

NEA Activities for the Safe and Effective Decommissioning of Nuclear Installations

Inge WEBER

Nuclear Decommissioning Specialist

Radiological Protection and Radioactive Waste Management Division

International Conference on Decommissioning of Nuclear Installations: Strategies, Practices and Challenges

Moscow, Russian Federation

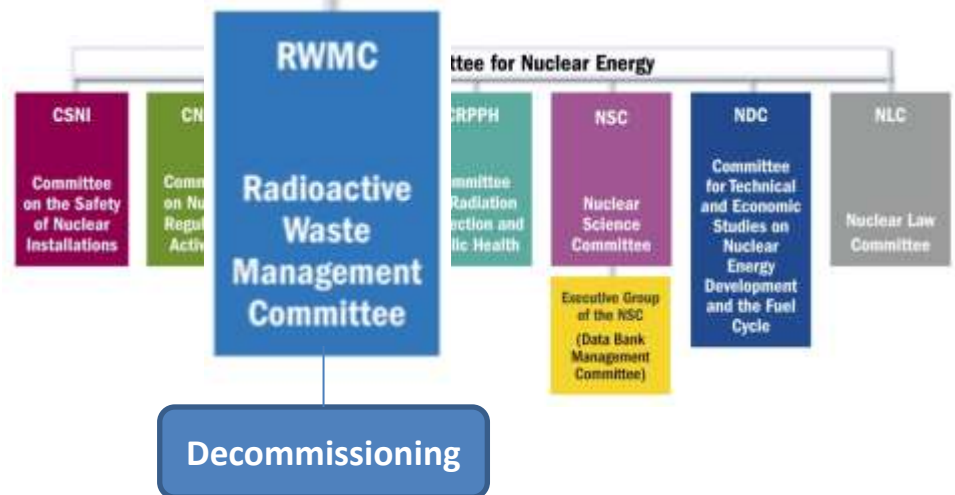
9-11 November 2015

„...the problem of decommissioning is principally not a technical problem; the technical problem is largely solved; [...]. What is not solved, is the political system.“¹

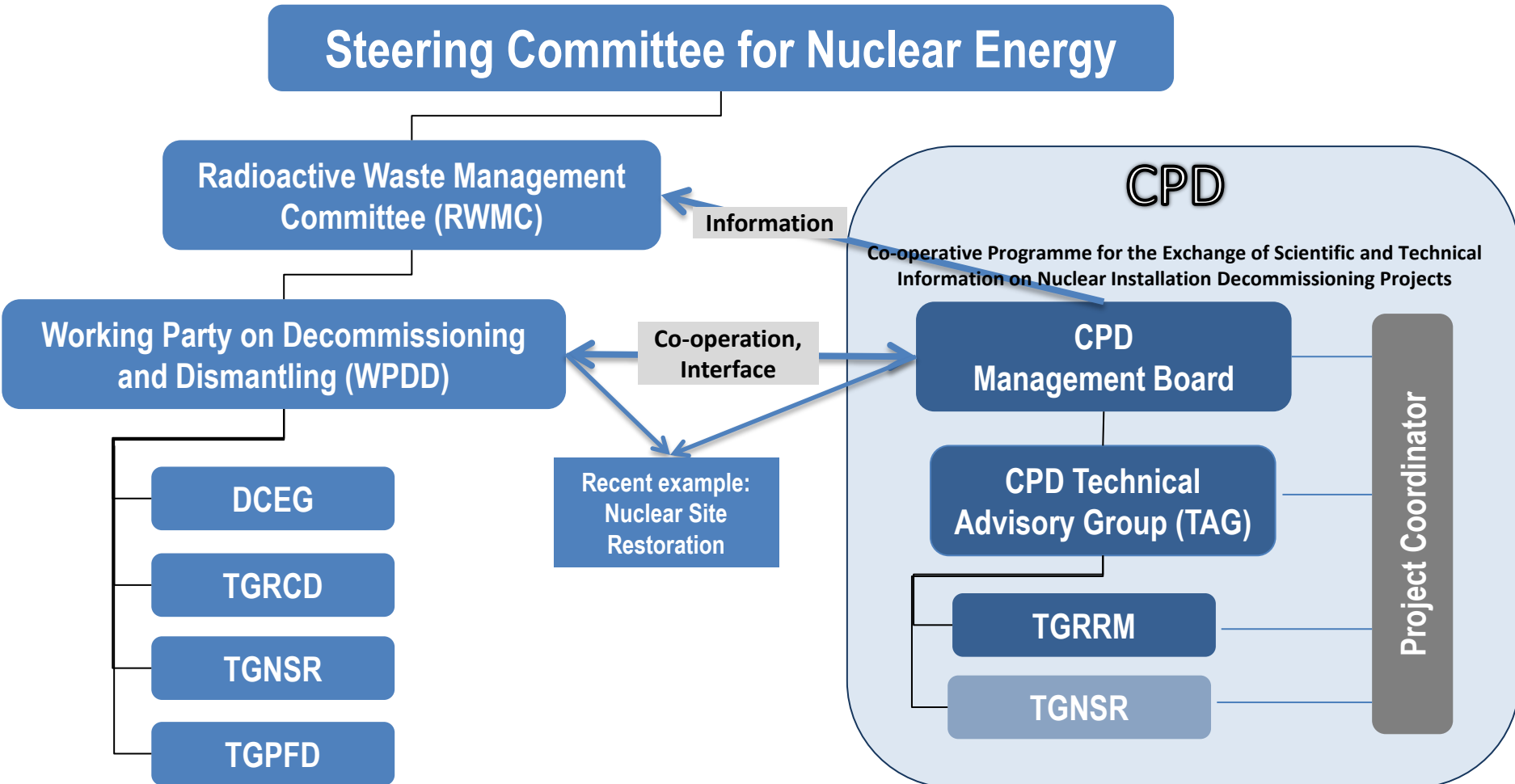
Source: Decommissioning of Nuclear Power Plants: Proceedings of a European Conference held in Luxembourg, 22–24 May 1984

