Stakeholder participation in radioactive waste management

“Stakeholder involvement” is a key concept in modern approaches to governance that has received considerable attention within the NEA programme of work, in particular in the area of radioactive waste management and the disposal of long-lived waste. Stakeholder involvement rests upon providing information, and may include consultation as well as active participation. In finalising the first phase of its work (2000-2004), the NEA Forum on Stakeholder Confidence (FSC) prepared a report on Learning and Adapting to Societal Requirements for Radioactive Waste Management, presenting a synthesis of key FSC findings and drawing specifically on the experience gained in three workshops held in national context in Belgium, Canada and Finland. Three overarching principles have been found to be essential elements of any decision making seeking broad societal support:

- Decision making should be performed through iterative processes, providing flexibility to adapt to contextual changes, e.g. by implementing a stepwise approach that provides sufficient time for developing a competent and fair discourse.
- Social learning should be facilitated, e.g. by promoting interactions between various stakeholders and experts.
- Public involvement in decision-making processes should be facilitated, e.g. by promoting constructive and high-quality communication between individuals with different knowledge, beliefs, interests, values and worldviews.

Within those principles, a hierarchy of objectives should be considered. The waste management programme should be founded first upon recognition by the national government that the status quo is no longer acceptable, and that an important issue needs to be resolved. The link between current waste management policy and the future of nuclear energy should be openly addressed. Identification of a safe and licensable site and a safe and licensable waste management concept that enjoy host community support should then follow. Next, siting efforts should allow for consideration of local and regional development schemes that take into account the needs and views of the affected communities. Finally, radioactive waste management facilities should be designed and implemented in ways that reflect the values and interests of local communities. According to the latter, safety, participation and local development are the main pillars of trust. Reviewers have also pointed out that most of these findings are of relevance to all public policy-making processes, not only to radioactive waste management.

In long-term radioactive waste management, consideration is also increasingly being given to concepts such as “stepwise decision making” and “adaptive staging”. The key feature of these concepts is development by steps or stages that are reversible, within the limits of practicability. This is designed to provide reassurance that decisions can be reversed if experience shows them to have adverse or unwanted effects.

Despite its early identification within the radioactive waste management community as an important means for reaching solutions and decisions in which there is broad-based confidence, the bases for and application of stepwise decision making, has not yet been widely reviewed. The FSC undertook this task, and documented key findings as well as extensive references to the literature in an FSC report on Stepwise Approach to Decision Making for Long-term Radioactive Waste Management. Some of the outstanding issues identified are that:

- Progress can no longer be expected to be linear when an iterative approach is used (this will pose challenges to traditional organisational structures).
- Criteria will be needed for balancing the social sustainability and the efficiency of a process made more lengthy and uncertain by added decision checkpoints.
- The concrete arrangements for sketching out and agreeing on decision phases, for selecting and involving stakeholders in a participative process, and for adapting institutions to meet long-term requirements, will require careful reflection and tuning in each national context.
- A democratic society must seek to accommodate conflicting values and fairness principles.

Institutions and governments are aware of these challenges and examples have been given of a proactive stance, e.g. the re-styling of the role of the regulators and the search for, and implementation of, new forms of dialogue. The FSC report confirms that radioactive waste management is more than finding a technical answer to a technical problem. Continued monitoring of stepwise experience will provide important guidance.

The FSC workshops held in national context have proven to be successful instruments for sharing national experience in interacting with stakeholders. In 2004, the FSC organised its fourth workshop in this series in Germany, following previous events in Finland, Canada and Belgium. Extensive discussions with stakeholders on all levels of interaction gave insight into the specific challenges of the German process, which are characterised by historic interactions perceived as traumatic by some stakeholders, as well as by the proposal of a new approach regarding repository siting criteria and procedures. In this context, the workshop provided a “testing ground” for the
Society and nuclear energy policy

The second phase of the NDC project on society and nuclear energy was completed with an analysis of case histories related to communication on the risks and benefits of nuclear energy. The report will be made freely available on the NEA website early in 2005. Readers will find a wide array of information and analysis covering generic and country-specific aspects of the issue. Countries addressed in the case histories include Belgium, Canada, Finland, Hungary, Japan, Spain and the United States.