, the aim was not just to present RISCOM II results but also to see them in the context of adjacent projects. Especially, the workshop was set up in cooperation with the NEA Forum on Stakeholder Confidence (FSC) since this was seen as a good opportunity for exchange of experiences between the two activities. There was also participation by representatives from the EC COWAM Concerted Action and one presentation was devoted to this activity. There was thus an opportunity to discuss the three activities together. A draft of the RISCOM II Final Report had been made available for workshop participants before the meeting.

The first part of the workshop entitled ***Transparency and citizen participation*** was moderated by Yves LE BARS, FSC chairman, and president of ANDRA. The second part dealt with ***Outcomes of the RISCOM Project*** and was moderated by Elizabeth Atherton from UK Nirex. Magnus Westerlind (SKI), the RISCOM II coordinator, moderated the third part that dealt with ***Organisation and roles.***

The participants were welcomed to Prague and the workshop by Juri Slovak, Head of the Nuclear Research Institute, Vitezlav Dude from the Radioactive Waste Repository Authority and Ales Laciok, the Nuclear Research Institute representative in RISCOM II. They each gave a short presentation about their work with nuclear waste and stressed the importance of a good dialogue between the different actors involved in the management of nuclear waste.

Also Magnus Westerlind welcomed all to this final workshop. RISCOM II has engaged five different countries and twelve different organisations. Westerlind expressed two wishes for this final workshop, to give everybody an opportunity to share what has been learnt during the past years and to compare the experiences from this project with experiences gained in related projects like COWAM and NEA/FSC.

Kjell Andersson gave an introduction (Appendix 3) to the workshop by giving some facts about RISCOM II. The project, which started in November 2000, has been accomplished by six work packages which by the time of the workshop had produced 14 reports on the web site www.karinta-konsult.se/RISCOM.htm . The Final Report, still to be complemented and improved, will be finalized until December 31. Andersson reminded that participants that projects like RISCOM II, NEA/FSC and COWAM were started as a reaction to problems in the siting of nuclear waste repositories like lack of trust, narrow framing and the need for citizen involvement. In parallel, there have been many initiatives in national programmes, like a new Nirex transparency policy and a

new SSI approach to regulatory guidance. The FSC has described about 50 activities world wide aimed at improved communication in radioactive waste programmes.

We should thus by now know how ”good” participation processes look like (NEA/FSC), how to organise a transparent process (RISCOM) and what the involved communities want (COWAM). Andersson put the question: Are the lessons learned the same (or complementary) between FSC, RISCOM and COWAM? If yes – the time is now to implement! If no – more research on diverging issues is needed. If we cannot answer, we certainly need more time for more interaction! Concerning the RISCOM Model, some questions that Andersson hoped the workshop would discuss were:

- How important is transparency? Can we specify the link between the RISCOM Model?
  and criteria for participative processes?
- Can we apply the model?
- Can we communicate the model?

In the following we summarize the talks given at the workshop and the discussions that took place.

Transparency and citizen participation (Moderator: Yves Le Bars)

The RISCOM Model of transparency (Clas-Otto Wene and Raul Espejo)

Clas-Otto Wene and Raul Espejo jointly presented the RISCOM Model (Appendix 4). The model has emerged as an outcome of Habermas' theory of communicative action[1] and Stafford Beer's organisational theory[2]. It offers an approach to increase the chances of an effective democratic process in complex societal decisions. For this purpose it propounds developing communications and interactions to give all participants similar influence and power in the related decision processes.

The model has been described elsewhere and we shall not here go into detail. However, it says that for a decision process to be transparent it must give the opportunity to evaluate three claims of a stakeholder, namely, that his statements are true and right and that he is truthful. The truth requirement relates to "the objective world", and a statement of truth is based on claims of validity. The requirement of rightness means that the statement is legitimate in its social context. The truthfulness requirement means that an actor must be honest - there must be consistency between words and action and no hidden agenda. The "RISCOM triangle" (truth, legitimacy and authenticity) should be applied on different levels of meaningful dialogue which Wene illustrated with the case of the "distrustful geologist" (see Appendix 4).

The key idea in the RISCOM Model is that to achieve transparency there must be appropriate organisational processes ("*transparency loops"*) organised in the system of decision-making and implementation through which decision-makers and the public can increase their chances of validating claims of truth, legitimacy and authenticity. In the Final Report five such transparency loops are defined. One of the loops is *stretching*, which means that especially the implementer of a proposed project should be challenged with critical questions raised from different perspectives such as environmental groups, regulators and other stakeholders.

Espejo summarized the studies which has been made on the organisational system in Sweden, UK and France about the prerequisites for transparency in the three countries. He stressed that dialogues need as a context a decision-making process in which all stakeholders satisfy the requirement of an on-going engagement in the decision process. This is one of the requirements for a truly democratic and participative decision process, Espejo meant.

Lessons learned from the NEA/FSC (Vera Sumberova)

Vera Sumberova gave a presentation of lessons learned from the NEA/FSC (Appendix 5). The FSC initiative is to improve the understanding of the principles of stakeholder interaction and public participation in decision-making related to radioactive waste management. This is done by sharing international experience in addressing the societal dimension of radioactive waste management and a wide

[1] Habermas, J. Theorie des kommunikative Handelns, 2 vols, Suhrkamp, Frankfurt, 1981.
[2] Beer, S. The Heart of Enterprise, Chichester: Wiley, 1979

representation of civil society through workshops held in national contexts with participation of local stakeholders. Efforts are made to understand radioactive waste management issues in the context of recent developments in society by participation of social scientists (experts in community development, strategic decisions, public management etc.).

The main aim of FSC is to explore ways of ensuring effective dialogue with the public and of strengthening confidence in decision-making processes. The FSC will produce a widely agreed upon document on the principles, implications, practices, and issues in involving technical and non-technical stakeholders in long-term waste-management projects ("Outcome document").

FSC alternates between workshops and meetings (one of each per year). Workshops are held at national locations where the dialogue can involve a wide range of stakeholders on a specific project or issue. Such workshops have been held in Turku where the Finnish site selection case was studied, in Ottawa, where Canadian experiences were investigated and in Brussels where the Belgian partnerships were studied. Annual meetings are held in Paris and involve FSC members and invited experts. Among the most important lessons learnt so far by FSC is that:

- The environment for socio-technical decisions including RWM is changing.
- RWM due to long-term nature, uncertainties and emotive nature is not the exclusive domain of technical expertise.
- Wider stakeholder concerns should be addressed at the same level as technical issues.
- Implementation of participatory democracy forms is necessary for construction of shared values and goals leading to agreement and confidence, i.e. to social legitimacy of RWM.
- Trust implies that an individual is willing to give up a certain measure of control of another person. Trust must be given in order to make it possible to receive it.
- The decision-making process should embody competing social values, while approaches to achieve this may change over time.
- The programme should provide sufficient time, resources and commitment for meaningful involvement of stakeholders.
- Regulator involvement is needed and is achievable without compromising integrity, independence and credibility.

The FSC has been recognized as a forum for mutual exchanges, mutual respect and learning. It is a unique standing forum where technicians, civil servants, social scientists and other stakeholders can interact.

Yves Le Bars, chairman of FSC, stressed the importance of at stepwise approach with defined steps and the importance of the management of the process. It is important that the actors have well defined roles and legitimacy in the process. A stepwise process is required to fit the national and local processes together.

A municipality perspective - The COWAM project (Harald Åhagen)

Harald Åhagen, being a participant in COWAM representing Oskarshamn, gave a municipality perspective of the project, which is a Concert Action within the EC research programme (Appendix 6).

There is a need for mutual trust between the implementer, national authorities and the local communities and a need to address the local perspective and increase the local influence. The observed deficit in the networking of local actors in NWM at a European level was one of reasons to launching COWAM.

COWAM is a three year programme in Europe with 4 seminars hosted by local communities - Oskarshamn (Sweden, October 2001), Verdun (Bure, France, March 2002), Fürigen (Switzerland, September 2002) and Cordoba (Spain, March 2003). There had thus been good conditions for local actors to participate actively and to bring their views and concerns into the work.

It is importnat to recognise that while safety remains a paramount criterion, voluntary and free participation are criteria of quality in the decision-making process. A safe solution is not safe until it is accepted safe by the public!

The COWAM project has emphasised that is takes time "to do it right" from the beginning and that a restart of a process e.g. for site selection can take decades. One should bring in the social science aspects early and be prepared to use innovative methods. There needs to be an open dialogue, the official stakeholders must listen to the local level and adjust according to changing needs. Furthermore, local decision makers and the public must work hand in hand. Another COWAM finding is that it is more comfortable for local communities having a veto right to participate effectively in a site selection process

The COWAM project has functioned well as a neutral arena for reflections on national aspects without confrontation. It is the first project where all parties have participated with a local majority. Local contacts have provided tools to reflect and improve the work at home. Finally, competence building, to which COWAM has contributed, gives self confidence and is the key to local participation rather than confrontation.

Åhagen meant that it is important to maintain and develop an open exchange between national and local parties and to develop the EIA as a participative tool. It makes it possible for all parties to develop and agree on the basis for decision-making while decisions are taken separately by each party. R&D and experience has provided models and tools to improve decision-making with public participation and transparency. Åhagen stressed that we should use them in the ongoing programmes and share the best practises and that this is more important than more "RISCOM and COWAM"! Yves Le Bars complemented the presentation by emphasising that COWAM is a unique forum gathering a large variety of stakeholders and that it has been a source for cultural exchanges particularly outside the group of operators. The project has helped enforcement of dialogue within each country, particularly when hosting the annual meetings. Le Bars also acknowledged that operators know from COWAM to respect the roles of

other actors and that NWM is a multigenerational process that needs to take into account the coming generations.

A final COWAM report is to be produced during the second half of 2003 and it will be available at the COWAM web site.

Discussion: Expectations on participation - Transparency and/or consensus building

Three different projects have been described; RISCOM, FSC and COWAM. They are all three focused on questions dealing with meetings with the public and public participation in decision-making processes. As an outset for the discussion, Mr Le Bars suggested that it would be interesting to hear comments about if the lessons learned between RISCOM, COWAM and FSC are complementary.

During the discussion a number of observations were made regarding the three projects. It was stated that they are quite different in approach and therefore complement each other. RISCOM is more theoretical and COWAM gives practical examples concerning the needs of local communities. FSC has been set up more by implementers and regulators but turns toward social sciences and local representatives to understand different perspectives. Implementers, regulators, researchers, local politicians and local groups all give their points of view - not only official stakeholders.

RISCOM has a broad way of looking at NWM programmes and COWAM and FSC indicate that it is necessary to base the RISCOM model on more substance. COWAM shows what we should do to make NWM work better in the future and RISCOM provides a methodology for how that can be done. COWAM is an interesting and successful approach in understanding the role of local actors and RISCOM gives systems understanding regarding decision-making.

All the three projects deal somehow with citizen participation and different models of democracy. The importance of using already existing democratic models was emphasised. It is not necessary to find special solutions for special problems but instead we should look at wider democratic solutions. One particular aspect of this is the relation between transparency and consensus. Sometimes there are expectations that our projects and participation will lead to consensus. Experiences from Sweden have shown that transparency and awareness can lead to consensus under certain circumstances, however, this is not necessarily so. Transparency can also lead to more conflict since it will make different value systems more visible. From the RISCOM project point of view, however, the argument would be that transparency should come first, then there needs to be a functioning democratic system to deal with different values. It was also remarked that social scientists can help us understand the processes in which we are involved. One of the conclusions in the presentation by Åhagen was reiterated: until a safe solution is recognised as safe by the public- it is not safe!

The need for better explanations of the RISCOM Model was discussed “in order to be transparent ourselves”. The substance in the RISCOM model can hardly be consumed by those that are working with the issue on a daily basis. Practical examples are needed

so that the model can be consumed and used as a method. There may be a need to simplify the theoretical model, however, theory also gives sustainable structure to organise information on how different processes work.

It was also remarked that perhaps it is not necessary to explain the model so much in detail. In fact, if we apply the RISCOM principles to the model itself, the need for technical explanation is reduced if we are authentic in our goals to use the model. Actually this is what happened in the Tierp municipality when there was a seminar arranged with the public about the RISCOM Model. It is apparent that you don't need to completely understand the model to be helped by it. And after all, the model is "validated" if it gives support in the design of decision-making processes.

Finally there was agreement that the lessons learned in the three projects are similar, that it is important to apply the methods they offer and that interactions between the three perspectives will support progress.

Outcomes of the RISCOM Project (Moderator: Elizabeth Atherton)

UK studies on participative processes (Jane Hunt)

Jane Hunt talked about the dialogue experiments held in UK as part of RISCOM II (Appendix 7). The aim was to identify and evaluate different processes and their associated rationales, and to produce recommendations with a particular focus on "institutional stretching". The four experimental processes were called discussion group, future search variation, scenarios workshop and dialogue workshop, and the criteria used in their evaluation were:

- transparency and legitimacy
- equality of access
- openness of framing
- inclusive and "best" knowledge elicited
- deliberative environment
- improvement of trust and understanding
- developing insight and new meaning
- developing sense of shared responsibility and common good
- producing acceptable/tolerable outcomes/decisions

There are 11 reports from this part of the UK work. The discussion and conclusions presented in RISCOM II deliverables 10 and 11 deals with clarity of aims and process, interpersonal dynamics, information, public capacities and attitudes, official stakeholder learning and institutional issues.

The UK dialogues worked with the idea of "stretching" for expanding and developing official stakeholder understanding. However, Hunt concluded that the RISCOM Model was not applicable in the UK context where there is a fluid and dynamic situation in the RWM programme.

The Finnish EIA (Jaana Avolahti)

Jaana Avolahti presented the evaluation made as part of RISCOM II of the interactive (participatory) planning of the Environmental Impact Assessment (EIA) procedure of final disposal in Finland (Appendix 8). The purpose of this study was to collect and analyse the experience from the interactive planning in the EIA and to propose measures to improve the quality of the interaction. The EIA programme, the EIA report, all written statements submitted to the co-ordinating authority, as well as newspaper articles on the subject were analysed using the RISCOM Model and the theory of communicative planning.

It was found that the process hade been successful concerning transparent reporting, high quality arrangements for interaction, good dissemination of information and it was easy to verify citizen's impact on the process.

The most significant shortcoming in Posiva's activity was that the EIA programme initially analysed only a single, basic option of geologic disposal in Finnish bedrock. The lack of arguments for omitting alternative options gave rise to criticism, and the co-ordinating authority, indeed, recommended in its statement on the EIA programme that a general analysis of the alternatives be conducted. Posiva followed the guidance and brought forward the criteria for selecting the alternatives in the final EIA report, applying a disaggregate method of comparison. Another problem was that actually the site was chosen before the EIA process hade been finalised.

The involvement by residents was not as active as Posiva had wished, and it was concluded that NGO representatives could give more energy to the debate. Furthermore, it was also concluded that sufficient participation resources should be ensured for citizens.

