

OECD NEA activities for the safe and effective management in the field of nuclear fuel cycle back-end

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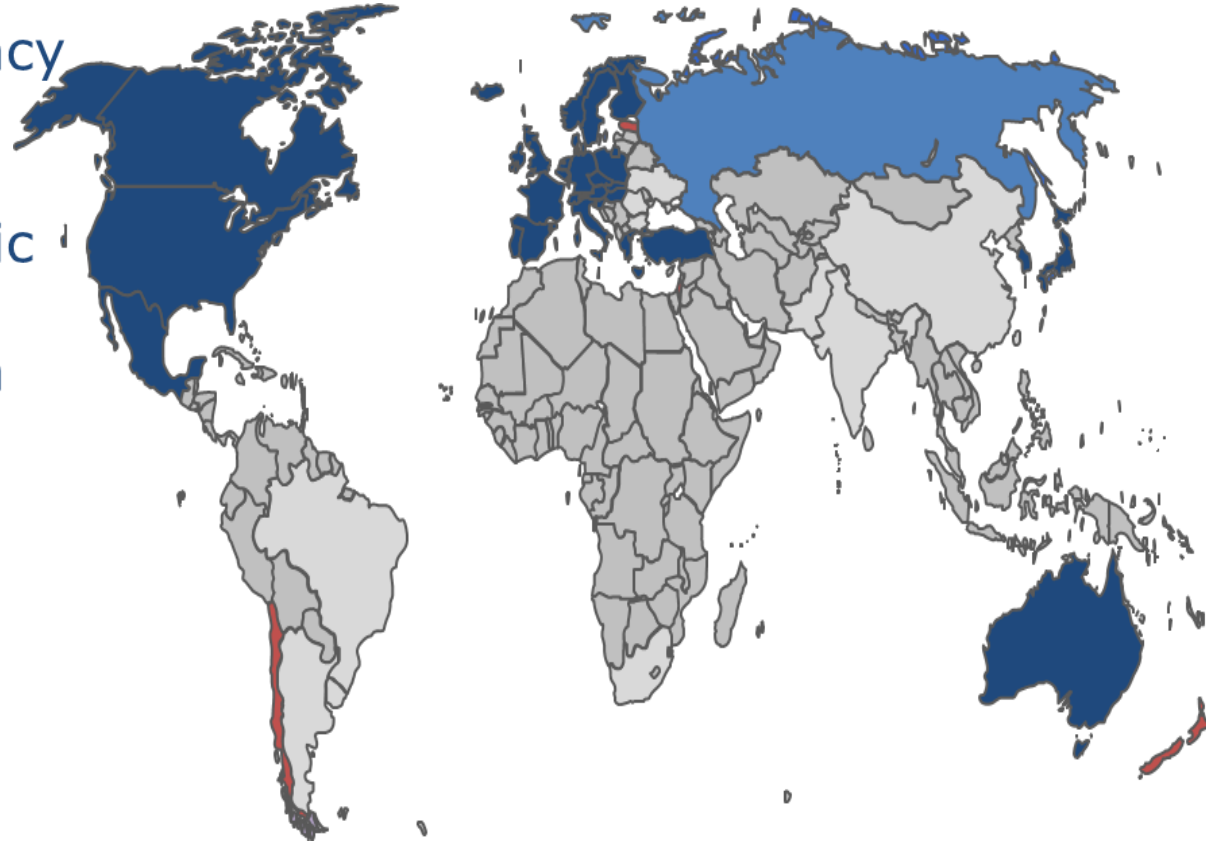
NEA mission

- **To assist its member countries in maintaining and further developing**, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical **use of nuclear energy** for peaceful purposes.
- To provide authoritative assessments and to forge common understandings on key issues as **input to government decisions on nuclear energy policy** and to broader OECD policy analyses in areas such as energy and sustainable development.

NEA member countries

Russian Federation is full member of NEA from 01.01.2013

The Nuclear Energy Agency (NEA) is a specialised agency within the Organisation for Economic Co-operation and Development (OECD), an intergovernmental organisation of industrialised countries based in Paris, France.



The NEA's current membership consists of 31 countries in Europe, North America and the Asia-Pacific region. Together they account for approximately 90% of the world's installed nuclear capacity.

NEA committee structure



The Integration Group for the Safety Case

The Integration Group for the Safety Case (IGSC) – established in 2000 to foster full integration of all aspects of the **safety case**. The IGSC focuses on the deep geological disposal especially of LL RW and HLW/SF.

- Define the essential elements of a safety case;
- Identify best practices to assess safety;
- Share national experience and progress in documenting and reviewing safety cases;
- Advance in understanding of natural and engineered components and their performance;
- Develop databases and information tools;
- Identify emerging trends and issues.