1. The NEA: A Forum for Co-operation for the Most Advanced Countries in the World


- Founded in 1958
- 31 member countries
- 7 standing technical committees
- 75 working parties and expert groups
- 21 international joint projects



2. Decommissioning and Dismantling at NEA

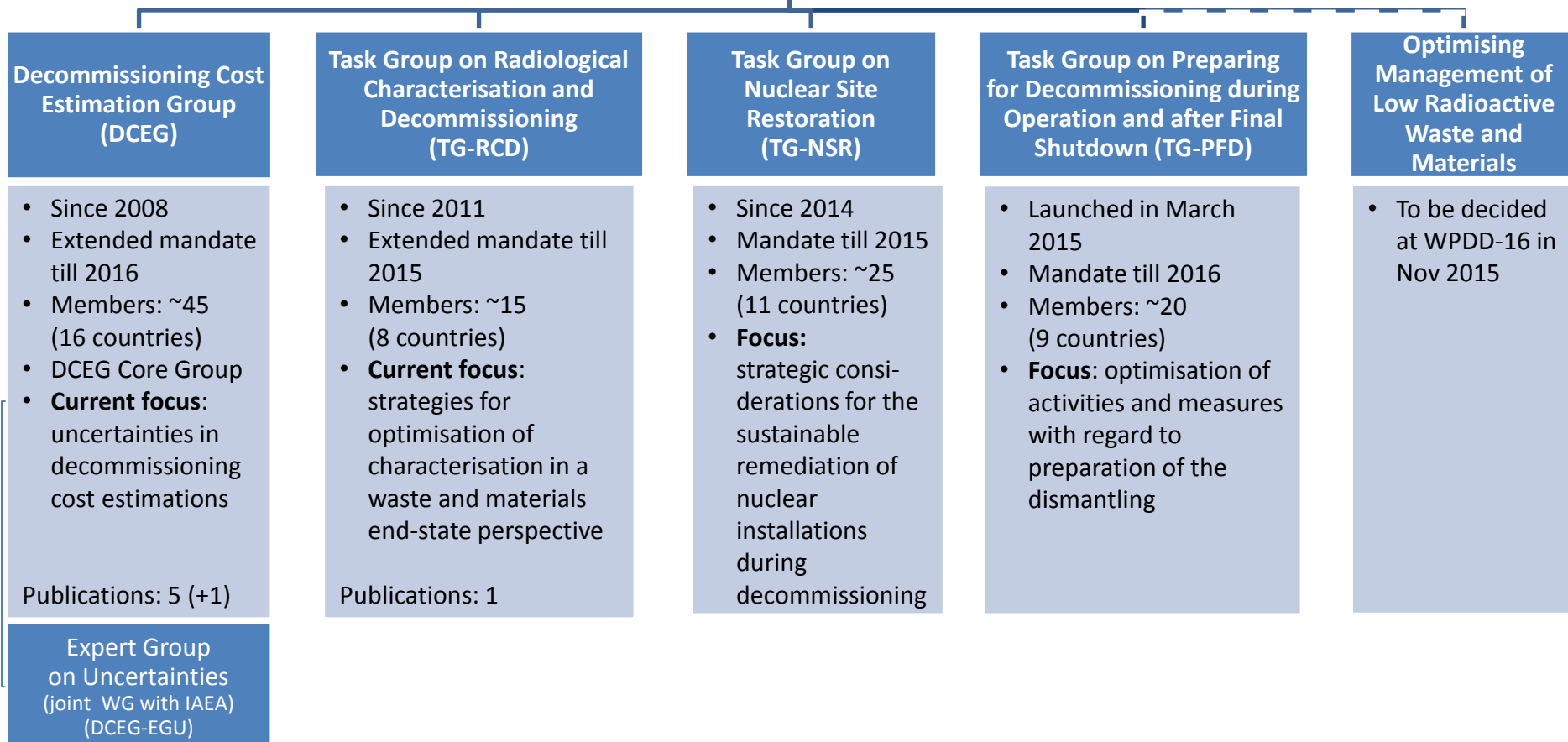


2. Decommissioning and Dismantling at NEA

WPDD	CPD
Working Party on Decommissioning and Dismantling	Co-operative Programme for Decommissioning
Since year of 2000	Since year of 1985
Open to all OECD NEA countries	Confidentiality, CPD Agreement
Governments	Companies
Strategy makers, regulators, implementers	Implementers from decommissioning projects
Policies, strategies	Procedures, techniques
Representatives from 21 countries + EC, IAEA: 23 Regulators/Policy Makers, 24 Implementers, 8 Research Institutes, 7 Waste Management Organisations	66 Decommissioning Projects from 25 organisations (Implementers) from 13 countries + 1 non-OECD member country + EC
	
CPD provides advice and technical input to WPDD	