The Swedish hearings (Kjell Andersson)

Kjell Andersson (Appendix 9) summarised experiences from the hearings held in Sweden as a component in the review of SKB:s proposal of candidate sites for a spent nuclear fuel repository. The hearings were organised by the SKI and SSI and aimed at complementing the authorities' reviews of SKB's work and plans (called FUD-K). This was the first time the RISCOM Model was used in setting up an event as part of a real decision-making process.

The hearings were designed by a reference group with representatives from the municipalities assisted by a working group set up by SKI. In the design, a systems methodology called TASCOI (the acronym stands for Transformation, Actors, Suppliers, Customers, Owners, Interveners) was used. It is a systemic methodology that clarified what the hearings were supposed to achieve and the roles of different participants in the hearings.

From the point of view of the RISCOM Model, the hearing format was quite successful in several respects such as a high level of involvement, the mental separation of levels of discussion, stretching without a too adversarial set-up, and all questions were given answers. Still, though, the values inherent in the problems were more implicitly than explicitly expressed.

In the further development of hearings in the Swedish radioactive waste programme a number of issues will have to be considered. The now completed hearings were essentially based on the public's questions and concerns. In the future, hearings may also be arranged at an "expert level". It should however be kept in mind that the municipalities are experts on local circumstances and must be involved since the immediate impact of a repository is local.

In conclusion, the RISCOM Model was useful in supporting the hearing design and there are tools available (e.g. TASCOI) that can assist in doing that. The involvement of the actors themselves in the hearing design contributed to the fairness of the entire process.

Discussion: Lessons learned from undertaking dialogues

There was a debate initiated by the statement by Jane Hunt in her presentation that "the RISCOM Model was not applicable in the UK context". Hunt also meant that the public is wrongly defined according to the model. There is a practicable problem that resources are not equally distributed among the different actors involved in the process.

In the UK there is no real process in place, no real policy and no clearly defined responsibilities. The experimental RISCOM processes were going on at the same time as policy discussions were conducted. There were diverging views in the group whether the RISCOM model needs an established organisation for its application or not. For example, in the UK is it difficult to find meaningful levels of discussion as there is not even a disposal method defined. The connection between the lack of long-term decisions and the current handling and regulation of the waste is a problem. The comment was made that perhaps it is difficult to use the model if you don't have the Swedish background, since it is based on Swedish context from the beginning. However, it was also claimed that the Swedish and French experiences show that the model is an instrument that can analyse the prerequisites for transparency that are set by a countries organisational system.

Perhaps this part of the discussion can be summarised as follows: If the organisational structures are in a phase of transformation, as in the UK, the model may instead be used as a supportive tool of analysis of alterative outcomes of the transformation. However, it remains to be shown that the RISCOM Model can be applied to a developing waste management system, in which the system structure is emerging as waste management options are selected, developed, and fulfilled.

The question was asked to Hunt what will be done with the information gathered in her study. When do you know that you have gathered enough information? She answered that the issue is to get a representation of ideas by asking people in focus groups. The focus groups are meant to gathering ideas and questions. When no new information is coming out of the focus groups meetings, then you know you have done enough.

Then there were comments on Finnish case. It was meant that in practice there were parallel processes going on in the site selection, including practical politics. There was a competition between the candidate sites. It was argued that there should be commitment to the process and no decision about the site before the EIA-process is concluded. When applying the RISCOM Model to the Finnish case it is apparent that the process guardian is an important element in the model. There can also be problems when a new process such as EIA is supposed to be integrated into a culture.

The EIA as a process was discussed with the Finnish experiences as background. Apparently, the quality depends on the commitment of the different actors involved. EIA can mean two things; either a legal process or a process conducted according to "best EIA practice". An EIA-process is just as good as its participants wants it to be. The Oskarshamn example shows that one can work with EIA as good practice even if there are not legal requirements. It was also remarked that in Finland, Posiva did much more with the EIA than was required by law.

The question was finally raised how the RISCOM model can be applied on different levels. There seemed to be a need to investigate more in depth how the model can help e.g. UK, Canada and France in their strategic discussions.

Organisation and roles (Moderator: Magnus Westerlind)

Organisational prerequisites for transparency (Raul Espejo)

Raul Espejo presented the part of RISCOM II that dealt with organisational prerequisites for transparency (Appendix 10). He explained the Viable System Model (VSM) as part of the RISCOM model which has five "channels for transparency". The model makes apparent that dialogues with stakeholders are not enough to achieve communicative action. Additionally it requires developing communications and interactions as implied by its channels for transparency. This requires:

- Vocal minorities as legitimate representatives of the silent majority.
- Stretched implementers.
- Policy process with "inside and now" checked and balanced by "outside and then" and vice versa.
- Legitimate and fair resources bargaining within the organisational system.
- Authentic and efficient services to customers (part of the "silent majority").

Furthermore, how democratic might be the design of occasional interactions (e.g. dialogues), if external stakeholders cannot maintain over time their engagement in the decision process, they may feel that they are being manipulated by the establishment and that they lack opportunities to influence outcomes. One way to avoid this is to organise "orthogonal communications" in which participants in the on-going dialogues and negotiations monitor each others' activities to confirm the legitimacy, authenticity and truth of the other's claims.

The expert role (Stéphane Chataignier)

Stéphane Chataignier gave a presentation about dialogues between experts and public based on two studies in France (Appendix 11):

- Meetings between specialists and non specialists about safety of radioactive waste disposal.
- Understanding rejection by the population of consultation for the siting of a second laboratory in France.

The differences one can see on positions are not between experts (specialists and non specialists) and non experts (local population rejecting the consultation) but between nuclear experts (specialists on radioactive waste management) on one hand, and non nuclear experts and non experts (non specialists and local population) on the other hand. What non specialists say about public participation during the discussions is more like what the local population says in interviews than what specialists say.

Another result from the French study is that for everybody it is very difficult to imagine dialogue due to different reasons. For nuclear experts, it is because of social resistance against modern technologies. Other people say it is because of the tradition of secrecy used in the nuclear industry. According to them, it was commonly used in the past and still remains today even if the communication of nuclear institutions has changed.

Nuclear waste is not a political issue like others but people do not agree about what kind of issue it is. For the nuclear experts, it is a technical issue above all. The discussion should be about risks and long term uncertainties and the experts do believe that science will reduce them. For others, a lot of other dimensions should be discussed, namely nuclear energy and energy consumption.

In the end, expertise is still greatly expected in order to analyse different solutions, compare them and help to decide which one is the best. Furthermore, the expertise has different points of view, coming from engineering, earth and human sciences. Chataignier summarised by stating that we should "make the scientific debate public instead of making the public debate scientific".

The role of safety authorities (Carmen Ruiz Lopez)

Carmen Ruiz Lopez talked about lessons learnt within the FSC concerning the image and role of the regulator in decision-making for RWM (Appendix 12). She gave a picture of societal changes that involve risk management in general and regulators in particular. Changes in modern society demand new forms of risk governance in dealing with hazardous activities, characterized by the involvement of the concerned stakeholders. The scientific and engineering aspects of RWM safety are no longer of exclusive importance. Organisational ability to communicate and to adapt to the new context has emerged as critical contributors to public confidence.

Modern societal demands on risk governance and the widespread adoption of a stepwise approach to decision-making have produced changes in the image and role of regulators. Legal instruments reflect and encourage a new set of behaviours and a new understanding of how regulators may serve the public interest. To be fully effective in carrying out their mission, regulators need not only to be independent, competent and reliable, but they should also strive to achieve the confidence and earn the trust of stakeholders and the public at large.

Successful experiences in facility siting have shown that active regulatory involvement is needed, and also possible without endangering the independence and integrity of regulatory authorities. Ideally, the regulators should be seen as "guarantors" of safety and the "peoples' expert", acting as an accessible resource to stakeholders addressing their safety concerns. Regulator's role should be one of collaboration, acting proactively on the side of municipalities. The objective is not to gain public acceptance of a project but to build up the regulator's credibility and gain public confidence to provide national and local decision makers with the necessary information on safety matters.

Discussion: Organisational issues that affect transparency and participation

The major theme in this concluding discussion was the role of the "process guardian" and who that could be. Ideally, it was said, a process guardian should have capacity, resources and trust and be outside the system, however, this is rarely the case. In Sweden, SKI and SSI has this role on the national level, and on the local level the Oskarshamn municipality functions as guardian. It was said that a regulator can be guardian even if he is part of the system. In any case he has to earn trust from the organised civil society in order to be legitimate. In practice, a process may contain many guardians depending on where in the process one is.

There was also the opinion that it can be damaging to participants to have a very external body overseeing consultations. Normally, the guardians of processes are internal actors and part of the process having insight enough to have an opinion about it.

One particular aspect of the RISCOM organisational study was brought up, namely the view that SKB is described as having an ambiguous role, being both an industrial enterprise and the organisation responsible for managing the waste. Why the Swedish system has a weak identity is because SKB is driven by commercial ethics and the handling of nuclear waste is of public interest, it was said. In this case commercial interests are in conflict with public interests, which mean it becomes a societal problem.

This reasoning can lead to the conclusion that SKB should better be part of government. It was remarked that the fact that SKB is separated from the government gives the company a strong identity as opposite from what is said in the report, which claims that the Swedish system has a weak identity. The US example was referred to as case where the waste management organisation is within government but where the results are weak. A system where the responsible organisation is part of government also has the weakness that the role of the regulatory body, which has many key functions as e.g. stretching the implementer, becomes less clear. In Sweden, the regulator and the government take the final decision. The SKB proposals must be good enough, otherwise they will not be licensed. A high integrity of the regulator would be more difficult if SKB was state owned. However, it was also remarked that the relation between the public and the state is not that clear. SKB has to get approval from SKI for its research budget and the allocation of resources is complicated. Finally, it was agreed that the word "ambiguous" for SKB may be changed to "dual" in the final report.

Ales Laciok described the handling of nuclear waste in Czech Republic, which obviously is clear and therefore transparent. There is one regulatory body for nuclear waste safety and radiology and one implementer. There is a nuclear waste fund and a decommissioning account. The waste management strategy is approved by the government. The nuclear act defines the roles of all actors and the EIA Act states the EIA and the SEA processes. There is also an act on local referendum.

Magnus Westerlind ended the workshop by thanking Ales Laciok for arranging the workshop and for the hospitality of his organisation.

Appendices

1. Workshop agenda
2. List of participants

Copies of overheads

3. Introduction to RISCOM II workshop 3 (Kjell Andersson)
4. The RISCOM Model of transparency (Clas-Otto Wene and Raul Espejo)
5. Lessons learned from the NEA FSC (Vera Sumberova)
6. A municipality perspective - COWAM project (Harald Åhagen)
7. UK studies on participative processes (Jane Hunt)
8. The Finnish EIA (Jaana Avolahti)
9. The Swedish hearings (Kjell Andersson)
10. Organisational prerequisites for transparency (Raul Espejo)
11. The expert role (Stéphane Chataignier)
12. The role of safety authorities (Carmen Ruiz Lopez)

Appendix 1: Workshop agenda

RISCOM II Final Workshop
Olympik Hotel, Prague, 10-11 September, 2003

Wednesday Sep 10

8.30-9.0	Welcoming remarks	(Ales Laciok)
	Introductory remarks	(Magnus Westerlind)
	What is RISCOM – purpose of workshop	(Kjell Andersson)

Transparency and citizen participation (Moderator: Yves Le Bars)

9.00-9.30	The RISCOM Model of transparency (Clas-Otto Wene and Raul Espejo)
9.30-10	Lessons learned from the NEA FSC (Vera Sumberova)
10-10.30	A municipality perspective – The COWAM project (Harald Åhagen)
10.30-11	Coffee break
11-12	**Discussion**: Expectations on participation : Transparency and/or consensus building
12-1.30	Lunch

Outcomes of the RISCOM Project (Moderator: Elizabeth Atherton)

1.30-2	UK studies on participative processes	(Jane Hunt)
2-2.30	The Finnish EIA	(Jaana Avolahti)
2.30-3	The Swedish hearings	(Kjell Andersson)
3-3.30	Coffee break	
3.30-5	**Discussion**: Lessons learned from undertaking dialogues	

Thursday Sept 11

Organisation and roles (Moderator: Magnus Westerlind)

8.30-9	Organisational prerequisites for transparency (Raul Espejo)
9-9.30	The expert role (Stéphane Chataignier)
9.30-10	The role of safety authorities (Carmen Ruiz Lopez.)
10-10.30	Coffee break
10.30-11.30	**Discussion**: Organisational issues that affect transparency and participation
11.30-12	Close of Workshop

Appendix 2: List of participants

Czech Republic

Juri Slovak	Head, Nuclear Research Institute
Ales Laciok	Nuclear Research Institute
Vitezlav Dude	Radioactive Waste Repository Authority

Finland

Juhani Vira	Posiva
Jaana Avolahti	Pohjolan Voima Oy
Matti Kojo	University of Tampere

France

Jacques Tamborini	ANDRA
Béatrice Hammer	EDF R&D
Stéphane Chataîgnier	EDF R&D
Gérard Bruno	IRSN
Francois Besnus	IRSN
Michele Viala	IRSN

Sweden

Magnus Westerlind	SKI
Kjell Andersson	Karinta-Konsult
Josefin Päiviö	SKI
Christina Lilja	SKI
Björn Hedberg	SSI
Björn Strokirk	SKB
Clas-Otto Wene	Wenergy
Ansi Gerhardsson	Ministry of Environment
Olof Söderberg	KASAM
Hanna Sofia Johansson	Göteborg University
Harald Åhagen	Oskarshamn municipality

United Kingdom

Elisabeth Atherton	Nirex Ltd
Roger Yearsley	Environment Agency
Paula Orr	Environment Agency
Tim Hicks	Galson Sciences
Jane Hunt	Lancaster University
Raul Espejo	Syncho

OECD/NEA Forum for Stakeholder Confidence

Yves LE BARS	FSC chairman, and president of ANDRA
Vera Sumberova	FSC and RAWRA (Czech Republic)
Carmen Ruiz Lopez	FSC and Consejo de Seguridad Nulear (Spain)

European Commission

Henning von Maravic	DG Research

Appendix 3:

Introduction to RISCOM II workshop 3

Kjell Andersson

RISCOM-II Workshop No 3
Prague Sept. 10-11, 2003

Introduction

Kjell Andersson

RISCOM-II status

- Started November 1, 2000
- **Ends October 31, 2003**
- Six work packages
- **14 reports on the web site**

  www.karinta-konsult.se/RISCOM.htm
- two more to come
- **Final report: 3rd draft here, still to be complemented and improved**

Workshop

- **Discuss the RISCOM-II results**
- **Bring in the context of NEA/FSC and COWAM**
- **Discuss generic issues related to transparency, citizen participation, organisation and roles**

”State of the art”

- Problems in UK, Canada, Germany, France, Switzerland …
- Organizations are aware of lack of trust, narrow framing and the need for citizen involvement
- Many activities like RISCOM, COWAM, NEA/FSC etc
- Others; Nirex transparency policy, SSI new approach (50 activities listed in FSC report)

”State of the art”, cont.

We should by now know:

- How ”good” participation processes look like (NEA/FSC)
- How to organize a transparent process (RISCOM)
- What the communities want (COWAM)

Are the lessons learned the same (or complementary) between FSC, RISCOM and COWAM?

