NEA NI2050 Initiative Information on NEA input for Decommissioning

Inge WEBER

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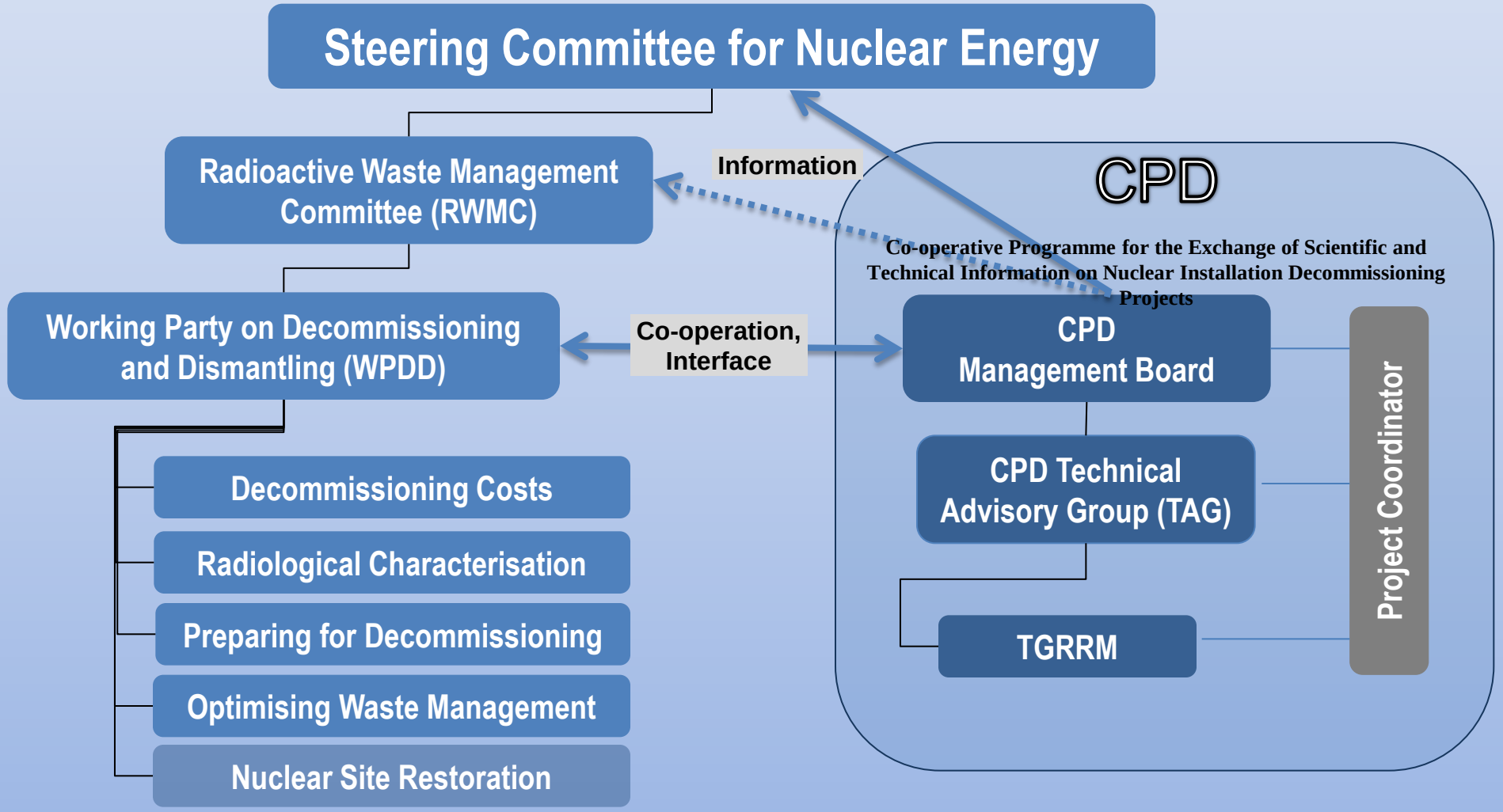
Decommissioning at NEA



