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**Making the decision-making basis for nuclear waste management transparent  
Summary of a pre-study report**

**English Summary**

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## **English Summary**

### **Making the decision-making basis for nuclear waste management transparent Summary of a pre-study report**

The Swedish National Council for Nuclear Waste, KASAM, which is an independent committee attached to the Swedish Ministry of Environment, studies issues related to nuclear waste management and the decommissioning of nuclear installations in order to advise the Government on these issues.

## **Background**

During 2005 and 2006 discussions were held between KASAM and the Ministry as well as between KASAM and a number of actors having an interest in the nuclear waste management area including SKB, responsible authorities, municipalities involved in site investigations by SKB, their respective county administrative boards and regional councils, as well as environmental groups about their views on the future work of KASAM. These discussions showed that there is a need for activities by KASAM leading to more transparency in the Swedish nuclear waste management programme. Therefore KASAM decided to start a pre-study for a transparency programme and Kjell Andersson (Karinta-Konsult/Karita Research) was contracted to carry out the pre-study. The idea of the transparency programme is that it should increase the transparency, and thereby the quality, of the decision-making process and the document basis for the up-coming decisions related to the SKB license applications for a final repository for high level nuclear waste and an encapsulation plant for spent nuclear fuel, expected to be submitted to the government at the end of 2009 (SKB, 2006, in Swedish).

## **Earlier efforts towards transparency**

The KASAM transparency programme builds on research and development that has taken place in Sweden since the beginning of the 1990s starting with the Dialogue Project of SKI and SSI (Andersson J, Andersson K & Wene, 1993), followed by the RISCUM Pilot study (Andersson, Espejo & Wene, 1998) and the RISCUM II project (Andersson et.al., 2003) coordinated by SKI. Also the Swedish municipalities Oskarshamn and Östhammar have used the ideas of the RISCUM Model in organizing seminars and hearings, and the “Oskarshamn model” builds partially on RISCUM ideas. The RISCUM Model has also been used in other areas than nuclear waste management, such as the risk assessment of mobile telephone systems (Hedberg, 2006), siting of energy installations (Andersson, Johansson & Wene, 2006), and remediation of chemically contaminated sites (Andersson, Grundfelt & Wene, 2005).

## Basic elements

The pre-study report proposes that KASAM uses the RISCUM Model to support the transparency programme. Recurrent elements in the programme would then be:

- A clear description of background for the issue being addressed
- Knowledge building activities
- A hearing where the KASAM committee members and staff stretch the stakeholders

The transparency programme can combine the RISCUM Model with other approaches to citizen participation at occasions when this is deemed suitable. For example, focus groups, other forms of working groups and consensus conferences could be organized and linked to a “RISCUM hearing”. Therefore, the pre-study report contains an overview section about methods for public participation.

At this stage of the Swedish programme for nuclear waste management it is believed that KASAM can provide an arena for transparency which other stakeholders can trust not having hidden agendas or vested interests in the results.

## Contents

During the pre-study a number of stakeholders were approached to give their views about the format and contents of the transparency programme. The consultations showed great expectations on the programme and a large number of issues were raised that could be included in transparency creating activities.

A typical activity will be relatively resource demanding, especially with respect to the time available for key stakeholders. Therefore, issues to be addressed must be critically prioritised. The pre-study report contains nine issues proposed for special efforts by KASAM:

- Deep bore holes as a possible alternative method for final disposal
- Citizen participation and democracy
- The roles of responsible authorities
- Decommissioning of nuclear reactors
- Site selection – on what basis?
- Socioeconomic issues
- Local environmental issues and regional environmental goals
- Long term storage of spent nuclear fuel
- Critical assumptions in the safety assessment

A first event in this suggested series of activities within the transparency programme took place in March 2007, when KASAM arranged a hearing about deep bore holes as a possible alternative method for final disposal. Technical feasibility, long term safety and safety philosophy were among the topics addressed. The hearing will be reported in a KASAM report, to be published in 2007.

Realistically, at most two issues can be covered per year, therefore maximum five issues can be dealt with until SKB has submitted its licence application, however, in principle the transparency programme can continue also during the licensing process. The timing of the KASAM activities will be crucial considering the SKB programme, the review work of the authorities as well as the municipality involvement.

## **Conclusions**

The transparency programme should prepare KASAM for its advisory role to the Swedish government but it should also be a resource for all stakeholders, the political decision makers and concerned citizens who wish to deepen their insight into the issues addressed. Besides contributing in a constructive way to the Swedish nuclear waste management programme, the KASAM transparency programme can contribute to the development of nuclear waste management in a wider context including research and development work that takes place in Europe about public participation and transparency, as well as to other sectors in society.

## **References**

Andersson J, Andersson K & Wene C-O., The Swedish Dialogue Project. An attempt to explore how different actors may take part in the decision process related to disposal of radioactive waste;, High Level Radioactive Waste Management, Fourth Annual International Conference, Las Vegas, 1993.

Andersson, K., Espejo, R. & Wene, C-O., 1998, Building channels for transparent risk assessment, SKI Report 98:5, RISCOM pilot study, Stockholm, 1998.

Andersson, K. et.al., 2003, Transparency and Public Participation in Radioactive Waste Management. RISCOM II Final report, SKI Report 2004:08, Stockholm, December 30, 2003

Andersson, K., Grundfelt, B. & Wene, C.-O., Transparenta Saneringsprojekt, Naturvårdsverket Rapport, 2005

Andersson, K., Johansson, R. & Wene, C.-O., Dialogos Förstudie, Elforsk Rapport 06:36, 2006

Beierle, T., & Cayford, J., Democracy in Practice. Public participation in environmental decisions. Resources for the Future, RFF Press book, ISBN-1-891853-53-8. Washington DC, 2002

Drottz Sjöberg, B-M., Evaluation of hearings with questionnaires and interviews. SKI Rapport 01:39. In Swedish with a two page English summary (RISCOM II Deliverable 5.4), Stockholm, 2001

Gustavsson-Bergquist, A-K., Strålande forskningsutsikter – En översikt över kärnavfallsfrågor inom samhällsvetenskaplig forskning, Umeå Universitet, Inst. Ekonomisk Historia, KASAM 23/07.

Habermas, J. 1981, *Theorie des kommunikative Handelns*, 2 vols, Suhrkamp, Frankfurt.

Hedberg, B., Transparency forum for mobile telephone systems - a risk management project. Proceedings of the fourth VALDOR Symposium, Swedish Nuclear Power Inspectorate, Stockholm, 14-18 May 2006

KASAM Verksamhetsplan 2007, Dnr KASAM 63/06, Eva Simic, 2006-11-22

Krueger, R.A & Casey, M.A., *Focus Groups : A Practical Guide for Applied Research*, SAGE Publications; 3rd edition. April 26, 2000

Rowe G. & Frewer L. J., Evaluating public participation exercises: A research agenda *Science, Technology, and Human Values* 29 512-556. 2004

SKB, Long-term safety for KBS-3 repositories at Forsmark and Laxemar – a first evaluation. Main report of the SR-Can project, TR-06-09, October 2006

SKB, Ansökansplan för inkapslingsanläggningen och slutförvaret för använt kärnbränsle, R-06-50, September 2006,

SKB, Ansökan från Svensk Kärnbränslehantering AB (SKB) om tillstånd enligt kärntekniklagen för inkapslingsanläggningen och Clab. 2006-11-08