If yes – time to implement!

If no – more research on diverging issues

If we can not answer – time for more interaction!

RISCOM questions

- How important is transparency?
- The link between the RISCOM Model and criteria for participative processes
- Can we apply the model?
- Can we communicate the model? Can it be communicated?

Appendix 4:

The RISCOM Model of transparency

Clas-Otto Wene and Raul Espejo

RISCOM II
Final Workshop
Prague 10-11 September 2003

The RISCOM Model of Transparency

Part 1: Communicative Action and Clarifying Effectiveness

Clas-Otto Wene, Wenergy AB
Raul Espejo, Syncho Ltd

The Transparency Question

Decisions on technically complex issues with uncertain but potentially large and inequitable consequences

Two Legitimate Needs:

Need for Meaningful Participation In the Decision Process

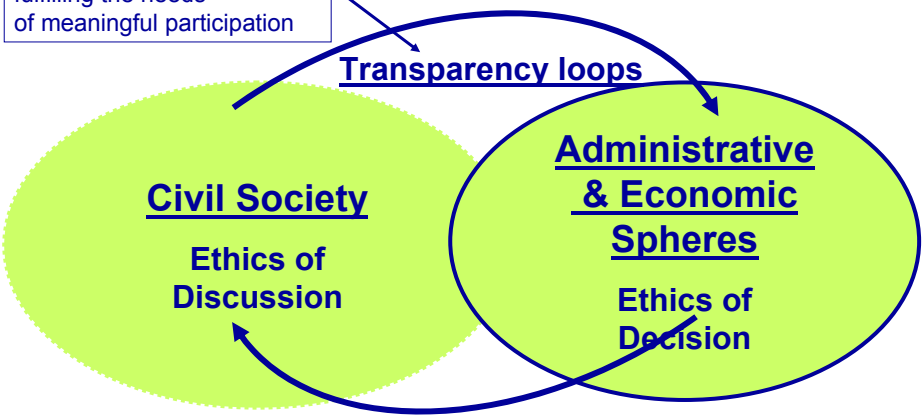
TRANSPARENCY

- Clarify the meaning of "effective solution"
- Ensure that the clarification has a clear and palpable effect on the decision

Need to reach an effective solution (Closure)

The RISCOM Model

Continuously maintaining
open and unbiased channels
fulfilling the needs
of meaningful participation



Habermas: Communicative action, pragmatistic model
Stafford Beer: Transparency loops, decision process

Communicative Action: A competent Speaker makes Three Claims with he is willing to Redeem

Truth

-Scientific methods and technology
- "Is this true?"
- "Are we doing things right?" ⇒ ***Efficiency***

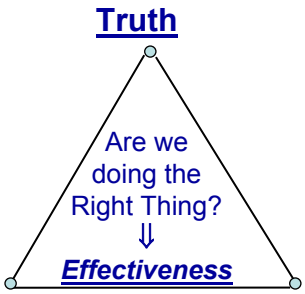
Legitimacy

- Norms and interpersonal relations
- "Is this right and fair?"

Authenticity

- Integrity and identity expressed in words and actions (consistency/values)
-"Is this good?"
-"Are you truthful/honest?"

Transparency requires Understanding and Learning about a situation



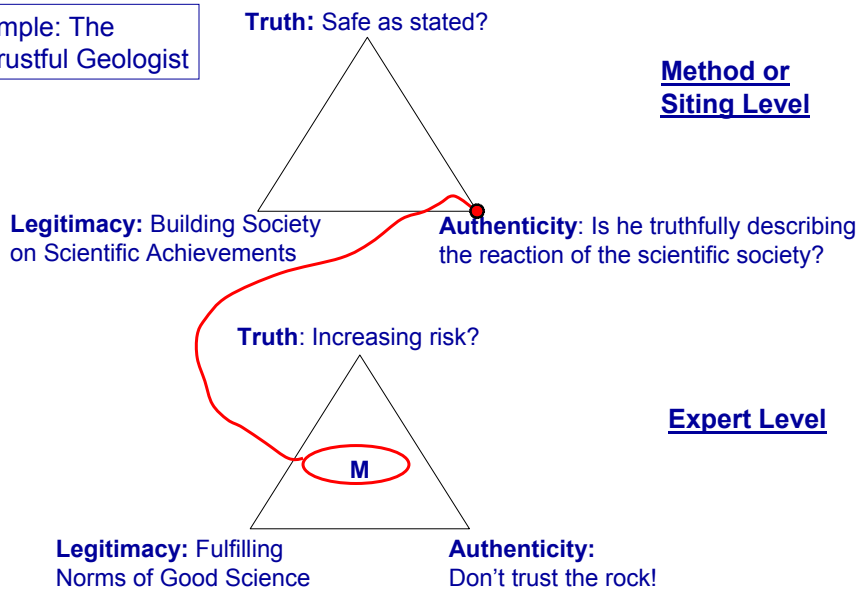
Civil Society
Communicative Action – *Clarify* Effectiveness

Adm.&Economic Spheres
Strategic Action - *Improve* Effectiveness

Purpose of Transparency
Can *never* be to improve effectiveness

Managing Complexity: Levels of Meaningful Debate

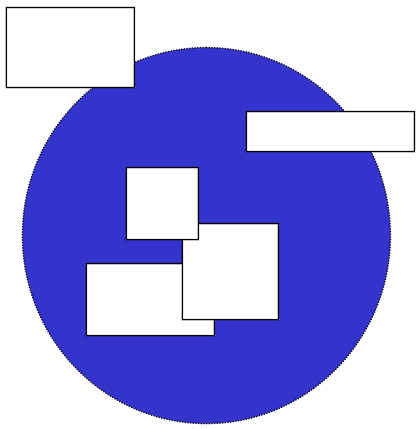
Example: The Distrustful Geologist



RISCOM Definition of Transparency

In a given policy area, transparency is the outco of an ongoing process that increases the stakehol appreciation of related issues and provides them channels to stretch the implementer to meet their requirements for technical explanations, proof of authenticity, and legitimacy of actions. Transpar requires a regulator to act as guardian of proces integrity.

Fragmentation and Organisation



Fragmentation makes it more difficult 'to see' the systems we produce through our interactions. However, our experience is that we collectively create and produce meanings.

Requisite Organisation

A *requisite organisation* is one able to create and produce desirable meanings. If the concern is a policy issue, it is critical to understand not only the *creation* of the policy but also the *production* of the meanings entailed by that policy. The concern is *connecting meaning creation with meaning production (the informational with the operational domains)*.

Viplan Method

- Data collection
- Building a rich picture
- Naming relevant systems
- Develop structural models
- Develop unfolding of complexity
- Model distribution of resources and communications (structure)
- VSM modelling and diagnostic points

Viewpoint: Nirex is a future waste disposer

- **Identity Statement 1:** Nirex is an organisation owned by the nuclear industry that is developing the technological, management and organisational processes for the short and long-term management of ILW by research, organisational development and ensuring that the information system is developed so that it can (in the future) dispose safely of ILW for the industry, for the benefit of current and future generations.

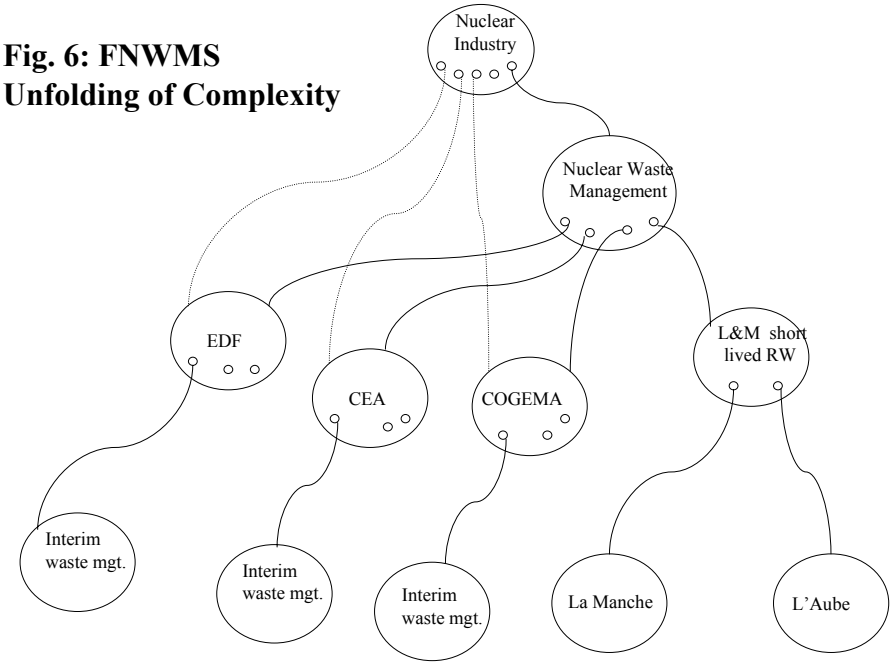
Viewpoint: Nirex is an advisor

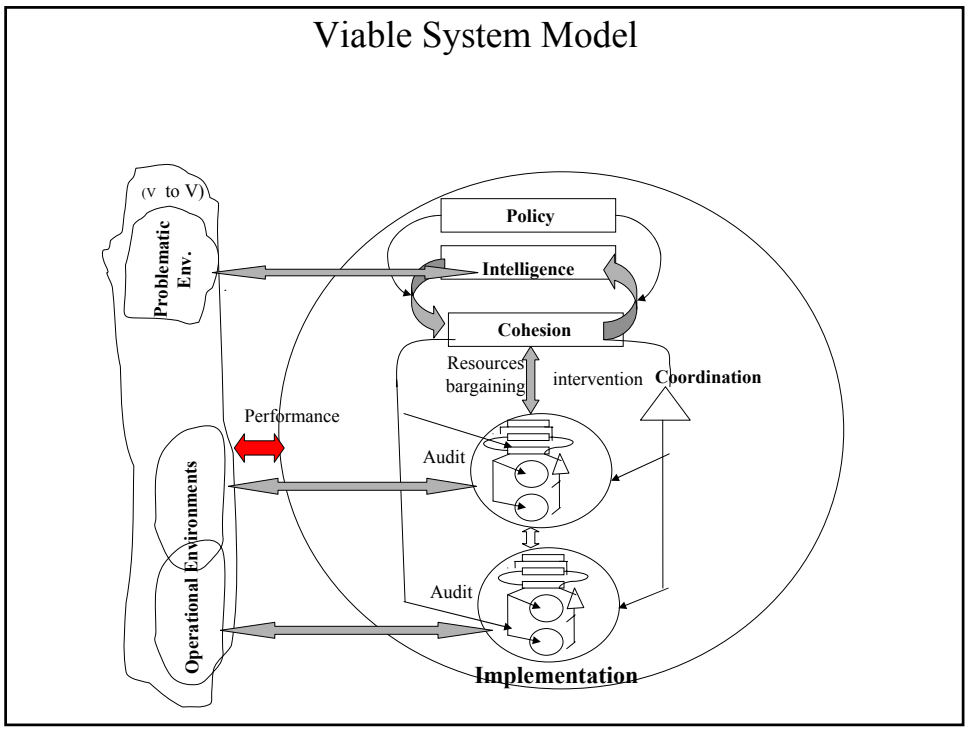
- **Identity Statement 2:** NIREX is an organisation owned by the nuclear industry. Nirex provides 'Letters of Comfort' that reassure the industry that its ILW, once conditioned and packaged according to requirements agreed in these letters, could at some future date be disposed of in a way that is acceptable to a future disposal organisation. "Letters of Comfort" also provide some reassurance to the NII and the Environment Agency that packaged waste could be disposed of without further work, so as to assure current and future generations that ILW is safely managed.

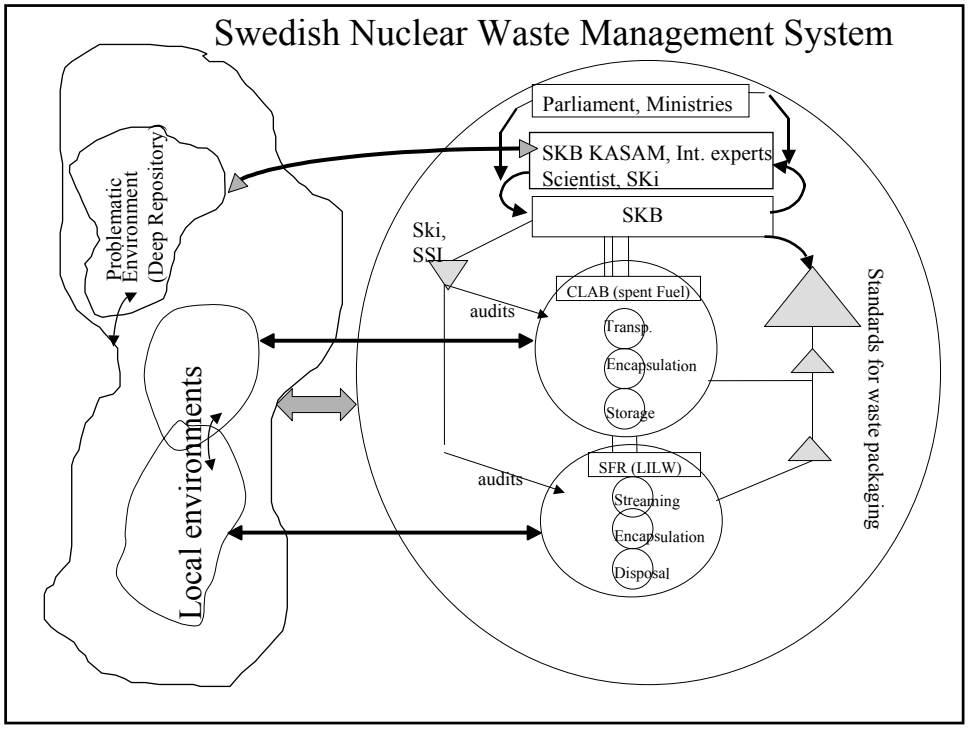
Viewpoint: Nirex is a research and advisory organisation

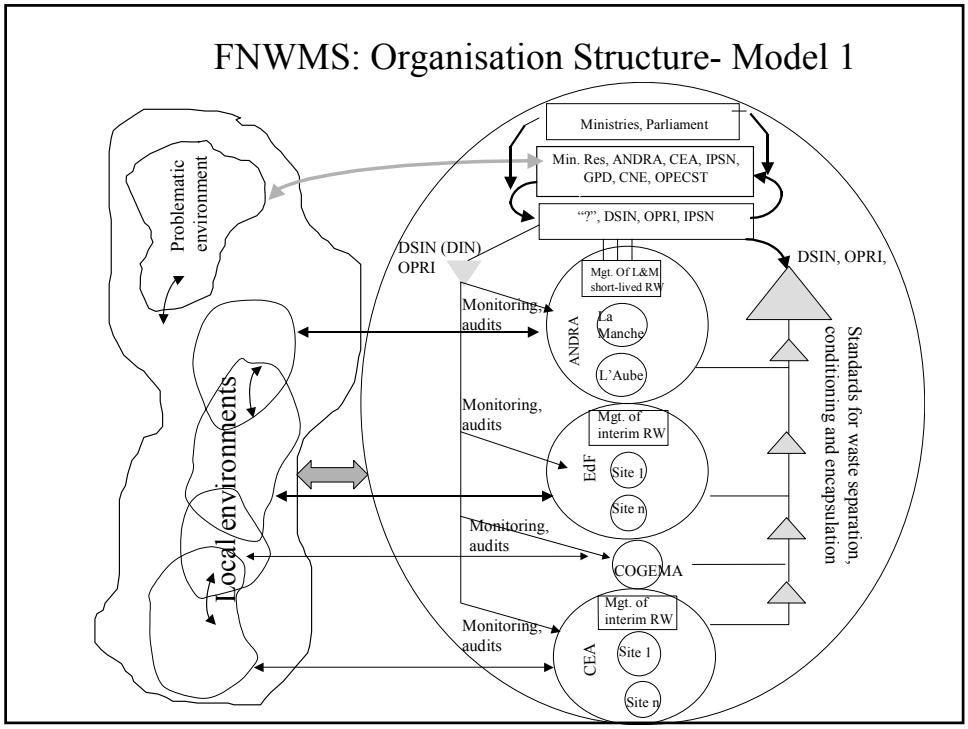
- **Identity Statement 3:** Nirex is an organisation owned by the nuclear industry, that researches intermediate nuclear waste management issues on behalf of the industry, providing expert advice to operators on technical, environmental and human issues in NWM and to the industry and the public in general through reports, for a transparent UKNWMS.

