BELI Belgian TSO

Research and innovation supporting safety, security and safeguards *Radioactive Waste Management* Views from Valéry Detilleux

EURATOM & RWM



- Considerable knowledge in the field of Radioactive Waste Management (RWM) acquired over the past 40 years.
- Collaborative RD&D projects supported by EC through EURATOM
- Leap forward since 2019: EC Policy & Strategy for integration of EU Member-States R&D programmes

Replace EU competitive calls for projects by inclusive European Joint Programmes / Partnerships



EUROPEAN PARTNERSHIP ON RADIOACTIVE WASTE MANAGEMENT (EURAD-2)

5 years 2024-2029	10 R&D WPs	6 Strategic Studies	Knowledge Management WP
jectives : Develop, maintain and consolidate the scientific and technical basis of RWM Address important and complex issues and enable		Ministries from 21 European countries recognising their role of directing RD&D at the national level, provided mandates to 51 organisations acting as Beneficiary within EURAD:	

- Waste Management Organisations
 - **Technical Support Organisations**

Coordination : Andra

@EJP EURAD

- **Research Entities**
 - ... with 69 affiliated entities & 22 associated partners (international) also participating



Oh

- expert networking
- Enhance KM and transfer between organisations, _ Member States and generations

Key features :

- Largest partnership in the RWM domain
- Maximal and direct support to all MS in reaching KPIs monitored by DG ENER (Council Directive 2011/70)



Website : https://www.ejp-eurad.eu/ EURAD

EURAD key achievements: personal views BEL Belgian TSO

From a "community" perspective

- Mobilisation of a large community working in the field of RWM, made up of several stakeholders with independent missions, and taking joint decisions on the EURAD programme. This is positive from a safety point of view!
- Civil society organisations are also involved. This helps to build trust between them and the other stakeholders.

From a technical perspective

- Integration of the various scientific fields relating to the life cycle of RWM. This helps avoiding research in "silos" and promotes scientific excellence.
- Management of a joint Strategic Research and Knowledge Management Agenda (SRA). This
 enables a consensus on what joint activities at international level are still needed in the future and
 why. This is important to bring an added value to the national RWM programmes.

Knowledge management

• Development of a "Roadmap" for developing and implementing RWM programmes. Existing and generated knowledge is being consolidated and organized according to this roadmap. This is important for a sustainable (intergenerational) knowledge management.

And some final personal « TSO » views



- International context is rapidly evolving:
 - Several programmes made important steps towards geological disposal of HLW/SF these last years (e.g. FI, SE, CH, FR...)
 - Development of SMR technologies, Artificial Intelligence (AI)...
 - Multiple « S » to consider (Safety, Security, Safeguards, Sustainability, Society...)
- Drivers for new joint activities at EU level are thus also evolving. E.g. (see also ongoing Strategic Studies in EURAD-2):
 - The approaching operation of geological disposal facilities (GDFs) for HLW/SF and the growth of AI call new activities driven by « Innovation for optimisation ».
 - Need of « tailored solutions » for SMR waste management...
- Challenging period for all stakeholders, including TSOs as they support safety authorities for instance in
 - Evaluating GDFs safety cases and verifying that the construction and operation of GDFs stay in the licensed safety « enveloppes »
 - · Verifying that optimisation of RWM steps and measures for Security, Safeguards & Sustainability will not compromise the Safety
 - Evaluating the safety cases of SMRs, and their possible interactions with the existing or planned (interdependent) RWM steps
 - Building trust with Civil Society organisations
- An efficient TSO coordination at the international level about RWM is thus important.
- This is the purpose of SITEX.Network (<u>https://sitex.network</u>).



CONTACT

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