

Unclassified

NEA/RWM(2010)9/PROV



Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

30-Jun-2010

English - Or. English

NUCLEAR ENERGY AGENCY
RADIOACTIVE WASTE MANAGEMENT COMMITTEE

Cancels & replaces the same document of 18 May 2010

**LONG-TERM PRESERVATION OF INFORMATION AND KNOWLEDGE.
DRAFT VISION DOCUMENT OF THE RWMC PROJECT 2010-2013.**

The RWMC is implementing its programme of work in the field of long-term preservation of information and memory. This document describes proposed goals and deliverables of a RWMC project over the period 2010-2013, based on agreements at the March 2010 meeting of the Committee and at the meeting of the Project's Advisory Group on 29-30 June 2010.

claudio.pescatore@oecd.org

JT03286365

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

NEA/RWM(2010)9/PROV
Unclassified

English - Or. English

MOTIVATION AND BENEFITS

Preservation of information and memory across generations is a cross-cutting theme of increasing importance for radioactive waste management. National programmes would benefit from *a shared, broad-based and documented understanding*, at the international level, of the range of methods and concepts for the *long-term preservation of information and memory*. Such understanding – technical, institutional, societal and culture-specific – could be used as a reference for those national programmes that are involved in siting and licensing repositories, or that are involved in other long-term projects (whether or not those imply strong interactions with local communities, for whom knowledge consolidation and transfer is a particular concern). Such understanding would also foster the development of more robust strategies and regulations for national radioactive waste management programmes whatever their stage of implementation.

Because of the experience accumulated by the advanced national programmes that the RWMC represents, and the breadth of its related high-level initiatives, the Committee is uniquely placed internationally to combine resources and help develop state-of-the-art guidance on the long-term preservation of information and memory. In the context of fostering knowledge consolidation and transfer (KCT), the RWMC has already identified – in its reference document¹ on KCT – the area of *inter-generational* transfer of knowledge as one of two areas needing development.

The interdisciplinary forum provided by RWMC offers an appropriate venue for exploring and helping to develop guidance on regulatory, policy and technical aspects of long-term preservation of information and memory that are germane to implementation of waste management programmes. In 2009 started its programme of work in the area of long-term preservation of information and memory.

MODUS OPERANDI

The RWMC programme of work is installed as a series of projects or lines of actions opened by the RWMC and supervised by its Bureau.

Each project is set up to require meeting at most twice a year; emphasis is on inter-sessional work as much as possible. In this approach, an advisory group proposes direction of work along the indications of the RWMC; the work is co-ordinated by the Secretariat and steered by the RWMC Bureau; a consultant is hired; findings will reported and discussed within the project and at RWMC meetings and thereafter documented. A budget is determined for each project. The amount of the needed financial contribution per organisation depends on the number of participants.

The project is run in such a way as to keeping travel to a minimum. The NEA and the consultant provide intermittent progress reports. Specific information and directions is provided at key points and mostly by e-mail and teleconference, with final check and update at the annual meetings of the project.

¹ [NEA/RWM(2009)7]

PROJECT GOALS AND DELIVERABLES 2010-2013

The following goals and deliverables are envisaged over a period of three years:

2010-2011 (Phase 1)

1. A survey will be carried out of the literature in preparation of the workshop (Nov. 2010).
The scope of the survey is limited to nuclear waste management.
2. A glossary of terms to support the outputs of the project, including the Phase-1 Workshop (Nov 2010). It may contain for the same term the different definitions used by the different programmes, but only one will be used for this project.
3. A draft collective statement (CS) on fundamental questions in order to build agreement amongst technical specialists and organisations in the waste area. (January 2011) This two page text, should eliminate/address some of the current ambiguities by identifying the important questions/topics and providing the current answers, fully recognizing that some/many of them will require further development. The CS will also introduce/describe the current international project. The CS will be discussed in the 1st workshop of the project (see Item 3) [work by e-mail and teleconference]
4. Phase-1 workshop (week of 20 February 2011).
 - a. It will be used to check and improve on the CS (Item 3)
 - b. It will take advantage of the literature review (Item 1)
 - c. It will be the basis of further project work (see Items 6 and 7)
5. Updating of CS for discussion at RWMC-44 meeting in March 2011. Finalisation by June 2011. Publication in time for the ICGR2011 conference of October 2011.
6. A draft report will be produced on the RWM experience with preservation of information and memory (June 2011) [work by e-mail and teleconference]. Overall, the intent is not to establish a single common approach, but rather to document and reflect upon the range of methods, concepts, and approaches for the long-term preservation of information and memory and the implications of their actual implementation.
7. A draft programme of work, possibly identifying specific technical work for Phase-2. (June 2011)
8. Project meeting 30-August to 1-September 2011 to finalise draft report and draft PoW, and confirm way forward
9. Publication of report on RWM experience with preservation of information and memory (Autumn 2011)