2. D&D at NEA: Current Status and Focus of WPDD work

Working Party on Decommissioning and Dismantling (WPDD)

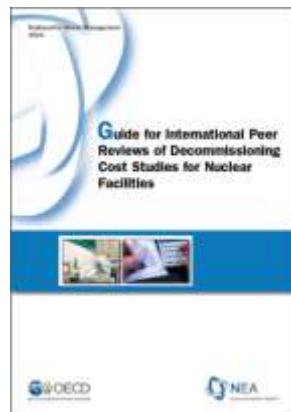


2. D&D at NEA: Recent WPDD Publications (1/2)

R&D and Innovation Needs for Decommissioning (2014)

- Areas with greatest potential for future improvements through R&D:
 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
- to be observed within WPDD Programme of Work

➤ **Link:** <https://www.oecd-nea.org/rwm/pubs/2014/7191-rd-innovation-needs.pdf>



Guide for International Peer Review of Decommissioning Cost Studies for Nuclear Facilities (2014)

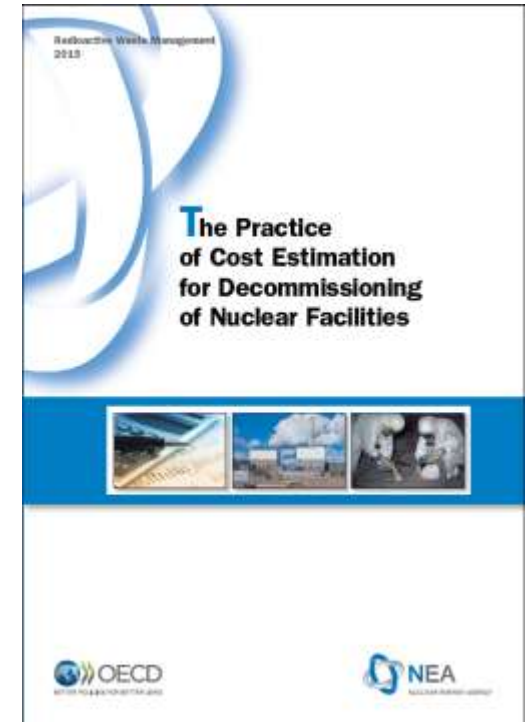
- Framework for decommissioning cost reviewers and reviewees to prepare for and conduct international peer reviews of decommissioning cost estimate studies for nuclear facilities
- Includes internationally developed checklists for attributes of cost estimates
- To promote transparency and accountability of decommissioning cost estimates