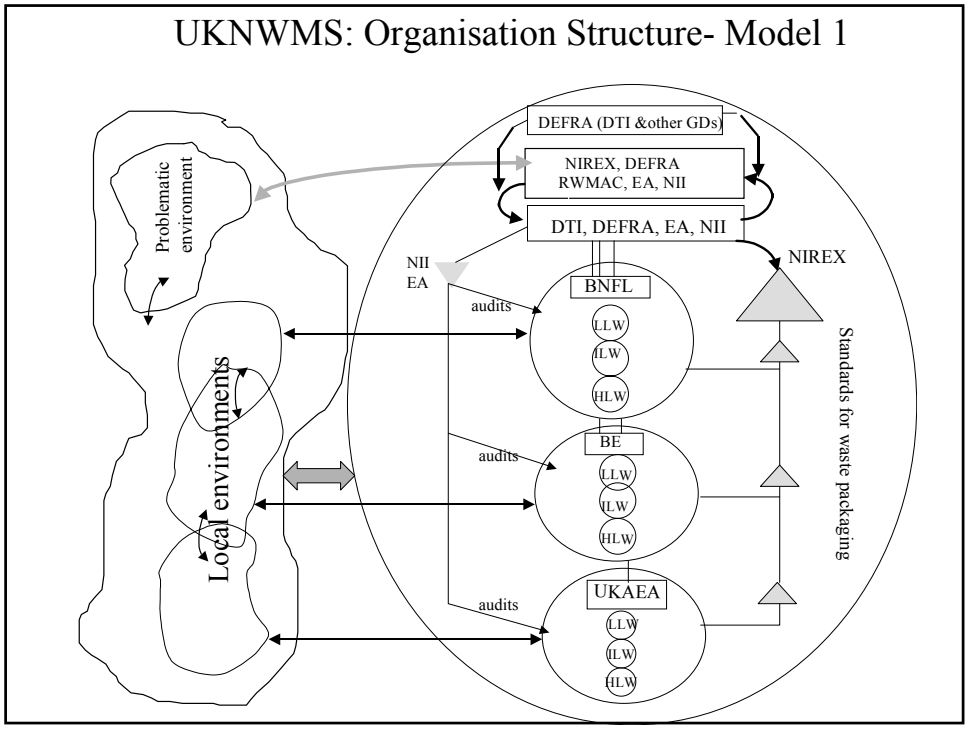
Fig. 6: FNWMS
Unfolding of Complexity



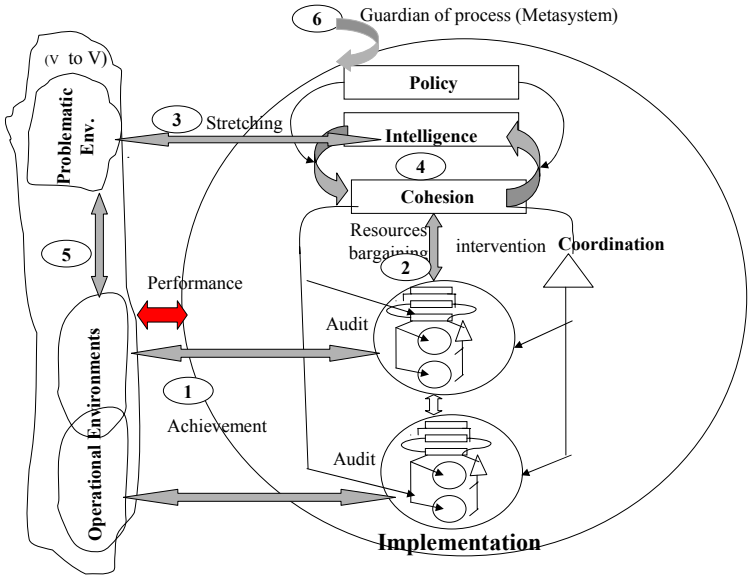

Viable System Model
(V to V)
Problematic Env.
Operational Environments
Policy
Intelligence
Cohesion
Resources bargaining
intervention
Coordination
Performance
Audit
Audit
Implementation


Swedish Nuclear Waste Management System
Problematic Environment (Deep Repository)
Local environments
Parliament, Ministries
SKB KASAM, Int. experts Scientist, SKi
SKB
Ski, SSI
audits
CLAB (spent Fuel)
Transp.
Encapsulation
Storage
audits
SFR (LILW)
Streaming
Encapsulation
Disposal
Standards for waste packaging


FNWMS: Organisation Structure- Model 1
Problematic environment
Local environments
Ministries, Parliament
Min. Res, ANDRA, CEA, IPSN, GPD, CNE, OPECST
"?", DSIN, OPRI, IPSN
DSIN (DIN) OPRI
DSIN, OPRI,
Mgt. Of L&M short-lived RW
ANDRA
La Manche
L'Aube
Monitoring, audits
Mgt. of interim RW
EdF
Site 1
Site n
COGEMA
CEA
Standards for waste separation, conditioning and encapsulation


UKNWMS: Organisation Structure- Model 1
Problematic environment
Local environments
DEFRA (DTI &other GDs)
NIREX, DEFRA RWMAC, EA, NII
DTI, DEFRA, EA, NII
NII EA
NIREX
BNFL
BE
UKAEA
LLW
ILW
HLW
audits
Standards for waste packaging

RISCOM Model: Transparency Loops



An Instrument for Transparency:

Countries / Criteria for Transparency	Sweden	France	UK
1. Org's Identity	ambiguous	strong	undefined
2.1 Achievement (loop1)	unproblematic	Unclear potentials	Distrust in actuality
2.2.Resources bargaining (loop 2)	clear	unclear	fragmented
2.3. Stretching (loop3)	on-going	under-developed.	No implementer to stretch
2.4. Policy- making (loop4)	pre-emptive closure	Ungrounded closure	No-closure: Fragmented resources
2.5 .Silent majority (loop5)	heard and influenced	detached	misrepresented
2.6. Guardianship (loop6)	needs more	needs to be more focused	needs to be defined

Revised Definition of Transparency

In a given policy area, transparency is the outcome of ongoing learning processes that increase ***all*** *stakeholders' appreciation of related issues, and provide them with channels to stretch their operators, implementers and representatives 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.*

Appendix 5:

Lessons learned from the NEA FSC

Vera Sumberova

Forum on Stakeholder Confidence: Activities and Lessons Learnt

Věra Šumberová
Radioactive Waste Repository Authority,
Czech Republic
on behalf of the FSC

RISCOM II – Final Workshop
Prague, 10 - 11 September 2003

FORUM ON STAKEHOLDER CONFIDENCE

- Initiative to improve understanding of the principles of stakeholder interaction and public participation in decision-making related to radioactive waste management
- Sharing international experience in addressing the societal dimension of radioactive waste management
- A wider representation of civil society through workshops held in national contexts with participation of local stakeholders.
- Effort to understand radioactive waste management issues in context of recent developments in society –participation of social scientists (experts in community development, strategic decisions, public management etc.)

MAIN AIMS AND EXPECTATIONS

- To improve ourselves
- Create an atmosphere of trust for the discussion of issues.
- To explore ways of ensuring effective dialogue with the public and of strengthening confidence in decision-making processes
- Produce a widely agreed upon document on the principles, implications, practices, and issues in involving technical and non-technical stakeholders in long-term waste-management projects ("Outcome document")

WORKING METHODS AND PROGRAMME

FSC alternates between workshops and meetings (one each per year)

Workshops: held at national locations where the dialogue can involve a wide range of stakeholders on a specific project or issue

Annual meetings: held in Paris and involve FSC members and invited experts

ANNUAL MEETINGS

- Elaboration of lessons learnt, documents
- In depth discussions on specific issues of interest through:
  - topical sessions
  - case studies presented from perspective of different stakeholders
  - analysis of questionnaire responses
- Planning of future activities
- Information on latest developments in member countries
- Opportunities for networking

WORKSHOPS AT NATIONAL LOCATIONS

- To view and discuss:
  - national decision-making structure of waste-management programmes
  - methods employed for stakeholder interactions
  - the successes and failures
- To hear directly from involved stakeholders their own views about the methods by which they were involved in the decision-making; to provide all stakeholders a wide audience; and to record their positions
- Due to the high level of interaction, workshops are „specific case studies“ (proceedings)

WORKSHOP METHODS

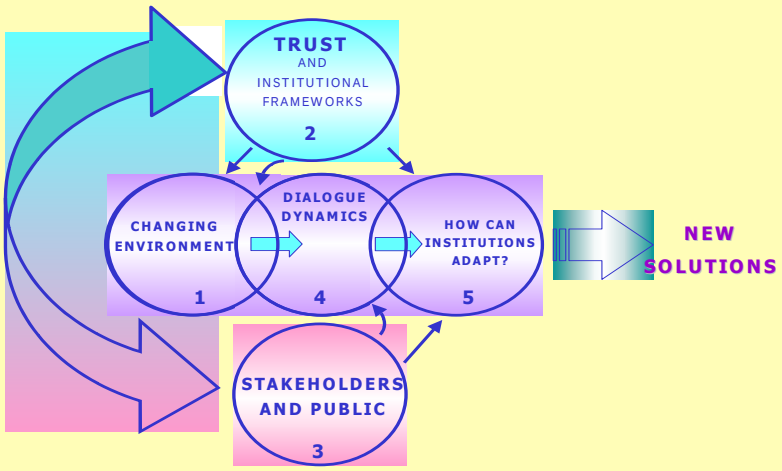
- Thought provoking, short presentations by a wide spectrum of stakeholder
- Participants discuss presentations in small groups, one FSC rapporteur at each table
- An FSC facilitator surveys the tables on the conclusion of the discussions
- External, thematic rapporteurs - specialists in specific areas - summarise their observations on the workshop
- All discussions and papers in workshops summaries and in full proceedings

PARIS WORKSHOP, 28-30 August 2000

- Themes:
  - changing environment for waste management,
  - participatory democracy in waste management
  - stakeholder identity
  - trust in the institutional framework
  - maintaining trust over time
- 75 attendees from 14 countries. Specialists from government bodies, implementing agencies, safety authorities, oversight bodies, national universities and academies with background from technical and social sciences, national and local political representatives
- Review the status and experience both in radioactive waste disposal and stakeholder confidence in member countries
- Proceedings

PARIS WORKSHOP

RELATION BETWEEN 5 TOPICS



TURKU WORKSHOP, 15-16 November 2001

- Theme: Stakeholder Involvement and Confidence in the Process of Decision Making for the Disposal of Spent Nuclear Fuel in Finland
- Examined the history leading up to the Decision in Principle taken by the Finnish Parliament to proceed with a final disposal facility for spent nuclear fuel
- A wide spectrum of Finnish stakeholders (implementers, regulators, policy-makers, opponents, communities, media, researchers, utilities, policy, ministries, parliament, etc.)
- About 1 Finnish stakeholder for 2 FSC representatives
- Workshop was preceded by meeting with Eurajoki community

OTTAWA WORKSHOP, 14 -18 October 2002

Themes: Public confidence in RWM within the Canadian context. Social concerns: what they are and how to address them. Providing for development opportunities to communities

- Two case studies: Port Hope Area Initiative; Entering into force of the Nuclear Fuel Waste Act
- Wide spectrum of Canadian stakeholders' views
- About 1 Canadian stakeholder for 2 FSC representatives
- Workshop was preceded by visit to Port Hope area communities and waste sites
- Summary is available, full proceedings available (Sept 2003)

BRUSSELS WORKSHOP, 18 – 21 November 2003

Theme: Dealing with Interests, Knowledge, and Values in Managing Risk

Case studies: the Belgian partnerships on the long-term management of LLW

Workshop will be preceded by visits to the partnerships, which are at different stages of development
Expected: personal, direct contact between local people and FSC to learn about their perspective and experience
Recommended topics:
Factors influencing partnership
Important successes and failures, ways for the future
External support

SOME LESSONS LEARNT

NATURE OF RWM AND SOCIAL ENVIRONMENT

- Environment for socio-technical decisions including RWM is changing
- RWM due to long-term nature, uncertainties, emotive nature is not exclusive domain of technical expertise
- Wider stakeholders concerns should be addressed at the same level as technical issues
- Implementation of participatory democracy forms is necessary for construction of shared values and goals – leading to agreement and confidence, i.e. to social legitimacy of RWM

SOME LESSONS LEARNT

STAHOLDERS, TRUST

The stakeholder : anybody with an interest or role to play

Major issues :

the interactions amongst groups and their respective roles

stakeholders change with time

Trust : implies that an individual is willing to give up a certain measure of control to another person. Trust must be given in order to make it possible to receive it.

Waste retrievability and programme reversibility alleviate mistrust of technology and help in decision making. Oversight contributes to keep up trust.