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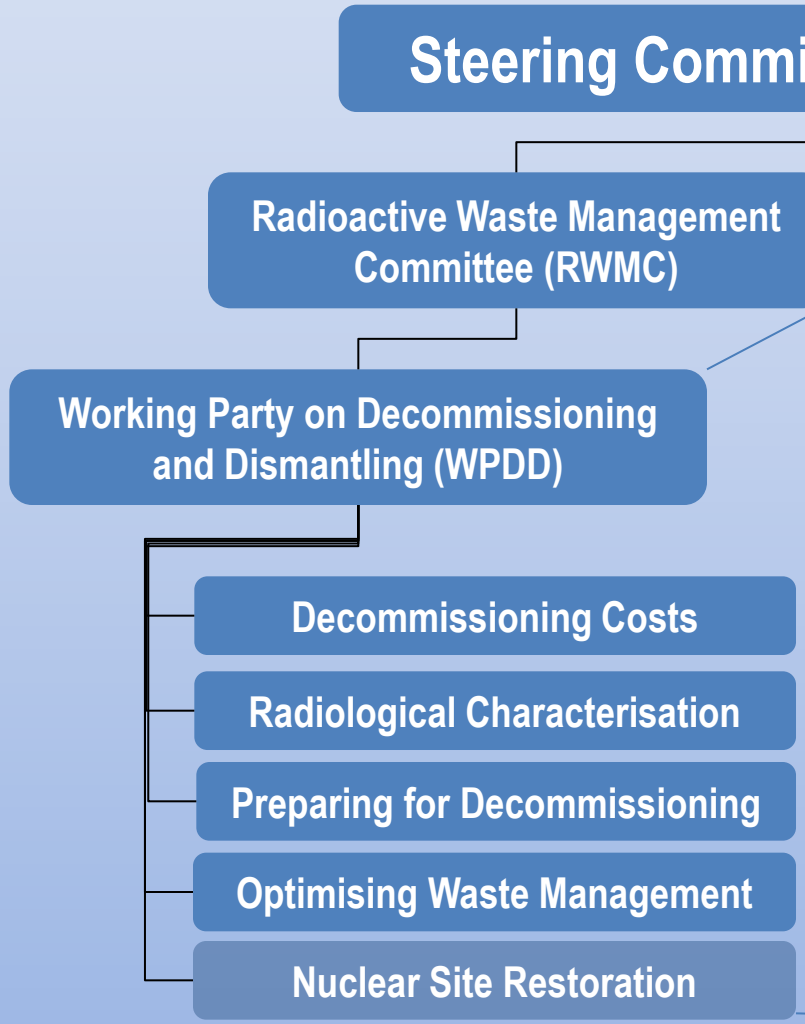
5. Role of the NEA: Decommissioning at NEA



