Working Group 4:
The challenges raised by wastes and how to overcome?

Recommendations

18. EAN Workshop ALARA for Decommissioning and Site Remediation, Marcoule, France, 11-13 March 2019
Strategic issues:

- **Choosing a decommissioning strategy** means choosing a waste management strategy. **Mixtures of strategies**, like decay storage of large components, can be advantageous in view of ALARA.

- Consider using rooms and facility areas **inside the facility** under decommissioning as storage facilities in order to **minimize transports**.

- When setting up criteria for evaluation it is important to clarify the **weighting of the criteria** (important – less important):
  - Technical
  - Environmental
  - Economical
  - Social
  - ...

- **Framework conditions for residual materials management** in different countries (e.g. France zoning and Germany clearance) should be compared in view of ALARA (not only in view of waste / material streams).

- Improve **cooperation between countries** regarding use of existing waste management facilities. This can increase flexibility.
Technical and procedural issues:

• **Waste acceptance criteria** for a repository should be in place before conditioning of waste. If not available, packaging should be done in a way that allows easy re-packaging with low dose for the workers.

• **Good documentation** of waste packages and keeping of information and knowledge is part of the ALARA-procedure.

• Lowering doses below ALARA can increase other (conventional) risks. The ALARA principles should be applied for individual doses instead of collective doses. How to compare real short-term doses with potential long-term doses when choosing a strategy?

• Use of remote techniques for inspections and maintenance in storage facilities might have a high potential for dose reduction in the long-term. Evaluate the possibility for self-shielding of waste packages in storage facilities.