SOME LESSONS LEARNT

FACTORS FOR CONFIDENCE

- Decision-making process (open, transparent, fair and participatory)
- Roles and responsibilities for different actors including local authorities clearly defined
- Main actors behaviour (reflecting values like openness, consistency, willingness to be involved in a dialogue, competence, capabilities to adapt to change…)

SOME LESSONS LEARNT

DECISION-MAKING PROCESS (1)

- Well-established process, recognised as fair, transparent and participatory by stakeholders, in which stakeholders can interact effectively
- Components of policy definition and stepwise implementation
- Mechanisms to ensure moving forward and to monitor progress
- Need of the public to participate, when the "rules of the game" are being defined
- Opened to different outcomes - none single (technical, social nor ethical) RWM solution

SOME LESSONS LEARNT

DECISION-MAKING PROCESS (2)

- Flexible to ensure access to preferred waste management options and design alternatives at a given time
- Designed so, that the result is broadly supported with implications widely understood
- Process should foster a dynamic of dialogue among stakeholders with clear and recognised roles
- Stakeholder participation –ensuring that broad-based knowledge, values and ethics are represented in decisions, contributes to quality of decisions and democracy as a whole

SOME LESSONS LEARNT

DECISION-MAKING PROCESS (3)

- Process should embody competing social values, while values and approaches to achieve this may change over time
- Legitimacy is not established once and for all
- Transparency: information "what is happening and why" always available
- The programme should provide sufficient time, resources and commitment for meaningful involvement of stakeholders

SOME LESSONS LEARNT

ROLES AND RESPONSIBILITIES (1)

- Roles of all stakeholders should be clearly defined, recognised, well-communicated and adapted, if necessary, to changing conditions
- National bodies need to initiate debate and design a process encouraging stakeholders involvement (adopting participatory democracy elements is complementing, not competing to representative democracy)
- Debate includes the link to future energy choices
- Political leaders in legislative and executive branches display long-term commitment to the programme

SOME LESSONS LEARNT

ROLES AND RESPONSIBILITIES (2)

- Roles of the regulator has to be separated from nuclear energy promotion
- Active regulator involvement is needed and is achievable without compromising integrity, independence and credibility
- Importance of regulator's role in protecting peoples health and safety
- Regulators role includes clarification on the reasons for changing and communication of the bases for their decisions

SOME LESSONS LEARNT

ROLES AND RESPONSIBILITIES (3)

- Independence is a valuable feature for implementer
- Roles of local authorities needs to be specified, including mandate in final decisions
- Right of veto for local municipality is a confidence factor
- Burden of consultations and negotiation should not be transferred to local representatives

SOME LESSONS LEARNT

INSTITUTIONAL FEATURES FOR BUILDING CONFIDENCE

Institutions (implementers) must adapt and demonstrate long-term abilities.

Recommended features:

Organisational : clarity of role position, dedicated sufficient funding, learning capacity, ethical behaviour, high level of skills and competence, public ownership …

Mission: clear mandate and goals, a grounded identity…

Behavioural: openness, transparency, consistency, honesty, willingness to be "stretched", freedom from arrogance, recognition of limits, proactive practices, listening and caring attitude, display commitment, policy of continuous improvement...

REPORTS AND ARTICLES

- **Strategic document (2001)**
- **Public Consultation, Information and Involvement in radioactive waste management - An International Overview of Approaches and Experiences (2003)**
- **The evolving image and role of the regulator… (2003)**
- **Stepwise decision making for long-term radioactive waste management [*being finalised*]**
- **http://www.nea.fr/html/rwm/fsc.html**

CONCLUSIONS

- **A more complex interaction** is now taking place at national, regional, and especially at local levels
- **A more realistic understanding of important commonalities existing across cultural settings related to step-wise decision making**, involving a range of actors is emerging
- **Positive features** of the FSC :
  - forum for **mutual exchanges**, mutual respect and learning
  - unique standing forum where technicians, civil servants, social scientists and other stakeholders can interact
  - **aiming to promote cultural changes** in, and stimulate new approaches by, participating organisations

Thanks to
Mr. Y. Le Bars, FSC Chairman
Mr. C. Pescatore, FSC Secretariat
for extensive summary materials

Appendix 6:

A municipality perspective - COWAM project

Harald Åhagen

A MUNICIPALITY PERSPECTIVE

REFLECTIONS AROUND THE EC COWAM CONCERTED ACTION

RISCOM II Final Workshop

This presentation gives a general background to the COWAM concerted action and offers some specific observations from my participation as a local representative. The presentation is based on some material produced by COWAM but the conclusions are my own and may not correspond with other participants!

A final COWAM report is to be produced during the second half of 2003 by and will be available at the COWAM web site

Harald Åhagen
Municipality of Oskarshamn and
Member of the COWAM Steering Committee

Prod. by Yves Le Bars ANDRA -HLW Las Vegas Conference 2003

I.1 Programme comparison

A. Preparation of a waste-management policy-making process

B. Strategy elaboration: R&D phase

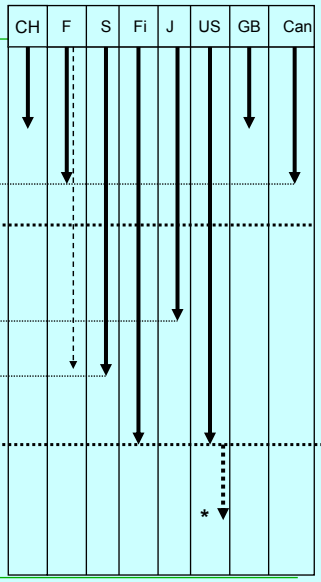
C. Strategy definition, option selection

D. If disposal option: research, study, selection of disposal site(s)

1. ***Decision to seek one or more potential disposal sites***
2. ***Study of selected site(s)***
3. **Site definition**

E. Decision to implement a repository

F. Operation



*** WIPP**

The context in 1999

- **Awareness Nuclear Waste Management (NWM) - a national problem requiring a local solution**
- **Local/national linking - many national prgrammes facing local oposition or rejection - also progress with local consent**
- **Need for mutual trust between the implementor, national authorities and the local communities**
- **An identified need to address the local perspective and increase local influence**
- **Large national variations in culture and legislation**
- **An observed deficit in the networking of local actors in NWM at European level**

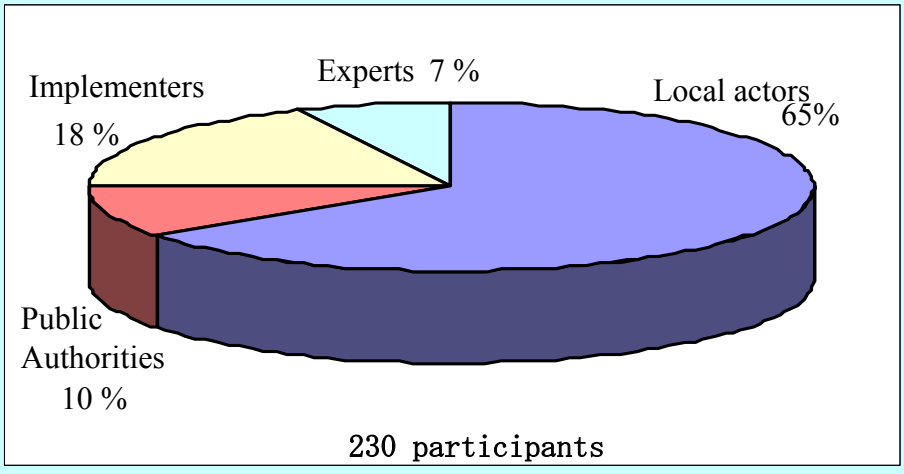
A 3 years collective learning process (2000-2003)

- EC DG Research - Radiation Protection- Concerted Action
- A 3 years programme in Europe with 4 seminars hosted by local communities - significant co-funding of the seminars
  - Oskarshamn (Sweden), October 2001
  - Verdun (Bure, France), March 2002
  - Fürigen (Switzerland), September 2002
  - Cordoba (Spain), March 2003

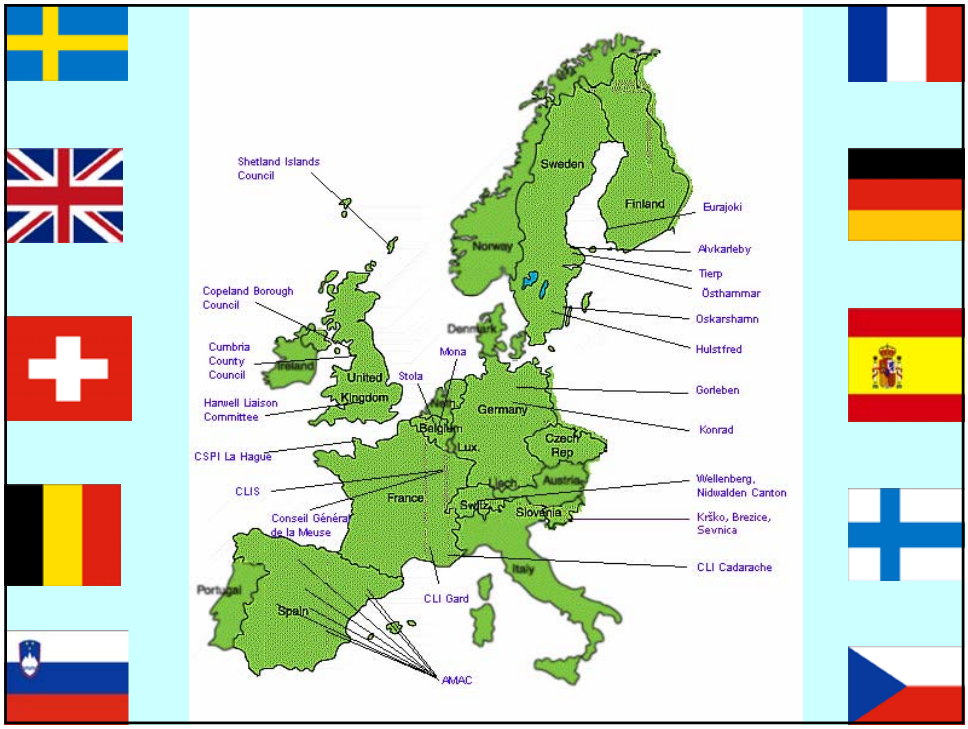
Objectives of COWAM

- Multi stakeholder presentations for collective reflections
- collective reflection on ways to improve NWM-Decision Making Processes (DMP)
- to create the conditions for local actors to participate actively, to bring their views and concerns and to network
- to facilitate a non hostile, fair, equitable dialogue of local actors with implementers, public authorities and experts
- to make observations that can be used for improving the quality of decision making in NWM

COWAM Network



LKO Lokal kompetensuppbyggnad i Oskarshamn - projekt kärnavfall. Platsundersökningsskedet



Oskarshamns kommun

COWAM Methodology

- To assess actual experiences of decision making at local level in different contexts
- Pluralistic case studies
- Single interest working groups
- Pluralistic recommendation groups
- To facilitate expression in native languages

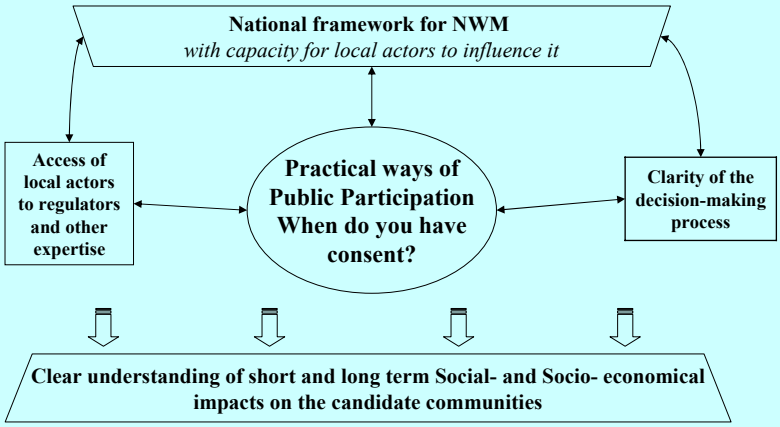
The pluralistic case studies

Decision context	Country
Sellafield	United Kingdom
Oskarshamn	Sweden
Tierp	Sweden
Görleben	Germany
Bure	France
Wellenberg	Switzerland
Spanish nuclear municipalities	Spain
Mona	Belgium
Stola Dessel	Belgium

The Recommendation Groups reports in the Cordoba final seminar (March 2003)

- Conclusions rather consensual
- NWM is a common concern
- Many common national and local difficulties
- Different challenges and innovations required in each national context - good examples exist
- Need for early involvement of local actors in the DMP
- Critical areas for improvement identified

Identified areas for improving the governance of NWM



Public participation

- The empowerment of local actors and an active participation of the wider population is necessary - the local perspective!
- Local participation is there for all opinions to allow people to discuss and establish their interest
- Local participation requires a defined national decision making process - clear decision making points
- The roles of the participating parties must be clear from the start - who takes the decision, when and on what basis

Public participation

- Involved local actors need guarantees that :
  - their comments and questions are investigated and addressed
  - that the project is modified based on local input
  - that decision are technically sound, safe and locally accepted
- Final decision rests with elected representatives at local and national levels

The implementation of local participation

- Local participation requires:
  - Structuring local dialogue
  - Plurality : local opposition is an asset
  - From the initiation of the DMP
- Principles of action and current practices are possible to identify but there is no one best solution

The implementation of local participation

- Local democracy on NWM requires resources for:
  - local competence building and participation
  - possibility to call on additional expertise
  - independent polls
  - participation in fora to influence regional and national players
- Independent funding

The access of non-experts to expertise in the local decision making process

- Access to the experts of the licensing authorities
- Access to expertise not only from the implementor is a factor of confidence for local actors

The access of non-experts to expertise in the local decision making process

- From time to time access to pluralistic expertise to supports local actors in :
  - Gaining autonomy, self-confidence and awareness
  - Raising relevant questions and stretching implementers and licensing authorities
  - Framing the technical and non technical dimensions of the project

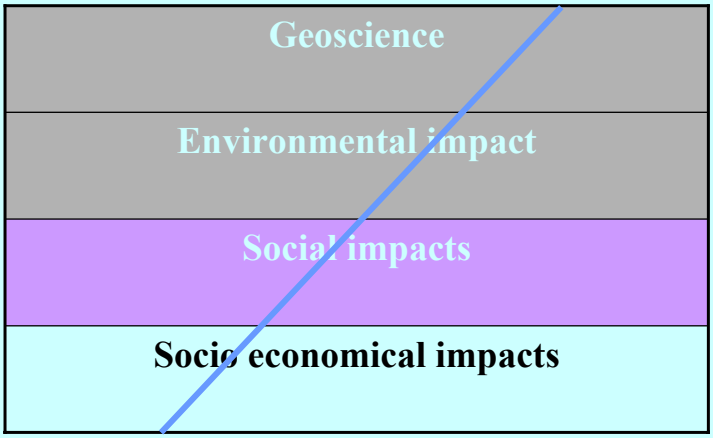
The existence of a national framework for NWM and the capacity of local actors to influence it

- **Co-operation and shared responsibility between levels of governance are required :**
  - **Credibility of local participation in NWM**
  - **Articulation of national and local interests**
- **A national framework is an essential basis :**
  - **Legislative framework**
  - **Clear definition of roles**
  - **Basic H&S standards**
  - **National solidarity with local communities**

The existence of a national framework for NWM and the capacity of local actors to influence it

- Local actors should be provided with channels to influence the design, implementation and review of the national policy, including :
  - NWM policy within the broader energy policy
  - Technical options and concepts - EIA alternatives
  - Site selection process

Scematic level of influence



SKB **Municipality/public**

Quality of the decision making process

- **A stable decision-making process should involve: consistency, be iterative, contain option analysis, be transparent, accountable and coherent**
- **A stepwise approach integrating national/local level for policy design - policy implementation - review**
  - **Acceptance criteria for decisions defined in advance for each step**
  - **Criteria should be discussed and reviewed at national and local levels as the implementation progresses**
  - **Defining the role of local communities and their interaction with other parties for each step**
  - **Need for clear and defined alternative options with regard to potential failure**