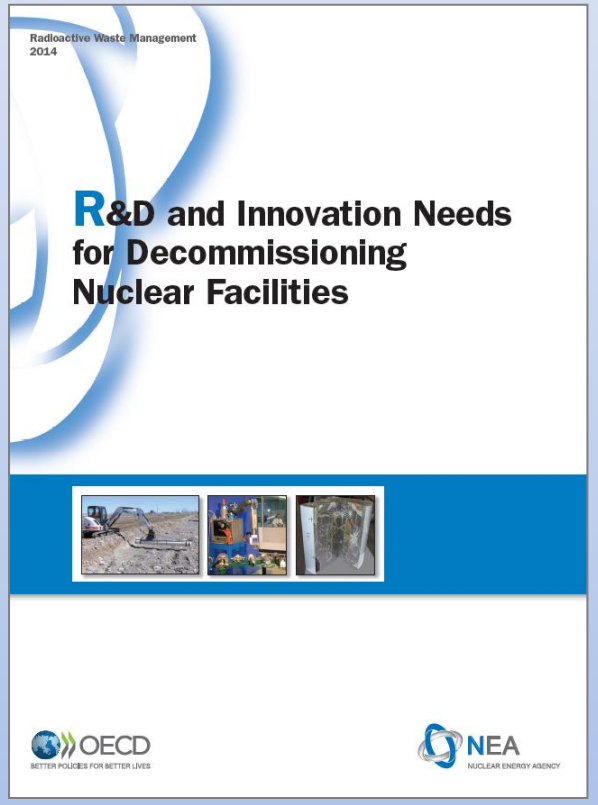
Decommissioning

- Platforms for experience exchange and information sharing
- Stakeholders tackling decommissioning challenges in nuclear facilities designed and constructed by former generation
- Focus: Keeping under review the policy, strategic, and regulatory aspects of decommissioning incl. management of materials, release of buildings and sites from regulatory control and associated cost estimation and funding.
- Reviewing practical considerations for decommissioning implementation
- Covering all types of (existing) nuclear facilities
- Identification of potential areas for R&D development

NEA Publications (1/2)

R&D and Innovation Needs for Decommissioning

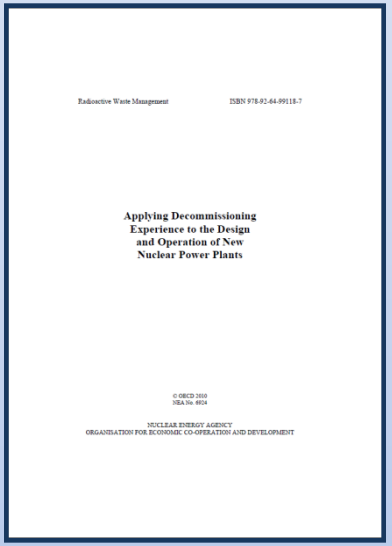
- Reference book, over 260 pages, published 08/2014
- Areas with greatest potential for future improvements through R&D - 5 themes
  1. Characterization and survey prior to dismantling
  2. Segmentation and dismantling
  3. Decontamination and remediation
  4. Materials and waste management
  5. Site characterization and environmental monitoring
- Highlights Cross-cutting topics



➔ R&D needs of decommissioning and dismantling under observation within the Programme of Work of the Working Party on Decommissionig and Dismantling (WPDD)

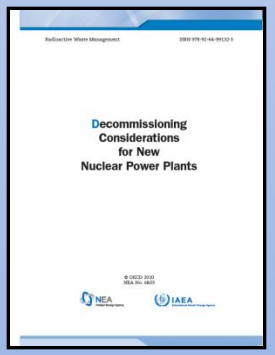
NEA Publication (2/2)

Applying Decommissioning Experience to the Design and Operation of New Nuclear Power Plants (2010)



- Collaborative undertaking of NEA and IAEA
- Current practices in applying experience from decommissioning to the design and licensing of third genreation reactor systems
- Basing on study carried out among regulatory authorities, electricity producers reactor design organisations concerned with the development and implementation of new reactors systems, and decommissioning and waste management organisations
- **Link:** http://www.oecd-nea.org/rwm/reports/2010/nea6924-applying-decommissioning.pdf

Decommissioning Considerations for New NPPs (2010)



- Summary of main findings of the study
- **Link:** http://www.oecd-nea.org/rwm/reports/2010/nea6833-decommissioning-considerations.pdf

