

European Commission involvement in multinational repository initiatives

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Abstract

The potential benefits of national programmes for disposal of spent fuel and high-level radioactive wastes sharing a common disposal facility (a MultiNational Repository – MNR) were recognized early. The IAEA produced a series of reports on such cooperation scenarios in the early 2000s. The EC took a major step forward in the same period when DG-RTD supported the comprehensive SAPIERR projects (Strategic Action Plan for Implementation of European Regional Repositories), which examined key technical, organisational, social and financial aspects of MNRs. This project stimulated a group of EU Member States to form the ERDO (European Repository Development Organization) Working Group which, in 2021, became the ERDO Association, whose focus is on strategic rather than technical issues.

Introduction

Because the major challenges in MNRs are not technical, but strategy/policy related, support for encouraging cooperation should come more appropriately from DG-ENER than from the research-oriented DG-RTD. Positive strategic input did emerge from the 2011 EC Waste Directive, which explicitly acknowledged that transfers of wastes for disposal in another EU Member State were allowed. The established focus of the EC on cooperation in R&D then led to the establishment through DG-RTD of the EURAD Programme. In establishing the Strategic Research Agenda for EURAD, little attention was paid to MNR issues, although the vision statement aimed at promoting cooperation “throughout all programme phases (from “cradle to grave”) across Europe now and in the future”. Some Work Packages did, however, directly address aspects of the MNR concept.

Description of the present situation

Current initiatives which promote enhanced cooperation are especially important because they go beyond research activities, where there have already been decades of cooperative effort to consider sharing of facilities.

- DG-ENER in 2024 issued a restricted call for a pilot project, “Proposal for a Joint European Approach towards Radioactive Waste”. (McCombie and Chapman, 2024)
- This work is underway to establish a wide consultation on a joint European approach towards radioactive waste management, including disposal.
- A complementary project, aimed at producing a compendium of data on the RWM systems of EU MS has also been initiated.
- The EURAD-2 Strategic Study on Alternative Waste Management Strategies (ASTRA) analyses selected alternative strategies for radioactive waste management (RWM) including alternative waste management approaches such as shared international waste management solutions.

Ongoing work

The current emphasis in ERDO is on the need to ensure support for MNR concepts by governments at the strategic and political level. The ERDO Roadmap (ERDO, 2021) is built on two main pathways that structure our work.

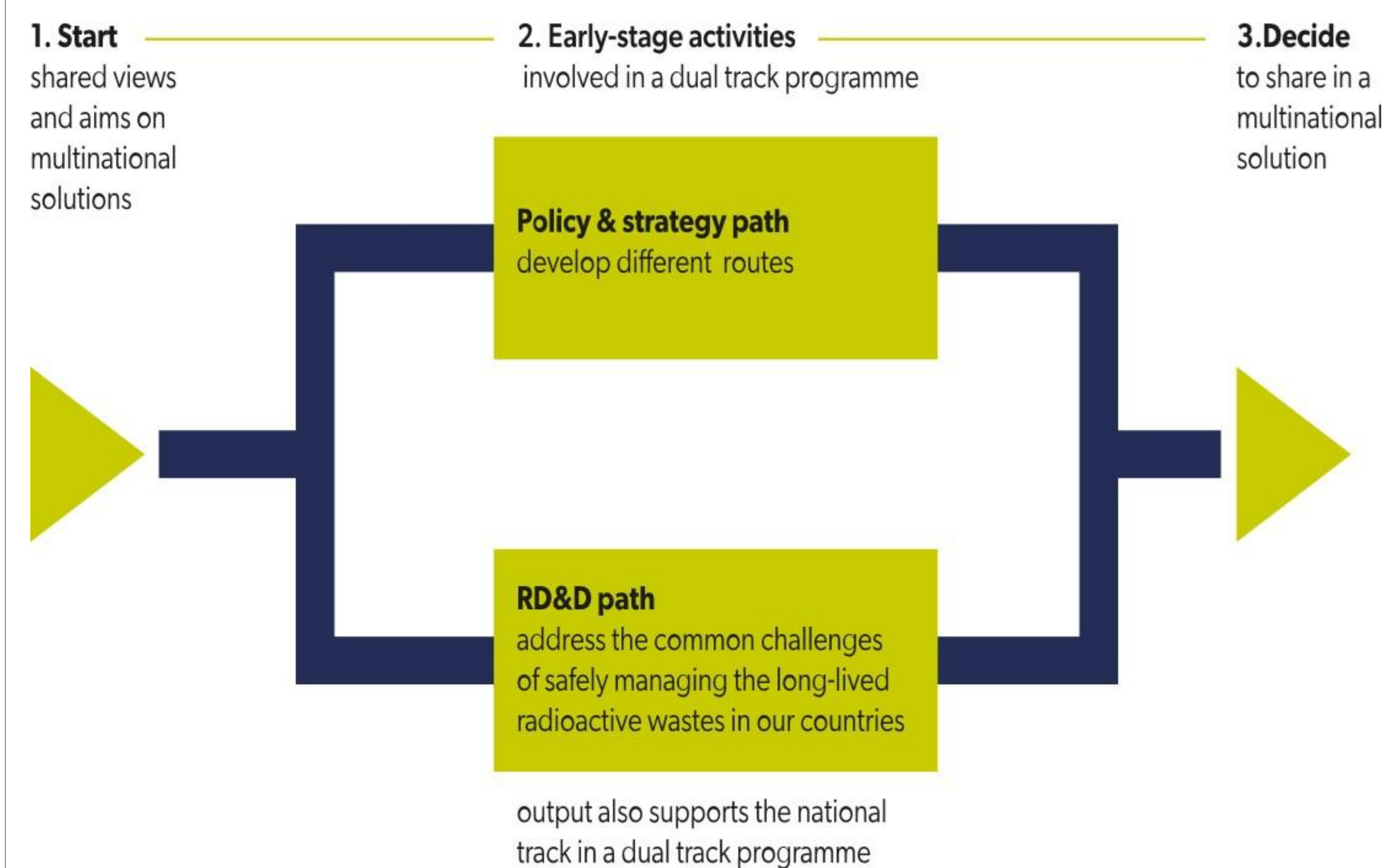


Figure 1. The two MNR paths in ERDO.

Discussions between government representatives of ERDO Member countries have been on-going for the last year, with the objective of organising a ministerial-level meeting between European countries that support a dual-track disposal policy that keeps open both national and multinational disposal options. ERDO is also been involved in the DG-ENER pilot project mentioned above as an advisor and a member of stakeholder group.

The way ahead

The pilot project is planned to finish at the end of 2025, but one of its workstreams is already planning for continued collaboration after this date. The workstream entitled “Forum for EU MS policymakers to explore shared RWM opportunities (including disposal)” should carry on after the project and keep discussions between governments on going.

Acknowledgments

We appreciate the pioneering work on the MNR concept by the Arius Association and the ERDO Working Group over the past 20 years.

References

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