

# Knowledge Management: NEA Views

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## The Importance of Knowledge Consolidation and Transfer

- ❖ The NEA Radioactive Waste Management Committee identifies knowledge consolidation and transfer as a “pillar” supporting its operation and that of member organisations:

“Radioactive waste management demands **the accumulation of a broad base of multi-disciplinary knowledge**, addressing complex technical and social considerations. Information is required by many parties . . .”

“The ... growing importance of subjects such as reversibility and retrievability, stepwise decision making, flexibility and adaptability, transfer or responsibilities between institutional actors, institutional controls, avoidance of human intrusion, surveillance, monitoring and confidence building all **depend for their success on the transfer of information to future generations, especially in the short term but increasingly on longer and longer time scales.**”

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# An Action Plan is needed for Knowledge Management

- ❖ **In the “short” term: over decades**
  - To guide operations and ensure adequate records in the event of accidents
  - To provide flexibility in adapting to new information gained in the future
  - To allow long-term management goals to be reached
- **In the long term:**
  - To provide knowledge that allows future generations to make informed decisions.

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## Issues in Knowledge Management

- ❖ What information should be preserved?
- ❖ Why should it be preserved? (vital to safety, facilitates adaptability, of scientific or social interest)
- ❖ Who is the audience?
- ❖ What time horizons should be considered?
- ❖ How should it be preserved?
- ❖ Where should it be preserved?

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## Tools and Priorities for the Short Term

- ❖ Exchange of international experience
- ❖ Optimising communication tools and adopting suitable formats for reports, etc.
- ❖ Maintaining repositories of information and expert knowledge that are readily accessible to guide operations
- ❖ Synthesising, analysing and extracting learning so that it is readily accessible; enabling information to be transferable to other relevant situations

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## Tools and Priorities for the Long Term

- ❖ Availability of information to support decision-making processes spanning long time periods
  - Systematically organising and maintaining information
  - Anticipating needs of future decision makers
- ❖ Organising programmes to capture and retain institutional knowledge
  - Retaining documentation on how decisions were reached and on the associated bases
  - Managing tacit knowledge through investment in human resources and skills training
- ❖ Evaluating progress and “mining” to benefit from the lessons learned and experience of others.

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## Some further thoughts:

- ❖ Organisational issues, including knowledge management, are directly relevant to the safety case and should not be considered peripheral.
- ❖ It is important not only to *retain* information, but also to *maintain* it in order to ensure that it remains accessible.
  - Technology is an issue to be considered.
- ❖ Not only data must be documented and kept, but also information on how it was interpreted and used.
  - The basis for decisions and choices should be made clear.
  - This “hidden” knowledge is a special challenge.
- ❖ During periods of organisational transformation, knowledge management deserves particular attention.