<http://www.oecd-nea.org/rwm/igsc>

IGSC activities

- Evaluation safety aspects for the DGR and promotes international dialogues to address strategic and policy aspects of repository development.
- Performing international expert assessment of long term safety.
- Carrying out meetings with discussions of issues and trends in developing safety cases.
- Organization of technical projects and workshops to investigate specific topics of the implementation of DGR.

http://www.oecd-nea.org/rwm/igsc-docs/IGSC_identity_flyer_FINAL_Sept_2009.pdf

Previous IGSC activities

- **AMIGO** - “Approaches and Methods for Integrating Geological Information into the Safety Case” - Geoscientific Information in the RW management Safety Case - <http://www.oecd-nea.org/rwm/reports/2010/nea6395-AMIGO.pdf>;
- **MESA** – “Methods for Safety Assessment of Geological Disposal Facilities for Radioactive Waste” - <http://www.oecd-nea.org/rwm/reports/2012/nea6923-MESA-initiative.pdf>
- “**Cementitious materials** in safety case for geological repositories for radioactive waste” – brochure - <http://www.oecd-nea.org/globalsearch/download.php?doc=77759> ;
- **Sorption project** - <http://www.oecd-nea.org/jointproj/sorption.html>
- 2nd International **Safety Case Symposium** 7-9 October, 2013 Paris, France (+EC and IAEA) - <http://www.oecd-nea.org/rwm/igsc/sc2013/>

Current IGSC activities

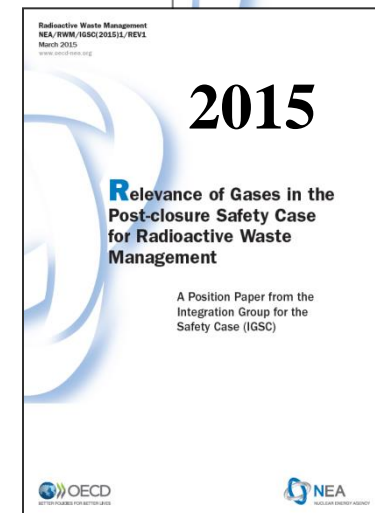
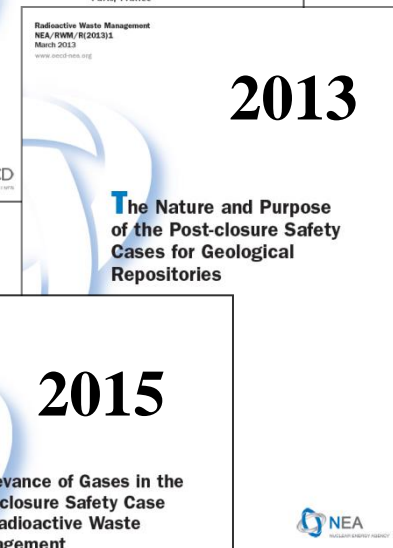
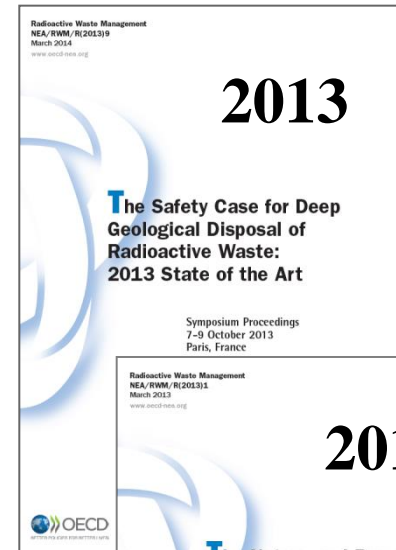
- NEA **FEP** (Features, Events and Processes) database - <http://www.oecd-nea.org/rwm/reports/2000/nea2549-features-events-processes-for-disposal.pdf>
- **Gas migration** – topical session (IGSC)
- **The salt club** - <http://www.oecd-nea.org/rwm/saltclub/>
- **The clay club** - <http://www.oecd-nea.org/rwm/clayclub/>
- **Operational safety (EG-OS)** (below)
- **TDB** project - <http://www.oecd-nea.org/dbtdb/>
- The repository **MetaData** management project (RepMet) - <http://www.oecd-nea.org/rwm/igsc/repmet/>