➤ **Link:** <https://www.oecd-nea.org/rwm/pubs/2014/7190-guide-peer-reviews.pdf>

2. D&D at NEA: Recent WPDD Publications (2/2)

The Practice of Cost Estimation for Decommissioning of Nuclear Facilities (2015)

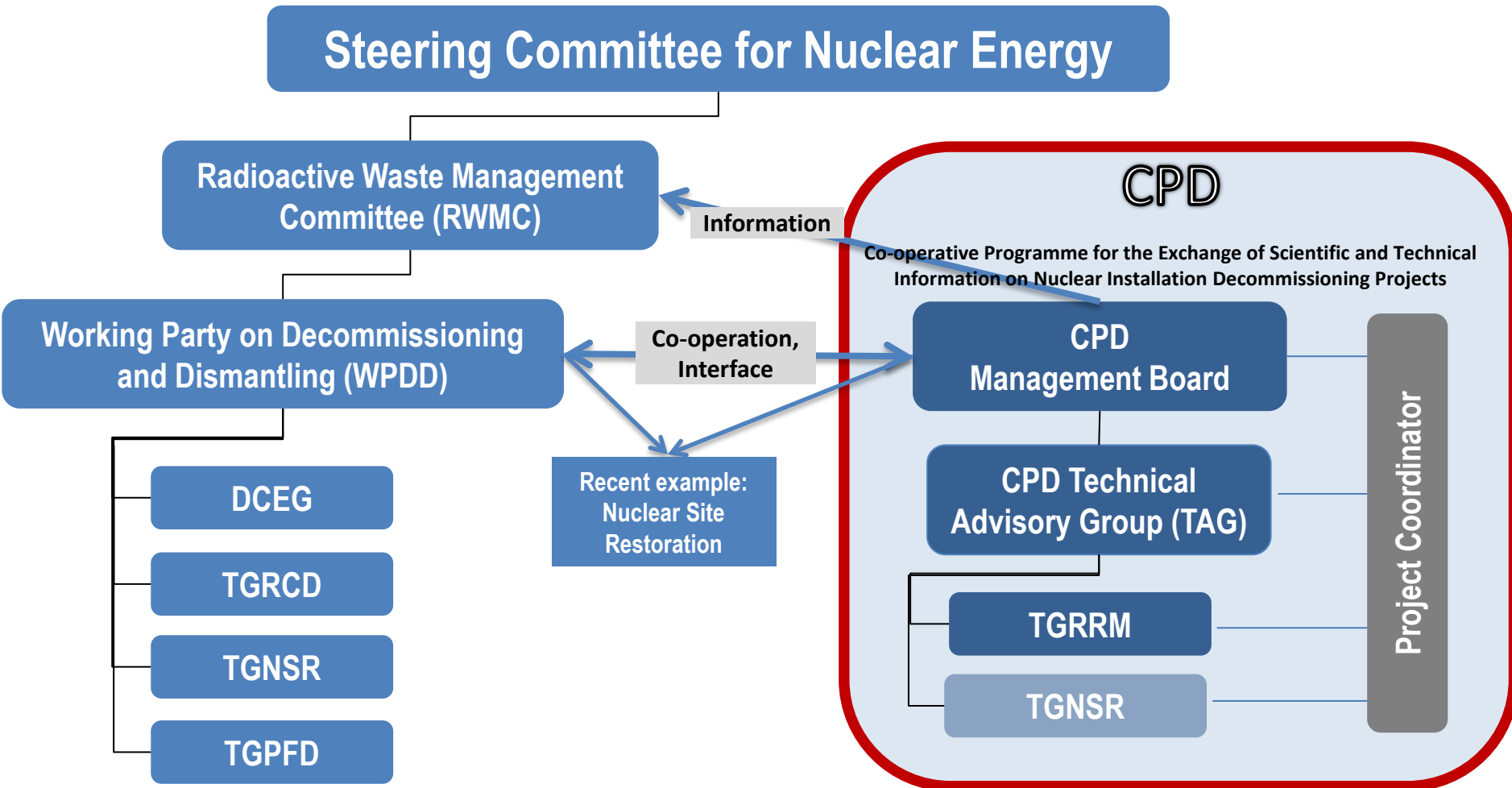
- Guidance for preparing quality cost and schedule estimates in order to support detailed budgeting for
 - securing of funding
 - the preparation of decommissioning plans (for licencing)
 - the decommissioning implementation
- To provide a detailed process to describe quality estimates in terms of cost classifications, the basis of estimates, the structure, risk analysis for cost and schedule, and quality assurance requirements



All NEA publications in Radioactive Waste Management and Decommissioning available for free.