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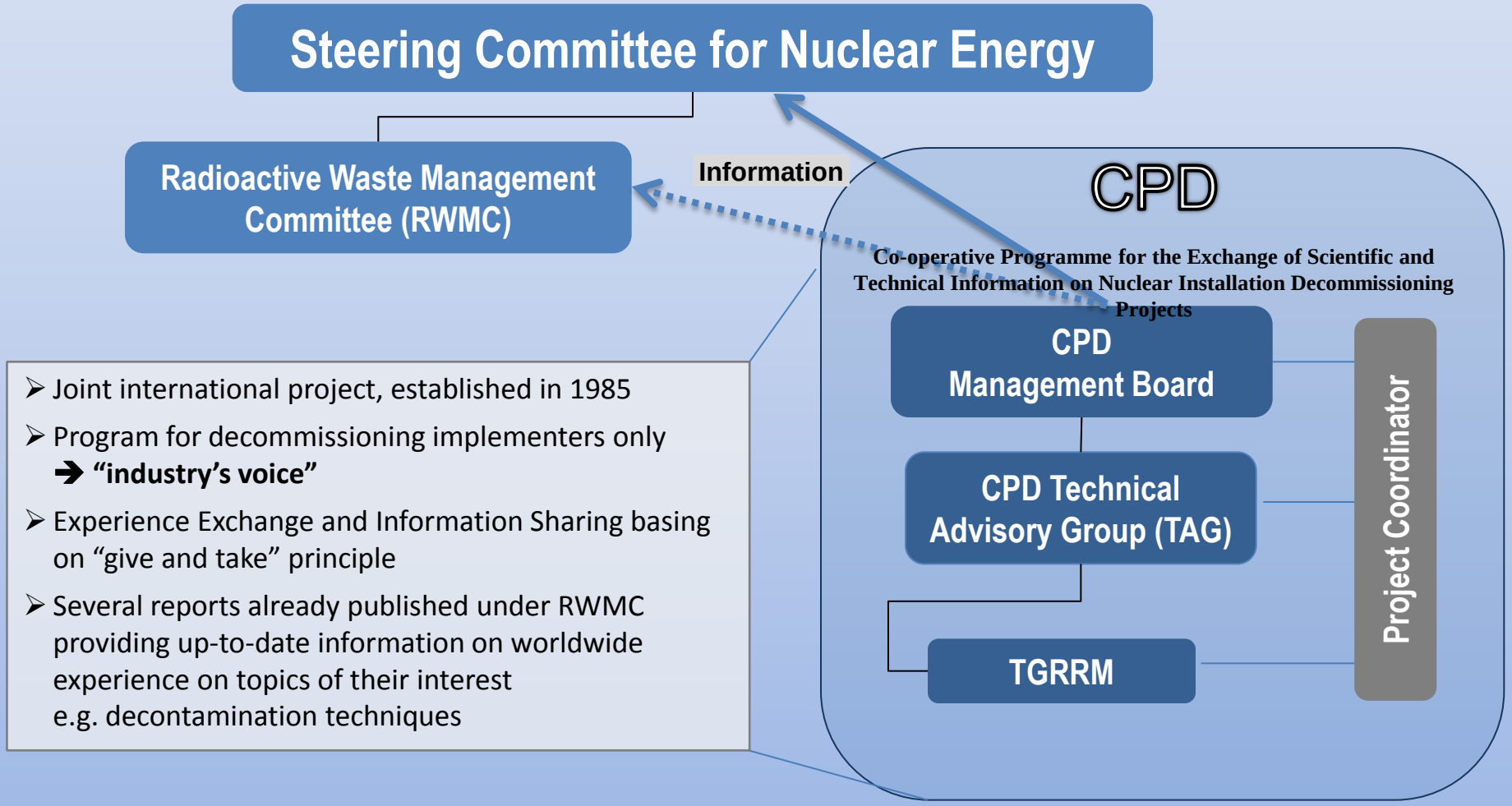

- Joint international project, established in 1985
- Program for decommissioning implementers only
  ➔ **"industry's voice"**
- Experience Exchange and Information Sharing basing on "give and take" principle
- Several reports already published under RWMC providing up-to-date information on worldwide experience on topics of their interest
  e.g. decontamination techniques

R&D for Irradiated Graphite Management

Background

- Dismantling, management and disposal of irradiated Graphite largely unsolved, but some single approaches and R&D initiatives existing
- **Pilot Demonstration Centre for the Uranium Graphite Reactors (PDC UGR)** in Tomsk, Russian Federations, available as demonstration facility
- NEA to explore interested organisations for a **international joint project**

Potential topics of activities

- Engineering aspects of uranium-graphite reactors; dismantling the graphite brickworks;
- RW materials movement in site; internal logistic;
- Primary storage, packaging, characterisation;
- Optimisation the different regulation requirements (safety, fire, etc.);
- Transfer the developed approaches/solutions to decommissioning projects of participants;
- Use the PDC UGR as the international competences centre (when necessary).

Next Steps:

Planned meeting for decision makers and technical experts from interested organisations in Tomsk in November 2016