Update on NEA’s Radioactive Waste Management Committee (RWMC) & Committee of Decommissioning and Legacy Management (CDLM)

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NEA: Bringing Advanced Countries Together to Address Global Challenges

The role of the NEA:

Foster international co-operation to develop the scientific, technological and legal bases required for a safe environmentally friendly and economical use of nuclear energy for peaceful purposes.

Develop authoritative assessments and forging common understandings on key issues as input to government decisions on nuclear technology policy.

Conduct multinational research into challenging scientific and technological issues.

33 NEA countries operate about 84% of the world’s installed nuclear capacity.
The RWMD supports 2 standing committees

Define strategic policies, best practices in addressing safety, societal and economics issues in managing RW in all phases.

Define strategic policies, best practices in nuclear decommissioning and legacy management.

- **RWMC** (Radioactive Waste Management Committee)
  - Regulatory/legal aspects
  - Env. & oper. safety aspects

- **CDLM** (Committee on Decommissioning of Nuclear Installations and Legacy Management)
  - Societal aspects
  - Economic aspects
Committee on Nuclear Decommissioning & Legacy Management (CDLM)

- Approved by the NEA Steering Committee in April 2018.
- The CDLM covers the decommissioning of all types of nuclear facilities and reactor types; as well as the management of legacy waste and waste sites from historical nuclear activities.

- **Objectives**
  - share experiences and knowledge;
  - establish best practices in decommissioning and legacy management;
  - improve understanding of decommissioning costs and uncertainty treatment; and
  - identify research needs and collaboration opportunities.
  - IDKM for decommissioning
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CDLM Membership

• Senior experts with extensive knowledge in decommissioning and legacy management.
• Representatives from regulatory authorities, policy-making bodies, decommissioning implementers, research institutes and other interested stakeholders.
• Particularly with the following criteria:
  o Experts with in-depth functional experience in developing policies, regulatory framework and practical regulatory measures;
  o Experts with strategic project planning and management experience, to reduce uncertainties associated with long-term project management and cost estimates; and
  o Experts with experience in interacting with stakeholders, to enhance public confidence in nuclear decommissioning and legacy management.
Status of CDLM

- Received 72 nominations, from 20 countries and the EC.
- IAEA as observer

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The RWMC’s vision to manage RW using a holistic approach. Specifically:

- Advance the state-of-the-art on technical, economic and societal aspects of radioactive waste management, also to foster exchange information and experience on RWM policies and practices among members;
- Identify and analyse key issues in policy and strategy for optimisation of the management of spent fuel and all types of radioactive waste generated during various activities.
- Promote cooperative efforts such as the setting up of joint international R&D projects or the development of databases, and to promote initiatives to retain relevant competencies and knowledge.
- Offer, upon request, a framework for the conduct of international peer reviews and international expert feedbacks of national activities in the field of radioactive waste management.
Near-term focus:
- Develop best available technologies which can be used to optimize RWM activities,
- effective methods for integrating new technological information in national RWM decision making.
- A new initiative on information, data, knowledge management.

Near-term focus:
- Continue FSC’s work on the social and ethical dimensions of radioactive waste management, nuclear decommissioning and legacy management;
- Its aim is to assist member countries to enhance confidence, communications and understanding of needs and expectations of all involved stakeholders.

Near-term focus:
- Economic factors that affect the selection and optimization of RWM strategies and their subsequent impacts.

- **Date & time:** Jan 30 – 31, 2019, Avignon, France

- **Objectives:**
  - to foster a harmonized understanding, terminology and approach for developing remote and robotic technologies in back-end activities of the nuclear cycle; and
  - to review the needs and challenges faced by developers and regulators in developing and regulating robotic and remote systems used in the nuclear back-end activities.
RWMC-52 approved the establishment of a new initiative on RRS application in the nuclear back-end.

Objectives:

- Promote the exchange of information on RRS development and application amongst the participants; collection and analysis of inputs from all participants;
- Study the main and emerging challenges for the RRS application. Identify the main factors influencing RRS development and application. Arrange the identified factors and develop a road map (a plan of actions) to support the development in the area of provision of the nuclear back-end programmes with RRS;
- Develop recommendations (road map) to members on establishing a framework, allowing the wider application of RRS in the nuclear back-end area. Strive to achieve shared approaches and standards, where appropriate;
- Support the development and implementation of common procedures, rules, standards, etc. that can facilitate the process of RRS application amongst the potential users of the systems.
Potential participants

Members should be senior technical specialists who have considerable experience and knowledge in the development and application of RRS:

- representatives of decision-makers;
- research and development institutions/organisations in the field of RRS;
- test sites, laboratories and facilities;
- regulatory bodies (various) and technical supporting organisations to the regulatory bodies;
- developers of the main and auxiliary elements for maintenance and repairing of RRS;
- RRS producers, suppliers and service providers;
- soft and electronic elements developers;
- environmental organisations and public communication experts;
- other relevant specialists.