Visit: <http://www.oecd-nea.org/rwm/public-documents/>

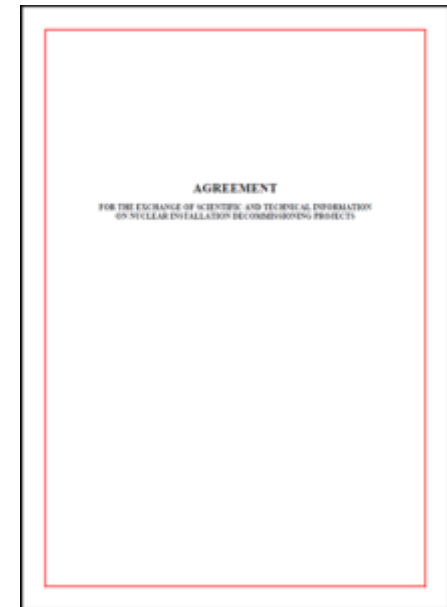
3. D&D at NEA: CPD Programme



3. NEA Co-operative Programme on Decommissioning

Co-operative Programme for the Exchange of Scientific and Technical Information on Nuclear Installation Decommissioning Projects (CPD)

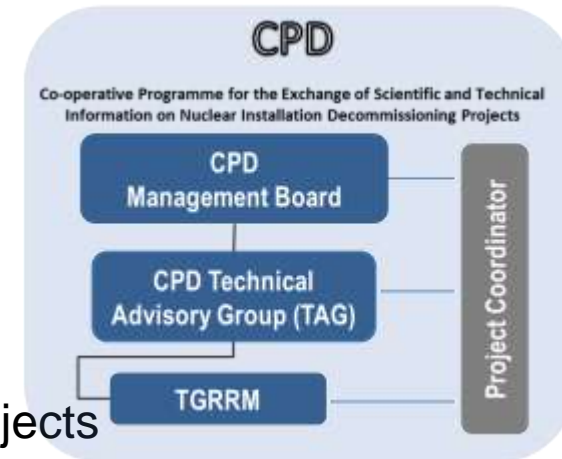
- **Joint undertaking of decommissioning projects**, set up 1985 according to Article 5 of the NEA statute
 - ✓ Planned, ongoing, dormant and terminated decom projects
 - ✓ NPPs, Research Reactors, Fuel Cycle Facilities
- The fundamental principle is that of sharing, i.e. “Give & Take” technical and scientific information.
- **Confidentiality and funding assured by an Agreement**, renewed for the period 2014-2018
- Interactions with WPDD implemented and synergies searched
- **25 Organisations with 66 decom projects from 14 Countries + EC:**
 - ✓ Chinshan NPP 1&2 (Chinese Taipei) and Danish Decommissioning recently accepted
 - ✓ Russian Bochvar Institute in the pipeline of affiliation
 - ✓ New entries from South Korea expected soon
- Link: <https://www.oecd-nea.org/jointproj/decom.html>



3. NEA Co-operative Programme for Decommissioning

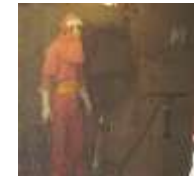
CPD Management Board (MB)

- Overall responsibility
 - for the management and control of the CPD
 - for ensuring compliance with the scope and objectives of the Agreement
- Decision on acceptance of new CPD participants / projects



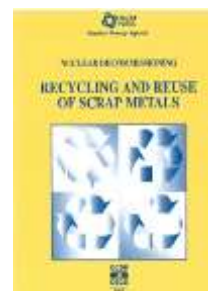
Technical Advisory Group (TAG)

- Senior specialists from decommissioning projects
- 2 meetings per year, hosted by CPD members