Quality of the decision making process

- It is more comfortable for local communities having a veto right to participate effectively in a site selection process
- While safety remains a paramount criterion, voluntary and free participation are criteria of quality for the decision making process

Some of my observations from the COWAM network

- A safe solution is not safe until it is accepted safe by the public! Many lack this insight!
- Take time-do it right from the beginning. A restart can take decades. NIREX
- Keep an open dialogue, listen to the local level and adjust according to changing needs. Germany

Some of my observations from the COWAM network

- Local decision makers and the public must work hand in hand. The real issues must be dealt with. Oskarshamn.
- Bring in the social science aspects early and be prepared to use innovative methods. Belgium
- Municipalities with nuclear experience an asset. Spain

LKO Lokal kompetensuppbyggnad i Oskarshamn - projekt kärnavfall. Platsundersökningsskedet

The most positive aspects of COWAM

- Neutral arena for reflections on national aspects without confrontation. Problems-solutions.
- First project where all parties have participated. (majority local)
- Local contacts have provided tools to reflect and improve the work at home
- Competence building - self confidence - is the key to local participation rather than confrontation

My view on what to do now

- Maintain and develop an open exchange between national local parties
- Develop the EIA as a participative tool. All parties develop and agree on the basis for decision making - Decisions taken separate by each party.
- Continued innovative initiatives required for practical Public Participation

My view on what to do now

- At what point have we reached an informed consent?
- **R&D and experience has provided models and tools to improve decision making- public participation and transparency - use them in the ongoing programmes and share the best practises - more important than more "RISCOM and COWAM"!!**

Appendix 7:

UK studies on participative processes

Jane Hunt

WP4: Dialogue Experiments

Jane Hunt
CSEC/IEPPP, Lancaster University

Aims

- identify and evaluate different processes and associated rationales (D4.1)
- develop and test experimental versions of selected processes to assess their potential contributions to furthering the debate (D4.2-4.9)
- produce recommendations (D4.10 and 4.11)

Aims

- to explore different processes of dialogue and identify
  - what works,
  - what doesn't,
  - how,
  - why,
  - and for whom
- particular focus on 'institutional stretching'

What is dialogue?

- means of interaction
- 'stakeholder dialogue'
- Common Ground model
- Deliberative model
- Bohmian model

Constructing roles, constructing people

- individualised (e.g. traditional questionnaire)
- competitive interests
- collective

Criteria: starting principles

- transparency and legitimacy
- equality of access
- openness of framing
- inclusive and ‘best’ knowledge elicited
- deliberative environment

- improvement of trust and understanding
- developing insight and new meaning
- developing sense of shared responsibility and common good
- producing acceptable/tolerable outcomes/decisions

4 experimental processes

- discussion group
- future search variation
- scenarios workshop
- dialogue workshop

+ Schools Website

- developed and trialled in five UK schools
- positive feedback
- but limited discussion time within National Curriculum
- RADIALe (Defra, EA, HSE)

Design factors

- participants
  - roles
  - interactions
- tasks and their purposes
- endpoints and outputs
- information provision and questioning
- expectations and presumptions
- mix and match
- flip charts or overheads?

Roles

- official stakeholders equivalent to lay public
- face to face interaction and shared tasks
- facilitators
- information officers
- no ‘expert authority’
- focus on listening and enabling, rather than explaining and arguing

Shared meaning

- open framing and collective problem definition
  - intractable problems
- new understanding
- basis of action

Collective good

- shared rather than individualised interests
- shared value base
- shared problem definition (what is at stake)
- recognition of difference
- new identities
  - 'the good citizen'
  - 'the good institution' ?
- commitment

Collaborative learning

- 'teacher centred' 'top down' (deficit model)
  - information as transmission of packages
- 'student centred' bottom up
  - active learning
  - interactive learning
  - information/knowledge as shared understanding, produced collaboratively

Bohmian approach

- listening and suspension
- extended epistemic communities
- participatory social learning

- institutional and organisational learning
  - structures
  - boundaries

Conclusions

- discussion and conclusions presented in D.10 and D.11
  - clarity of aims and process
  - interpersonal dynamics
  - information
  - public capacities and attitudes
  - official stakeholder learning
  - institutional issues

Riscom Model

- worked with idea of ‘stretching’ as expanding and developing official stakeholders understanding
- Riscom model overall not applicable in UK context where there is a fluid and dynamic situation

Final Word

- moving forward with the radwaste problem means moving forward with a collaborative approach
- practical implementation of principles of open, inclusive (Bohmian) dialogue

Appendix 8:

The Finnish EIA

Jaana Avolahti

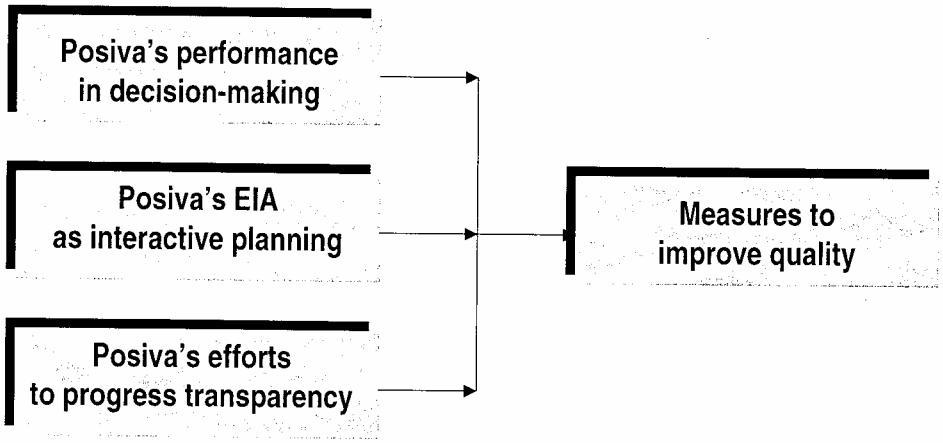
Working Report 2002-45

Interactive planning in the EIA of the final disposal facility for spent nuclear fuel in Finland

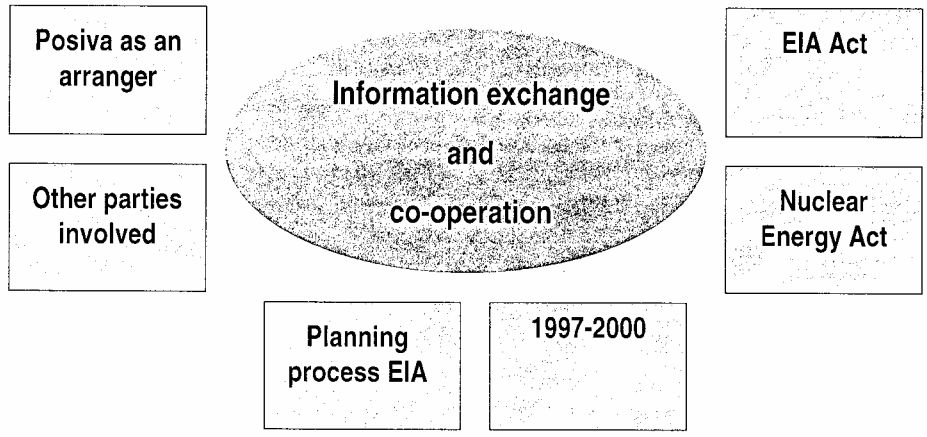
Antti Leskinen
Markku Turtiainen

September 2002

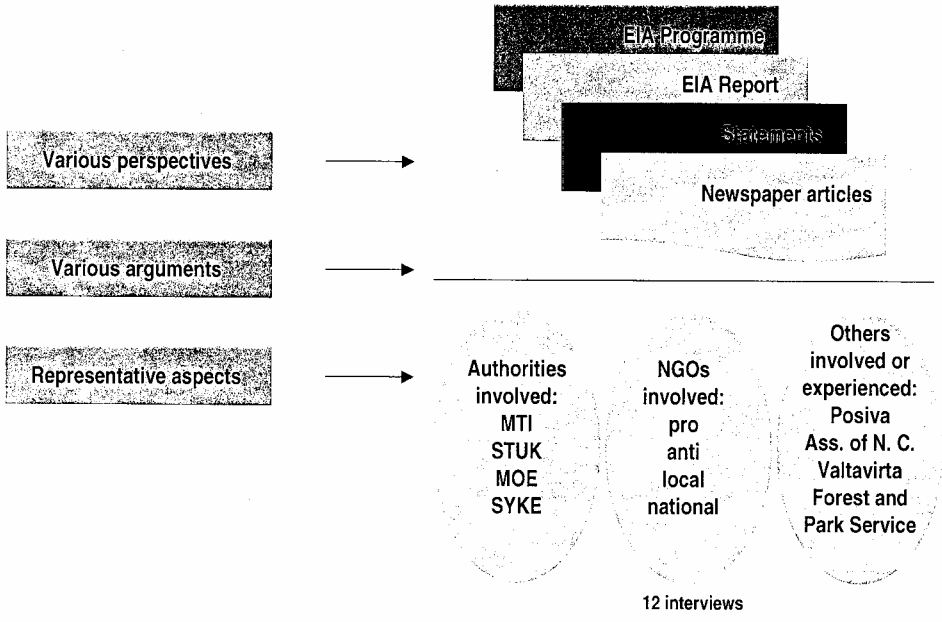
Objectives



Scope of the study



Material



Posiva's subcontractor

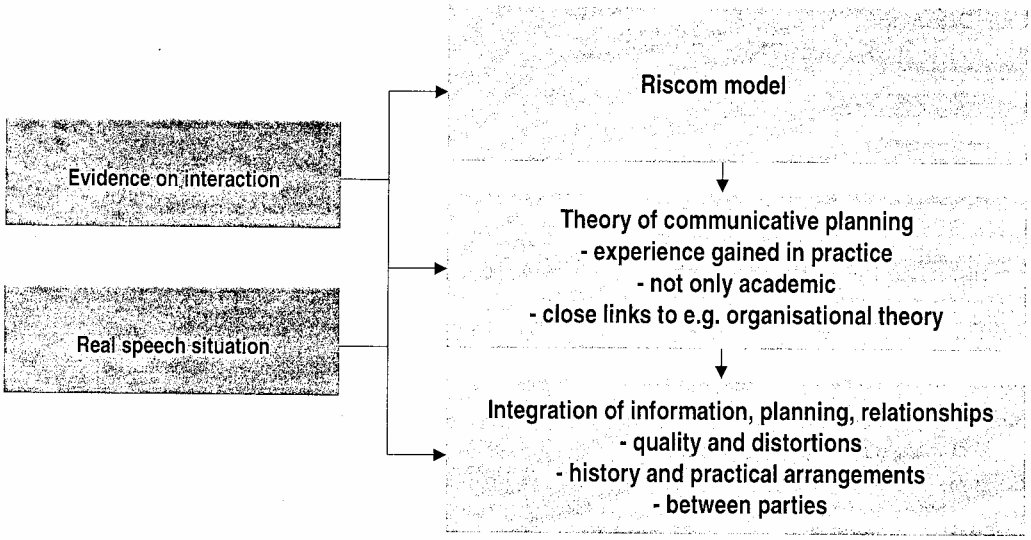
DISKURSSI

- Many years' experience on implementing interactive planning in practice
- A neutral chairman and facilitator in the public events and in the sessions of the discussion working group
- Interaction trainers of Posiva's team

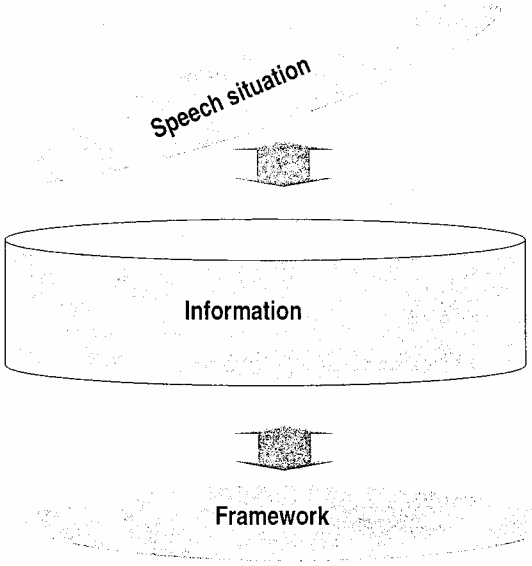
Topics studied

- Interaction in practice during EIA
- Detailed question concerning transparency, methods, comprehensibility, illustrativeness, attitudes, resources, phases, roles of the participants, relationships between authorities
- Technical concept

Analysis method



Elements in Analysis



Interaction between parties
Focus on Posiva
Sincerity, reliability
Legitimacy

Clarity
Comprehensibility

History
Preparation
Legislation
Arrangements
Opportunities

Evaluation criteria

- Role of each party
- Justifications
- Documents
- Prerequisites
- Influence

Planning was transparent and interactive but ...

Training courses	Plans for interaction
Resources	Positive attitudes
No alternatives, zero-alternative	Procedure not familiar
Parallel procedures	

Arrangements and implementation interactive but ...

Flexible arrangements: - more resources when necessary - new methods (i.e. exhibition bus)	Information on opportunities to participate sufficient	Timing and length - during elaboration of EIA programme - longest possible
Possibilities to influence - public hearing by municipalities	Unlimited participation - open to all - written material free of charge - selection representatives free	No national interaction
No statistical representativeness	→ Reasons for non-participation collected: conflicts and distrust, wrong level of planning, scarce resources, no impact on daily life, no benefits, not in the news, no experience	

Information clear and comprehensible but...

Needs for information satisfied - required analysis - answers to questions - verified	Documents - extensive report with clear outline - references on studies
Assessing methods - generally accepted - disaggregative method	Experts chosen by Posiva Not enough financial resources

Speech situation interactive but..

Rhetoric - pertinent - a matter-of-fact manner - good argumentation - sincerity in own views	Neutral chairman - rules of game
Risk perception - differences taken into account - verified	Posiva chose a site before EIA finalised

According to A. Leskinen:

The most significant skill in this kind of context is listening to.

Success requires commitment of an organisation and other parties.