During this phase, and especially the workshop, advantage will be taken of the lessons to be learned, positive or otherwise, from past experience in other areas than geologic disposal, e.g., in LLW disposal and decommissioning of obsolete nuclear facilities, from nuclear remediation projects (e.g., uranium milling facilities), from other international work, where it exists, e.g., IAEA TEC-DOC² 1222 of 2001 or the IAEA upcoming report on knowledge management for radioactive waste management³, or the EC (DG-ENER) current study on data collection and maintenance⁴, and from other fields, e.g., from history and from social studies.

² *Waste inventory record keeping systems (WIRKS) for the management of radioactive waste*. On the web at: http://www-pub.iaea.org/MTCD/publications/PDF/te_1222_prn.pdf.

³ *“Knowledge management for radioactive waste management organisations”*, IAEA, Nuclear Energy Document Series Publication, in press.

⁴ *Radioactive Waste and Spent Fuel Data Collection, Reporting, Record Keeping and Knowledge Transfer by EU Member States*, http://ec.europa.eu/energy/nuclear/studies/doc/2009_09_radiactive_waste.pdf

2011-2012 (Phase 2)

10. Implementation of PoW. Several possibilities can be envisaged:
 - a. Distillation of lessons from Phase-1 Report
 - b. Peer review initiative
 - c. Translating the Swiss study by the BfE on markers and augmenting it through Project input
 - d. Reference elements of an action plan for long-term information and memory preservation in the field of geological disposal.
 - e. Bases for common international approaches to LT memory and information keeping
 - f. 2-days project meeting

2012-2013 (Phase 3)

11. An international conference will be organised in 2013 building upon the survey and the lessons learned in the project (2012-2013)
12. Documentation of conference
13. Updating the PoW for Phase 4
14. 2-days project meeting to finalise outputs

FUNDING

A project budget of € per year is foreseen, to be borne by a majority of project participants. In-kind contributions, such as providing consultant services or direct support to the project, may also be envisioned.

The NEA will elicit a grant per organization or country according to its established practice.

ANNEX

Some initial agreed points at the launching of the project.

- The initiative on long term preservation of information and memory deserves a stable and continuous dedicated forum. The current project is likely to continue in later projects within this RWMC initiative.
- The current project should be practice oriented where possible.
 - Current experience should be examined with a view to identify strengths and weaknesses and gaps in knowledge.
 - Agreed results/statements are important deliverables
 - Practical suggestions such as peer reviews, joint memory networks, etc. should be considered in due course.
 - The project should come up with concrete recommendations
 - Visibility of products vis-à-vis all publics will be important
- In the CS we need to explain why there is the intention of memory keeping (which is not necessarily to minimise burden, nor in order to guarantee safety). We see that good transfer of knowledge is a responsibility from one generation to another. They have to have pertinent information/knowledge at all time. The CS should also show that the technical people are realistic in their approaches and expectations and that they are listening to the public voices. Reasons pro and against memory keeping, e.g., on the subject of markers, should be acknowledged.
- In identifying questions, their ranking is important as well. The first question may be: what we must not do so that we may miss something that may be crucial later.
- Non-technical disciplines may point to additional memory and information needs
- Information needs change with project phase. Information management must plan for changing needs for both information and the needed of detail. (see also IAEA TECDOC-1097)
- The long-term (after closure?) is likely best addressed by common international approaches and guidance. On interest is international consistency of messages, media, language and type of records. International networks amongst project may help maintain information and reduce financial burdens. Markers work does require an international approach.
- Safeguards will apply, especially if spent fuel is the waste. This can be used as a contributor to memory-keeping provisions and tools.
- Relinquishing memory duty to the State, without showing willingness to work on the memory aspects from early on in the programme is problematic, at least in the eyes of the public. To be noted is that archives have been shown to exist beyond the actual existence of the State.
- Information can be lost very quickly. Many examples exist of this exist in any areas. Good practice is to develop records now foreseeing the possible needs of future generations as well as challenges to the keeping of these records and retrieval of the information. A policy of memory keeping begins with good records. Part of these records must include metadata, so that the data are placed in context of the uses for which they were gotten. Of importance are regular syntheses of the gathered information and of the reasons for gathering them.