Recent IGSC publications

- “Relevance of gases in the post-closure safety case” - <http://www.oecd-nea.org/rwm/docs/2015/rwm-igsc2015-1-rev1.pdf>
- “The Safety Case for Deep Geological Disposal of Radioactive Waste: 2013 State of the Art” - <http://www.oecd-nea.org/rwm/docs/2013/rwm-r2013-9.pdf>
- “The nature and purpose of the post-closure safety cases for geological repositories” - <http://www.oecd-nea.org/rwm/docs/2013/rwm-r2013-1.pdf>
- “Underground Research Laboratories (URL)” - <http://www.oecd-nea.org/rwm/reports/2013/78122-rwm-url-brochure.pdf>
- Source book (to be published soon)
- TDB - From 1984 13 volumes are published - <http://www.oecd-nea.org/dbtdb/info/publications/>
- “Thermodynamic Sorption Modelling in Support of Radioactive Waste Disposal Safety Cases” - <http://www.oecd-nea.org/rwm/docs/2013/6914-sorption-III.pdf>

Events

- 2015 IGSC Scenario Development Workshop, 1-3 Jun. 2015, Paris, France - <http://www.oecd-nea.org/rwm/workshops/igsc2015/>
- ICGR Status and Plans – 7-8 Dec. 2016, Paris, France



Expert Group on Operational Safety (EGOS)

- Share technical, regulatory, or stakeholder related experience in operational safety;
- Identify plausible hazards in a geological repository, utilizing experience gained from the operation of mines (both uranium and non-radioactive), nuclear facilities and relevant engineering projects from outside the nuclear industry;
- Share and improve know-how on the practical assessment of hazards;
- Define best practices and technical solutions for risk prevention and mitigation;
- Enable the IGSC to foster in-depth exchanges with other international organisations/projects in the field of operational safety.

<http://www.oecd-nea.org/rwm/egos/>

Forum on Stakeholder Confidence (FSC)

<http://www.oecd-nea.org/rwm/fsc/>

- “Stakeholder Confidence in Radioactive Waste Management” (An Annotated Glossary of Key Terms) - <http://www.oecd-nea.org/rwm/docs/2013/6988-fsc-glossary.pdf>

RWMC Regulators Forum (RF)

<http://www.oecd-nea.org/rwm/regulator-forum.html>

- “Reversibility of Decisions and Retrievability of Radioactive Waste: An Overview of Regulatory Positions and Issues” - <http://www.oecd-nea.org/rwm/docs/2015/rwm-r2015-1.pdf>
- “Control, oversight and related terms in the international guidance on geological disposal of radioactive waste – review of definitions and use” - <http://www.oecd-nea.org/rwm/docs/2014/rwm-rf2014-2.pdf>
- “The Evolving Role and Image of the Regulator in Radioactive Waste Management: Trends over Two Decades” - <http://www.oecd-nea.org/rwm/docs/2012/7083-evolving-role-and-image.pdf>

Preservation of Records, Knowledge and Memory across Generations - RK&M

<http://www.oecd-nea.org/rwm/rkm/>

- “Monitoring of Geological Disposal Facilities: Technical and Societal Aspects” - <http://www.oecd-nea.org/rwm/docs/2014/rwm-r2014-2.pdf>
- “A Literature Survey on Markers and Memory Preservation for Deep Geological Repositories” - <http://www.oecd-nea.org/rwm/docs/2013/rwm-r2013-5.pdf>
- “Local communities’ expectations and demands on monitoring and the preservation of records, knowledge and memory of a deep geological repository” - <http://www.oecd-nea.org/rwm/docs/2013/rwm-r2013-4.pdf>

An **International Conference** and Debate on the Preservation of Records, Knowledge and Memory of Radioactive Waste across Generations, - Sept 2014, Verdun, France - <http://www.oecd-nea.org/rwm/rkm/constructingmemory/>

Radioactive Waste Repository Metadata Management (RepMet)

<http://www.oecd-nea.org/rwm/igsc/repmet/>

New RWMC initiatives

- **EGPRWM** – Expert Group on Predisposal RW management;
- **EGIRM** – Expert Group on Inventorying and Reporting Methodology;
- **EGFWMD** - Expert Group on Fukushima Waste Management and Decommissioning;
- Regulator – Implementer Dialogue Working Group.

Russian experts involved in each Expert Group

NDC Ad hoc Expert Group on the Economics of the Back End of the Nuclear Fuel Cycle

<http://www.oecd-nea.org/ndd/ebenfc.html>

“The Economics of the Back End of the Nuclear Fuel Cycle” - <http://www.oecd-nea.org/ndd/pubs/2013/7061-ebenfc.pdf>

NDC 2014 publication

“Nuclear Energy Data” (Brown book) - <http://www.oecd-nea.org/ndd/pubs/2014/7197-bb-2014.pdf>

Thank you for attention!