Appendix 9:

The Swedish hearings

Kjell Andersson

RISCOM-II Workshop No 3
Prague, Sept 10-11, 2003

Swedish hearings and the RISCOM Model

Kjell Andersson

Background

SKB proposed in November 2000 municipalities for site investigations in the "FUD-K" report

SKI/SSI review 2000-2001

Government decision 2001

Decisions by municipalities 2001-2002

SKI/SSI organised hearings in:

- Östhammar, Tierp and Älvkarleby (NordUppland)
- Hultsfred and Oskarshamn (Småland)
- Nyköping (Södermanland)

It was decided by SKI and SSI to design the hearings using RISCOM Principles

Preparations and evaluation of the hearings was done as part of RISCOM-II

A working group and a reference group were formed

The hearing format and then RISCOM Model were subject for special public meeting in Tierp

Work Package No 5: Hearing

Critique against hearings

- **a battle zone**
- **adversarial confrontation**
- **unfair – too late in the process**
- **only a very small proportion of the population has an opportunity to speak**
- **favouring participants with economic stakes**
- **a show of power**

Positive elements

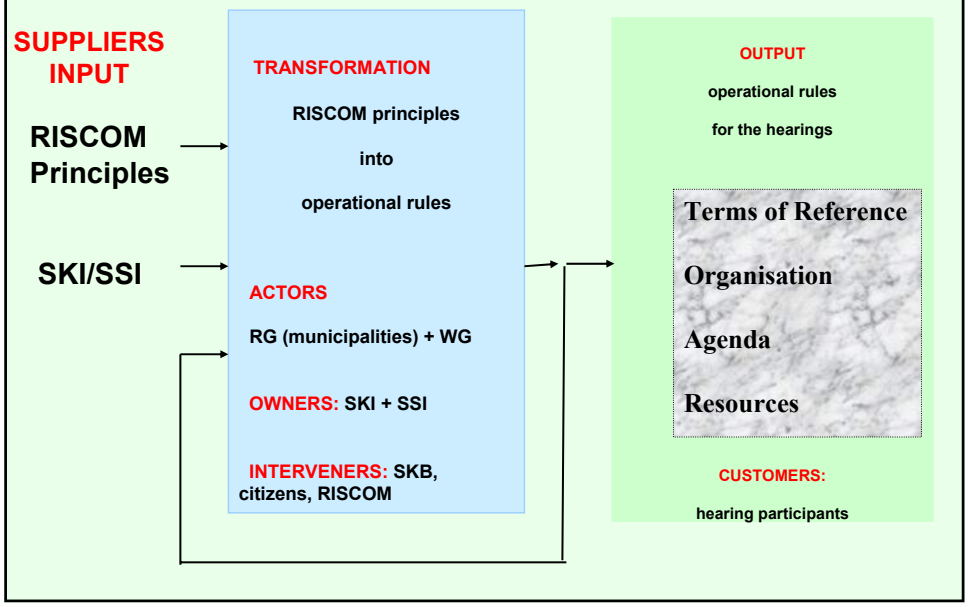
- **the questioning of all actors**
- **hard test of arguments**
- **publicity and openness for citizens**
- **opportunity for the citizens to express their concerns.**

TASCOI

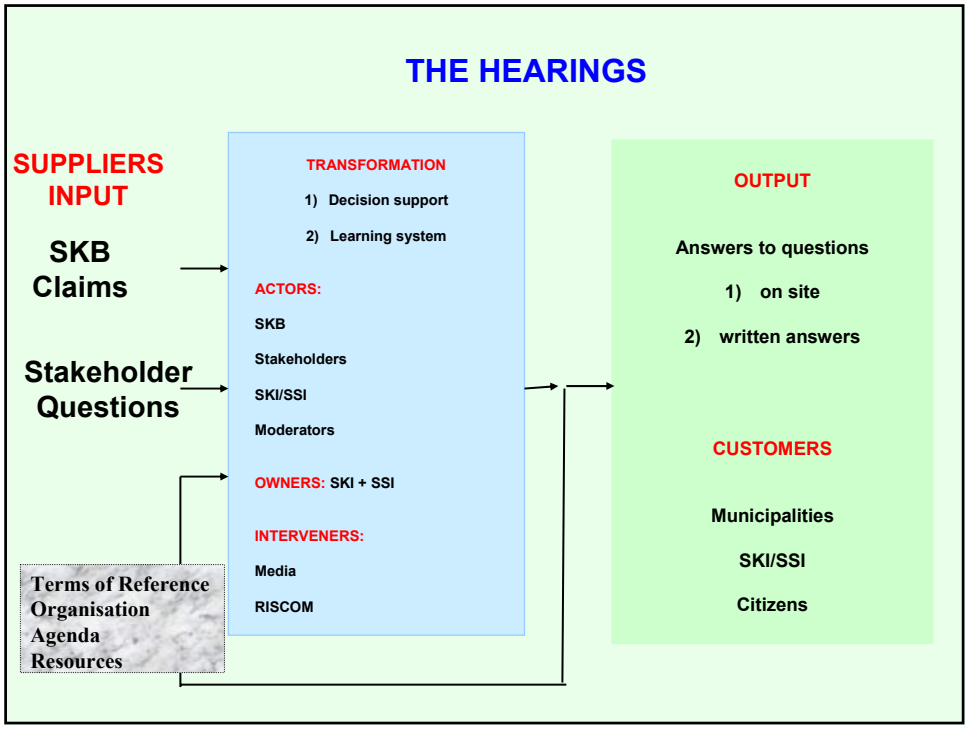
- **Transformation**: What inputs are transformed into what outputs?
- **Actors**: Who carries out the activities entailed by the transformation?
- **Suppliers**: Who are, or would be, the suppliers of inputs to make possible the transformation?
- **Customers**: Who are, or would be, the immediate customers for the outputs of this transformation?
- **Owners**: Who have or would have an overview of the transformation?
- **Interveners**: Who define or would define the context for the transformation

Karita Research

PREPARATION PROCESS



THE HEARINGS



Day 1: Waste management methods

- **Seminar on alternatives system**
- **Group discussions**

1. **To prepare questions for the panel debate**
2. **To describe issues of importance for deciding on waste management method – will be documented**

- **Panel debate**

Objectives of Day 1:

- **Increase awareness about different aspects**
- **Stretch the ”system” (trustworthiness of decision making process)**
- **Enrich the SKI/SSI review**

Day 2: Site selection

Hearing procedure

- Selection of feasibility study municipalities
- Site selection within the municipalities
- Selection of municipalities
- What is a site investigation ?

Objectives of Day 2:

- Increase awareness about SKBs site selection
- Stretch SKB (trustworthiness of SKB arguments)
- Enrich the SKI/SSI review

Drottz Sjöberg review

Some keys to success:

- Unbiased and skilled moderators
- Using working groups to formulate questions gave the participants time for reflection and discussions without dominance by e.g. the implementer or the authorities. It is likely that many participants appreciated the possibility to be anonymous and channel questions through the moderators

Cont.

- Well defined scope of the hearings developed in dialogue with the municipalities.
- It was clear that the authorities were the owners of the hearings and that the outcome would be included in their review of SKB's programme.
- The early involvement of the municipalities in the planning process

Renn et.al: Trust is promoted when:

there is a high likelihood that the participants will meet again in a similar setting **the setting was unique**

interaction takes place face-to-face in regular meetings over a reasonable period of time and people have a chance to get to know each other **yes, in the Swedish process**

participants are able to secure independent expert advice **to some degree**

participants are free to question the sincerity of the involved parties **yes**

citizens are involved early on in the decision making process **from start of feasibility studies**

Renn et.al: Trust is promoted when:

all available information is made freely accessible to all involved **Yes, necessary but not sufficient for transparency**

the process of selecting options based on preferences is logical and transparent **SKB:s claim at the hearing**

the decision making body seriously considers or endorses the outcome of the participation process **an outspoken claim by SKI/SSI**

citizens are given some control of the format of the discourse (agenda, rules, moderation, and decision making procedure) **first phase of project ; important for a fair process!**

Did it work ?? Transparency ??

- High level of involvement
- Stretching
- Answers to all questions
- Mental separation of nwm level from site selection level

- SKI/SSI too much mixed together with SKB ("the establishment")
- Values did not become explicit as compared to factual issues

Karita Research

Did it work ?? Cont.

- **Support from RISCOM model:** **yes**
- **Was it perfect ?** **no**
- **Can it be improved?** **yes**
- **Is it workable?** **yes**

Karita Research

CONCLUSIONS

- **The RISCOM Model can be applied to improve a decision-making process (and events within a process)**
- **There are tools (TASCOI) that can assist in process design**
- **Fairness - Involvement in the process design**

Karita Research

Appendix 10:

Organisational prerequisites for transparency

Raul Espejo

The RISCOM Model
RISCOM II Final Workshop
Prague, 10-11 September 2003

Part 2: Transparency Loop

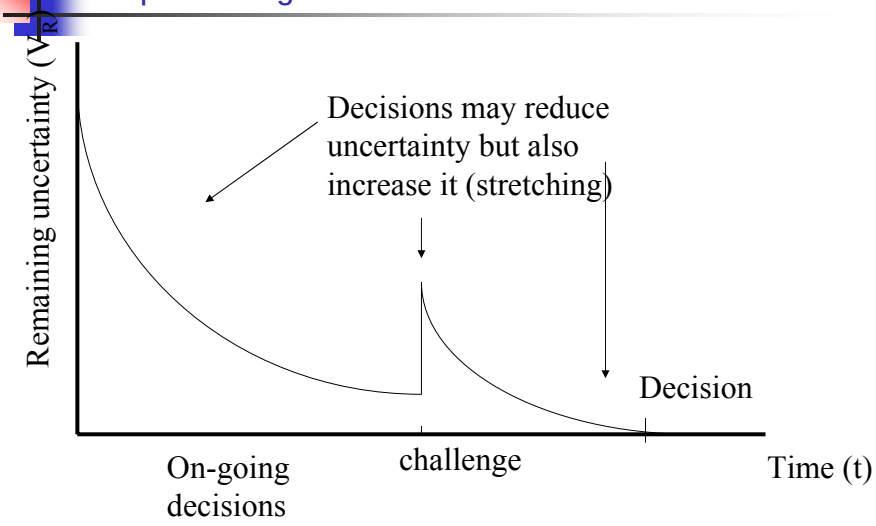
Raul Espejo, Syncho Ltd &
Clas-Otto Wene, Wenergy AB

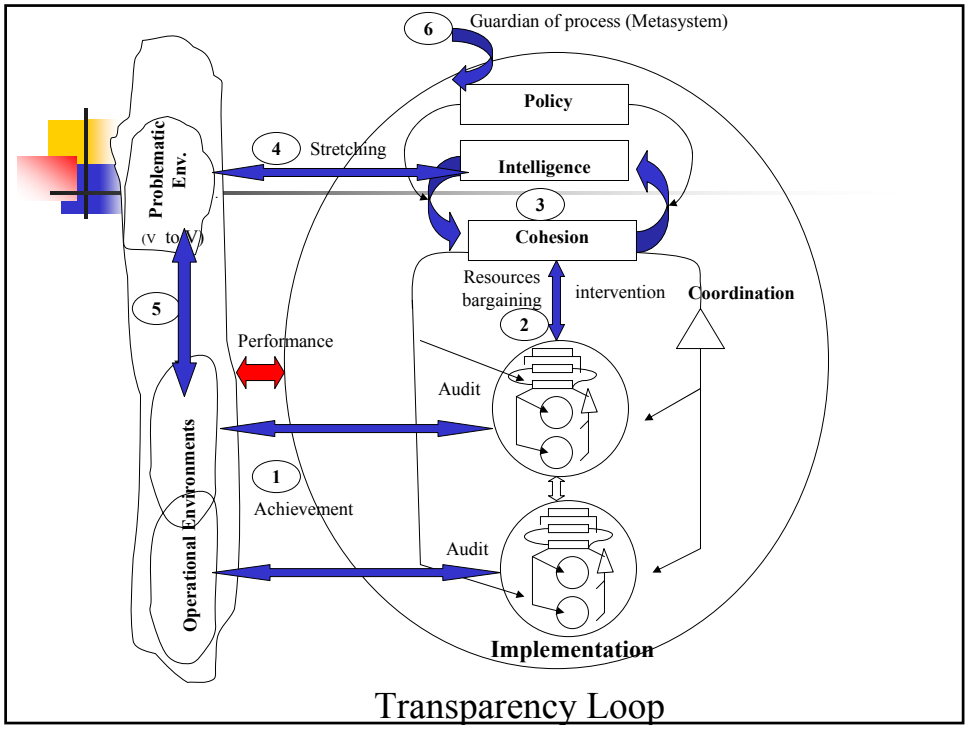
About the RISCOM Model

The RISCOM Model offers an approach to increase the chances of an effective democratic process in complex societal decisions. For this purpose it propounds developing communications and interactions to give all participants similar influence and power in the related decision processes.

Decision process from a complexity perspective

Simplified diagram





Transparency Loop

Interactions and Communications

The RISCOM model makes apparent that dialogues with stakeholders are not enough to achieve communicative action. Additionally it requires developing communications and interactions as implied by its channels for transparency.

Checks and Balances

For as long as the transparency loops (5 channels for transparency) suffer of inadequate checks and balances, it can be argued that the actions of the implementer will be strategic and therefore more focused on improving effectiveness than on clarification.

Context for Dialogues

Dialogues need as a context a decision-making process in which all stakeholders satisfy the requirement of an on-going engagement in the decision process (this is one of the requirements for a truly democratic and participative decision process).

Contextual Requirements

- Vocal minorities as legitimate representatives of silent majority
- Stretched implementers
- Policy process with ‘Inside and now’ checked and balanced by ‘outside and then’ and vice versa
- Legitimate and fair resources bargaining within organisational system
- Authentic and efficient services to customers (part of silent majority)

Design of Dialogues

However democratic might be the design of occasional interactions (e.g.dialogues), if external stakeholders cannot maintain over time their engagement in the decision process, they may feel that they are being manipulated by the establishment and that they lack opportunities to influence outcomes.

Design of Dialogues

The design of one-off events in general can be assumed to be in the benefit of those who maintain continuity working with the policy issue of concern. One might expect that it is easier for the implementer to achieve this continuity than for the external stakeholders.

A Possible Solution: Orthogonal Communications

When two groups in interaction have very different levels of complexity in particular aspects of a shared policy issue orthogonal communications are a means to reduce the strategic manipulation of each other. Orthogonal communications happen when on-going dialogues and negotiations are complemented by the monitoring of each others' activities to confirm the legitimacy, authenticity and truth of the other's claims.

Conclusion: Orthogonal Communications and Dialogues

To engage external stakeholders in on-going processes that they experience as too complex it makes sense to design effective orthogonal communications among them and the implementers. This may imply, for instance, that in addition to periodical dialogues external stakeholders occasionally monitor the implementer's activities.

Strategic Dialogues

When this is the case quite naturally those players who have more opportunities to involve themselves in the on-going decision process will have more chances to influence its outcomes, in which case those in the weaker end of the communication loop are likely to perceive dialogues as strategic.

Appendix 11:

The expert role

Stéphane Chataignier

The expert role

Imagining dialogue
between experts and public

Experts and non experts

Two studies:

- Meeting between specialists and non specialists about safety of radioactive waste disposal
- Understanding rejection by the population of consultation for the siting of a second laboratory

⇒Distinction is not between experts and non experts but between:

- Nuclear experts
- Non nuclear experts and non experts

How? unimaginable dialogue

- Local resistance for changes in society (NIMBY)
- Secret tradition in nuclear industry

All think first about conventional forms but no clear vision

⇒What do we want to talk about?

What about? a specific issue

- A technical issue
- A political issue

Environmental, economical risks: nuclear waste management becomes a multi-dimensional problem

⇒who should discuss on this specific issue?

Who? an historical context

- Mediation: organisation or "general public"
- Scientific mind
- Experts and public
- Concrete life

Dialogue on nuclear issues cannot avoid an historical background between social groups

⇒What for they should discuss on this specific issue?