The CDLM will be invited to be part of the initiative as well as the CRPPH and other NEA STCs. Communication with NI-2050.

International organisations (IAEA, EC, WNA, others) and initiatives (e.g. SHARE) will be invited.
New activities at NEA in the IDKM

- **IDKM Workshop** (22-24 January 2019)

- Development of the “**IDKM Roadmap**”, a document collecting activities for which the country member representatives have expressed willingness and interest to carry out under the RWMC auspices

- The NEA Radioactive Waste Management Committee (RMWC) has approved the creation of the “**IDKM Working Party**”. It will act as:
  - A group managing and coordinating all of the activities included in the IDKM Roadmap that the same group will maintain and update based on rising needs of RWMOs and innovations in the IDKM area;
  - A *neutral forum* for the exchange of experiences, lessons learned, common needs and challenges in IDKM among RWMOs, nuclear regulators, TSOs and other stakeholders;
  - A *platform* following major innovations and trends, emerging technologies and consolidating best practices in all forms of the dynamic area of IDKM, in order to assist member countries in their understanding and applications to the RWM field.
**Predisposal Management Workshop**

**Objectives:**
- To review the latest RW treatment/conditioning technologies within the RWM community, R&D needs, technical and social challenges in predisposal management.
- To better understand the impact of various factors, i.e. legal, technical, economics, societal, etc. on predisposal management and future WAC.
- To identify work topics for continuing the RWMC predisposal work, and potential collaborations with relevant STCs.

**Next step:**
- assemble a PC to plan for an NEA workshop, with all relevant STCs.
- WS to be held in Q1-Q2 2020.
Collect and analyse inputs in developing future predisposal mgmt. work. Inputs may include, but are not limited to:

- RWMC: to present current treatment experiences, R&D needs, challenges
- CDLM: optimization challenges, mgmt. of decom/legacy waste
- CRPPH: radiation protection in RW treatment processes
- NDC: economic aspects of predisposal mgmt.
- CSNI: challenges of on-site RWM and change of ownership
- NSC: predisposal mgmt. of SF from new reactors
- NLC: nuclear liabilities (incl. transportation).
- Databank: data management (jointly w/ IDKM).
Building Constructive Dialogues Between Regulators and Implementers in Developing Deep Geological Repositories and Other Disposal Projects for Radioactive Waste (RIDD)

- The aim of this new initiative (RIDD) is to develop best practices for structuring stakeholder interactions in the decision-making process of managing radioactive waste.

- Best practices will be defined based on existing national experiences and best practices as identified by international organizations such as the NEA, IAEA, EC, and ICRP.

- Best practices should be in line with the RWMC Statement.

- The main idea is to develop sustainable strategies for the management of all radioactive waste types from their production to final disposal.
RIDD – Work Scope

• 1st phase 2019-2020: focus on building constructive R-I dialogues in RW disposal projects.
• Proposed mode of operation: regular informal meetings to engage R-I dialogue in a collaborative setting, with opportunities for open discussion. Presentations, discussion outcomes and lessons learned will be documented and used to develop the final report.
• The RWMC may consider dialogues with other stakeholders in other radioactive waste management activities/projects in future phases.
• Future phases will identify best practices for structuring effective stakeholder dialogues in the following project areas:
  • Geological disposal
  • Other types of disposal, i.e. underground and near surface disposal
  • Decommissioning and dismantling
  • Transportation infrastructure development
  • Interim and long-term storage
Deliverable

- A final report (Phase I) summarising the best practices, strategies for structuring stakeholder involvement, the lessons learnt and the best practices gathered in previous and existing international work (i.e. work of the NEA, the IAEA, and the EC) to guide stakeholder interactions in the decision-making process of managing radioactive waste.

  - Main goal is to address “how to properly prepared regulators for regulating RWM activities in a DGR program.”
Thank you for your attention

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