

Multilevel Stakeholder Consensus Building in Radioactive Waste Management

Andrejs Dreimanis*

*Radiation Safety Centre, Licensing Department
Maskavas Str. 165, Riga LV-1019, Latvia*

Abstract

The increased demand of our society to its quality of life, global security and environmental safety as well as to observing a basic ethical principle of equity have advanced our attitude towards the recent proposals to develop shared multinational projects in the use of nuclear energy technologies, in particular, to: a) siting of shared deep repositories for high-level radioactive waste (RW) and spent nuclear fuel safe disposal. In turn, arrangement of multinational facilities requires to gain more complex consensus between all involved parties.

Method. We propose an interdisciplinary synergetic approach to multilevel consensus building for siting and construction of shared multinational repositories for RW deep disposal, based on self-organization (SO) of various stakeholders, chaos and fuzziness concepts as well as Ashby principle of requisite variety.

In the siting of a multi-national repository there appears an essential novel component of stakeholder consensus building, namely: to reach consent – political, social, economic, ecological – among international partners, in addition to solving the whole set of intra-national consensus building items. An entire partnering country is considered as a national stakeholder, represented by the national government, being faced to simultaneous seeking an upward (international) and a downward (intra-national) consensus in a psychologically stressed environment, having possibly diverse political, economic and social interests.

Main Results. Following inferences about building of multilevel consensus are developed:

1) the basis of synergetical approach to stakeholder interaction – informational SO, by forming a knowledge-creating stakeholder community via cooperation and competition among individuals, public bodies/groups, companies, institutions,

2) building of international stakeholder consensus could be promoted by activating and diversifying multilateral interactions between intra- and international stakeholders, including web networks of the RW disposal site investigations and decision-making, networks for international cooperation among government authorities in nuclear safety,

3) development of partnership between inter-national and intra-national stakeholders - a key towards democratic dialogue, with the aim to observe the whole set of distinguishing interests and to reach a shared understanding of the disputable issue,

4) emerged controversies are resolvable using synergetic approaches of conflict resolution: a) moderate chaos (mutual flexibility) succeeds to non-rigid step-by-step approach to the choice of the host country, b) fuzziness in

* Presenting author, E-mail: a.dreimanis@rdc.gov.lv

the siting strategy could promote societal SO by reducing mutual misunderstanding in decision-making,

5) social learning, cross-cultural thinking, integrative pluralism and knowledge - basic prerogatives for developing participative consciousness and co-awareness of existence of shared goals and favouring adequate equity and risk perception.

The stakeholder interaction for repository siting at the Lithuanian-Latvian border is treated.

Conclusion. The proposed approach towards reaching consensus for siting multinational RW repositories – by emphasizing social learning and creative flexibility - can be extended to solving similar problems for arrangement of nuclear power plants and research units. One can recommend to develop - in the frame of international cooperation - further systemic interdisciplinary studies being goal-oriented towards implementing actual shared projects.

KEYWORDS: consensus, international, synergetical approach, shared goal, perception.