CPD Task Group on Recycling and Reuse of Material

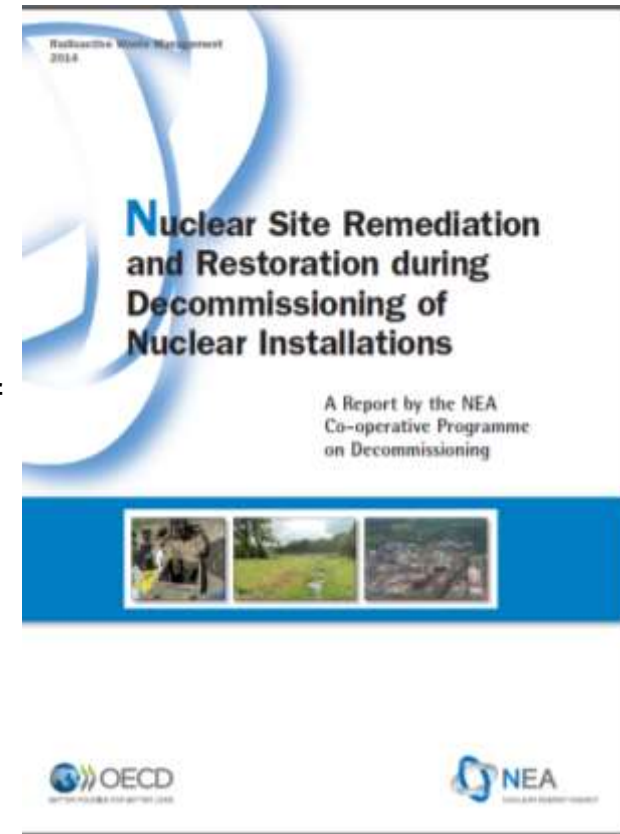
- 15 experts from CPD member organisations from 9 countries
- Objective: to provide an overview of the various approaches to the management of slightly contaminated material from decommissioning



3. NEA CPD Programme: Recent CPD Publication

Nuclear Site Remediation and Restoration during Decommissioning of Nuclear Installations (2014)

- Addresses technical aspects of nuclear site remediation
- Highlights lessons learnt from remediation experiences of NEA member countries that may be particularly helpful to practitioners, regulators and site operators.
- To provides observations (including case studies) and recommendations to be considered in the development of strategies and plans for efficient nuclear site remediation that ensures protection of workers and the environment.
- **Basis for the work of the WPDD Task Group on Nuclear Site Restoration** with focus on strategic considerations for the sustainable Remediation of Nuclear Installations during Decommissioning



- **Link:** <https://www.oecd-nea.org/rwm/pubs/2014/7192-cpd-report.pdf>

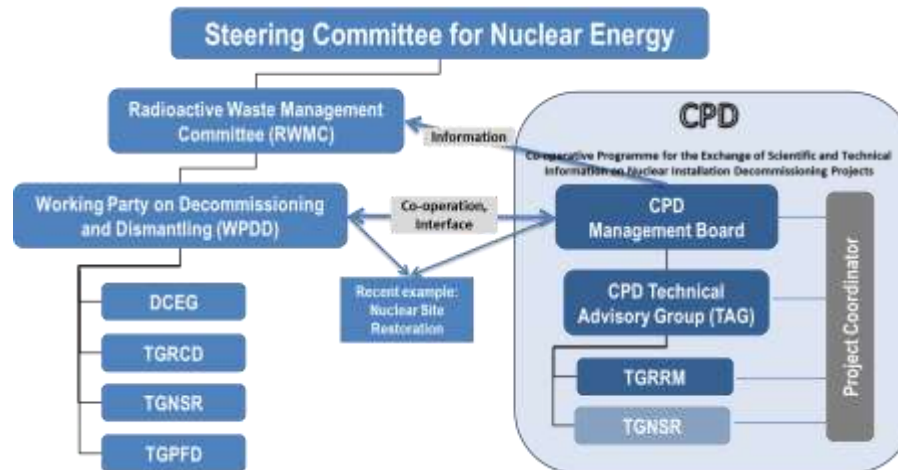
4. Events in Decommissioning with NEA Engagement

- **Workshop** “Sampling and Characterisation” (Montpellier, France) **17-19 Nov 2015**
<http://fr.amiando.com/Sampling-and-Characterisation-2015.html>
- **Symposium** „Preparation of Nuclear Facilities for Decommissioning“
PREDEC2016 (Lyon, France),
initiated by WPDD TGRCD and TGPFD,
co-organised with IAEA, EDF, Areva, CEA and Studsvik
<http://predec2016.scientific-event.com/> **16-18 Feb 2016**
- **IAEA Conference** “Advancing the Global Implementation of Decommissioning and Environmental Remediation Programmes” (Madrid, Spain)
<http://www.iaea.org/> **23-27 May 2016**
- **Conference** “Decommissioning and Remote Systems” (D&RS 2016)
(Pittsburgh, PA, USA)
http://www.ans.org/meetings/m_217 **31 July – 4 Aug 2016**

5. Conclusions

Our offer:

- Several Platforms and Groups for Different Interests and Needs in Decommissioning



- International Experience Exchange and Co-operation
- Networking

Everyone is invited to join our activities!

Thank you for your Attention!

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