What for? Compare and decide

- Convince with pedagogy
- Listen and understand

Society should decide after comparing different solutions

⇒Experts are expected for analysing solutions

Conclusion

- Expertise greatly expected
- Confronting a lot of experts from different domains and different structures
- Making the scientific debate public instead of making public debate scientific

⇒question remains on how to make it public? (see slide « how? »)

How? unimaginable dialogue

- Local resistance for changes in society (NIMBY)
- Secret tradition in nuclear industry

All think first about conventional forms but no clear vision

⇒What do we want to talk about?

Appendix 12:

The role of safety authorities

Carmen Ruiz Lopez

The Evolving Image and Role of the Regulator in Societal Decision making for the Long-term Management of Radioactive Waste

Lessons learnt within the FSC

Carmen Ruiz López (Member of the FSC)
Consejo de Seguridad Nuclear

RISCOM II - Final Workshop
Prague, 10-11 September 2003

Introduction

- ✓ The Forum on Stakeholder Confidence (FSC) has afforded the opportunity to examine the societal context of the long-term radioactive waste management (RWM) and solid waste disposal
- ✓ Several features of this context have particular significance for regulatory authorities
- ✓ Modern societal demands on risk governance, and the widespread adoption of stepwise approach to decision making, have produced changes in the image and role of regulators
- ⇨ Legal instruments reflect and encourage a new set of behaviours and new understanding of how regulators may serve the public interest

Outlines

Background

- Adapting to the modern societal demands
- Decision making process and implementation
- The waste management system: defining the regulator's role

Summary of key lessons

- Role of the regulators: A mission in service of the public
- Regulatory process: A job of gradual progress and public involvement
- Attributes of regulators that build confidence and earn public trust
- Dialogue and interaction: A culture of openness, learning organisations and active collaborative attitude

Conclusions

Background: Adapting to modern societal demands (1)

- ✓ Changes in modern society are shaping the context of long-term RWM, requiring new forms of dialogue and decision making process, involving a range of stakeholders
- ✓ Values as health, environment protection and safety gaining importance in our society, demand new forms of "risk governance" in dealing with hazardous activities
- ✓ The new dynamic of dialogue has been characterised as a shift from the traditional model "decide, announce and defend" to one of "engage, interact and co-operate", for which technical content and quality of the process are equally important
- ⇨ The scientific and engineering aspects of RWM safety are no longer of exclusive importance: Organisational ability to communicate and to adapt to the new context has emerged as critical contributors to public confidence

Background: Adapting to modern societal demands (2)

- ✓ **Technical competence is necessary but not sufficient. Although "safety" maintains highest priority, it is clear that the new context requires an extended set of attitudes and abilities**
- ✓ **Stakeholder confidence and trust in institutions are seen as key conditions for a successful societal decision making process for RWM**
- ✓ **This falls within the core role of regulators as "guarantors" of public health and safety:**
- ⇨ **To be fully effective in carrying out their mission, regulators need not only to be independent, competent and reliable, but also strive to achieve the confidence and earn the trust of stakeholders and the public at large**

Background Decision making process (1)

- ✓ **A stepwise approach to decision making with discrete and easily evaluated steps, facilitates the traceability of decisions, allows feedback from stakeholder and the public, and promotes public and political confidence in the safety of long –term RWM**
- ✓ **Basic features of the stepwise process include:**
  - ⇨ **a clear definition of the steps,**
  - ⇨ **a clear definition and division of the roles and responsibilities of each stakeholder,**
  - ⇨ **a legal framework**
- ✓ **In order to build confidence in the process it is important that it can be explained and understood as being open, transparent, fair and broadly participatory**

Background
Decision making process (2)

- ✓ To achieve openness and transparency, there must be appropriate procedures in which stakeholder and the public can participate and validate claims of trust, legitimacy and authenticity
- ⇨ Public participation is a way to ensure that public values and ethical understanding are represented, lending fairness, stability and legitimacy to decisions
- ⇨ Public examination of alternatives and options can serve as an important way to increase the legitimacy of the process
  - ❑ Environmental Impact Assessment (EIA) provides a good framework for public and stakeholder involvement for a specific project at a local level
  - ❑ Concerning decisions on general policies and strategies, the concept of Strategic Environmental Assessment (SEA) may be appropriate

Background
Decision making process (3)

- ✓ Experience in repository implementation shows that the progress rests on:
  - ⇨ A clear strategy for the long-term management solution and sound support by the government and policy makers, based on the recognition of responsibilities and needs
  - ⇨ A flexible decision-making process, which allows the accommodation of public and stakeholders' needs
  - ⇨ The commitment of all involved parties, including the municipality/ies and regulatory authorities
  - ⇨ A well structured process of dialogue/interaction between implementer, regulators, political decision-makers and general public

Background
The W M system: defining the regulator's role (1)

- ✓ **Nuclear regulator's responsibilities are:**
  - **to define radiation protection and safety requirements,**
  - **to issue guidance on the safety methodology,**
  - **to review the implenter´s safety analysis,**
  - **to inspect and review,**
  - **to provide information to political authorities, the public and others as needed**
- ✓ **Depending on national legislation and regulation, the licensing process may begin with some kind of decision on the site selection or with the construction permit**
- ✓ **The siting process is lengthy and, at the same time, a key and sensible element in the development of a repository from the point of view of public concerns and the implication of the decision makers at national and local level**

Background
The W M system: defining the regulator's role (2)

- ⇨ **Successful experiences in facility siting have shown that active regulatory involvement is needed, and also possible without endangering the independence and integrity of regulatory authorities**
- ⇨ **The level of involvement of regulators in pre-licensing activities, and their potential influence in the repository program and decision making process, is very much affected by the definition of their role in the national legal framework:**
  - **Regulatory feedback may in all cases be fruitfully ensured during the siting process by creating some reporting-review milestones**
  - **This model of dialogue between implementers and regulators require a strong societal trust in the regulatory authorities. It also requires a well-defined interaction process**

Summary of lessons learnt
Role of the regulator: A mission in service of the public (1)

- ✓ Since the responsibility of regulators is to protect the health and safety of the public, regulators have a mission in service of the public:
  - It is important that regulators, representing the interest of public safety, be involved early in the siting process and collaborate with the potential host community to the extent that is legally compatible with the statutory regulatory regime
  - Independence, competence and effectiveness are crucial for public confidence in the national RWM program, especially in the HLW program.
- ⇨ Regulators have an important role in the overall decision making process of the national waste management program, in ensuring credibility, and therefore, in favouring confidence in the system

Summary of lessons learnt
Role of the regulator: A mission in service of the public (2)

- ✓ Regulators need to act and be seen as independent overseers of the quality of the safety case and the integrity of the decision making process

  Ideally, the regulators should be seen as "guarantors" of the safety and the "peoples' expert", acting as an accessible resource to stakeholder addressing safety concern
- ✓ Regulators should establish good contact with the different stakeholders
  - Open channels of communication should be maintained with general public, implementers, government departments, parliament, concerned actions groups and others.
  - Appropriate mechanisms of dialogue must be found with the different stakeholders

Summary of lessons learnt
Regulatory process: A job of gradual progress and public involvement (1)

- ✓ Stepwise approach to decision making implies a stepwise regulatory process
- ✓ From a regulatory point of view, the stepwise approach for implementation of repository programs is essential, since it allows for evaluation of steps taken so far and to check the appropriateness of the next step
  - ⇨ This kind of process facilitates the development of regulations in a gradual way, starting from very general principles and ending with the guidance applicable to a licensing review
  - ⇨ In this way, the job of regulating is intrinsically one of gradual learning and refinement
  - ⇨ Rules set at one step may be modified or updated at later stage, although regulators must clarify the reasons and basis for changing regulations

Summary of lessons learnt
Regulatory process: A job of gradual progress and public involvement (2)

- ✓ To reserve flexibility, within a decision making process that can last decades, regulators should strive to avoid overly prescriptive rules too early
- ⇨ There are a wide variety of regulations in the OECD countries in terms of scope, criteria specified and level of detail set down in regulation. Two philosophies can be distinguished:
  - ❑ Detailed requirements: provide clear messages to both the implementer and the general public
    If unduly restrictive, they may hamper the development of techniques and procedures
  - ❑ No detailed requirements: provide more opportunity for a constructive dialogue between regulator and implementer, and could be beneficial for the development of technical procedures
    But leaving too much to interpretation can perhaps give the impression of insufficient control from the authorities

Summary of lessons learnt Regulatory process: A job of gradual progress and public involvement (3)

✓ A potential issue that could emerge is whether the level of knowledge is adequate to provide the necessary input for the technical and societal decision at each stage in the stepwise development process

⇨ Measured participation in this type of long-term process demands that regulators have a good oversight of the whole decision making process as well as a clear definition of what is required or expected at each step

A pragmatic response to this questions was provided by STUK during the FSC Turku workshop:

"in the Decision in Principle stage, no definitive conclusion on the safety of the proposed disposal concept was required. Only a preliminary safety appraisal was needed, stating that nothing had been found that would raise doubts about the possibility to achieve the required safety level"

Summary of lessons learnt Regulatory process: A job of gradual progress and public involvement (4)

✓ Involvement of the public when the rules of the game are defined: the process of ruling making and its application to facility site selection and licensing should be transparent and comprehensible

⇨ This implies an open process, in which the public and other stakeholders can comment on the approaches used by the regulators

- The "rules of the game" for the regulatory process should be known as soon as possible
- Ideally, the general public should perceive the overall system of regulation, including the formulation of relevant policy by the government, as being impartial and equitable

⇨ Since there are issues that are the exclusive responsibility of regulators, they should determine and inform in advance when, where and how public and other stakeholder's input can be accommodated. They should communicate also the basis of their decisions"

Summary of lessons learnt
Regulator's attributes to build confidence and earn public trust (1)

- ✓ Public trust is based both on track record, and on perceived morality and values
  - A good track record would suggest, from experience or evidence, that certain future event would occur as expected
  - A perception of reliability, honesty, veracity, fairness, strength etc. of a person or institution would further allow a certain degree of delegation to be given
- ⇨ Public trust is necessary to further legitimate the mission and role of regulators in the eye of the public
- ⇨ A number of organisational and behavioural features appear essential to build confidence and merit public trust

Summary of lessons learnt
Regulator's attributes to build confidence and earn public trust (2)

- ✓ Independence: of organisations of the nuclear energy industry in regards to licensing decisions, and of any organisation likely to be affected by such decisions. Independence has to be demonstrated by visible actions
- ✓ Competence: having sufficient resources to carefully scrutinise the implementer's proposal and arguments. Moreover, regulators must be prepared to be stretched in public fora
- ✓ Openness: being active in providing information about decisions, policies and questions related to safety. It is a question of being prepared to answer questions, to discuss and to exchange views with the public or organisations
- ✓ Clarity: demonstrating their commitment to openness through their efforts to communicate in ways that are clear and understandable to the broader public
- ✓ Accountability: Regulators must be prepared to have their actions and decisions probed and questioned in public fora

Summary of lessons learnt
Dialogue and interaction: a culture of openness, learning organisations (1)

- ✓ To gain public confidence and trust, all relevant regulatory authorities need a long-term strategy for public communication as well as for interaction with other stakeholders
- ⇨ A prerequisite in defining the communication strategies with stakeholders and to address issues of real interest is to listen to their concerns and expectations
  - In order to increase public confidence in their mandate, regulators must understand the social concerns and how to address them
  - The starting point in addressing information and defining stakeholder communication should be studies and research on social concern: Risk perception, values and interests of public and different stakeholders have been areas of research by regulators

Summary of lessons learnt
Dialogue and interaction: a culture of openness, learning organisations (2)

- ✓ Since local authorities are key decision-makers in the overall siting process, they are natural intermediaries for dialogue with the technical regulatory authorities for waste disposal (as in Finland and in Sweden)
- ⇨ Regulator's role should be one of collaboration, acting proactively on the side of municipalities

  In the Nordic cases, regulators are good examples of a proactive attitude in communication, and learning organisations
- ⇨ The objective is not to gain public acceptance of a project but
  - to build up the regulator's credibility and gain public confidence
  - to provide national and local decision makers with the necessary information on safety matters

Summary of lessons learnt
Dialogue and interaction: a culture of openness, learning organisations (3)

- ✓ Communication with the public and the news media is a matter of particular importance, as they are both an audience in themselves and a channel for communicating with other audiences
- ✓ How to communicate with the public is not a simple subject: Training in risk communication and conducting public meetings is necessary
- ⇨ Public information should be a key function of regulators. In fact, this is stated in legal instruments creating regulatory bodies, and included in regulatory strategic plans

  The regulatory authorities, as a body with independent functions, may provide independent, neutral, balanced and factual information about issues related to the safety of radioactive waste disposal
- ⇨ Regulators have to be prepared to respond: this means that they should position themselves on questions of debate and issues of public interest

Conclusions (1)

- ✓ Changes in modern society demand new forms of risk governance in dealing with hazardous activities, characterized by the involvement of the concerned stakeholders
- ✓ The decision making process in RWM and disposal should be seen in the context of a well structured dialogue/interaction between implementers, regulator, decision-makers and the general public
- ✓ A necessary condition for a successful process is that institutions and decision-makers gain and merit recognition as trustworthy and accountable
- ⇨ Among all the actors involved in the decision making process, the sharpest change of the role probably falls to the regulators

Conclusions (2)

- The traditional position world-wide has been that regulators should not be too intensively involved until the licensing process begin. This position is gradually changing toward a more active and visible role in the pre-licensing steps
- The regulatory authorities representing the interest of the public safety should be involved early in the sitting process and collaborate with the potential host community/ies
- Regulators have a role both in developing safety and criteria to ensure public health, and in evaluating whether these standards and criteria will be reasonable met by proposed facilities prior their licensing phases
- An open stepwise regulatory process, led by a respected regulator, can give confidence that the implementer's proposals are subject to the needed detailed technical scrutiny on behalf of the public

Conclusions (3)

- The independence and public accountability of the regulatory authorities are crucial for public confidence in national RWM system and repository program
- Regulators should strive to be and be seen as independent overseers of the quality of the work and the credibility of the decision making process
- Keeping the public informed is considered a key function of regulators. The goals of a regulatory authority in communicating with the public are:
  - to foster public understanding of the regulatory role and activities,
  - to gain public trust
  - to provide national and local decision-makers with the necessary information on relevant matters

Conclusions (4)

- ✓ The regulatory process is a part of a broader decision making system

- ✓ The practical application of the regulatory process has still to be better defined in some cases, or to be improved in others cases, taking proper account of national institutional framework and culture

www.ski.se

STATENS KÄRNKRAFTINSPEKTION
Swedish Nuclear Power Inspectorate

POST/POSTAL ADDRESS SE-106 58 Stockholm
BESÖK/OFFICE Klarabergsviadukten 90
TELEFON/TELEPHONE +46 (0)8 698 84 00
TELEFAX +46 (0)8 661 90 86
E-POST/E-MAIL ski@ski.se
WEBBPLATS/WEB SITE www.ski.se