

What are the challenges Cyprus faces? (1)

List the most important challenges you face in the implementation of your national radioactive waste management programme. Please be specific and give some examples.

1. Cyprus lacks an established national institution with deep technical capacity to support safety assessments, long-term safety cases and R&D, requiring regular external contracting or dependence on foreign expertise.
2. Cyprus does not carry out **national R&D on RW / DSRS management**.
 - An ARTEMIS mission (2022) suggestion refers to the need of establishing a relevant R&D programme to address the needs on RWM of the country.
3. A **governing structure** has been established for WMO that operates the national SRS/DSRS storage facility, but **not for TSO(s)**. There is still no legal status of cooperation between the RA and WMO due to legal and financial implications.
4. A local disposal solution e.g. borehole disposal, might **not be viable / sustainable** based on the **limited (current and anticipated) DSRS inventory**.
 - There is a need to extend **international dialogue on international disposal concepts and cross-border collaboration**.
 - Based on the solution(s) to be identified, the **national programme** for DSRS and RWM **needs to be revised** accordingly to address these long-term solution(s).

What are the challenges Cyprus faces? (2)

List the most important challenges you face in the implementation of your national radioactive waste management programme. Please be specific and give some examples.

5. Further guidance is needed on **specific aspects of implementation of the national programme**
 - e.g. financial estimates for the management of RW and DSRS covering existing and future needs.
6. **Resources (e.g. human, infrastructure, allocated funds, knowledge)** are limited.
 - Capacity-building activities are sporadic and non-systematic.
 - Reliance on external support, frequent utilization of capacity-building opportunities provided by IAEA.
 - Retaining and transferring knowledge in a small inventory country remains a challenge.
 - Securing financial resources for future disposal solution is problematic, as long as a long-term disposal solution has not been decided yet.

How can EURAD-2 help Cyprus / SIMS? (1)

Describe how EURAD-2 could help you in the implementation of the national radioactive waste management programme. Point out any Work Packages that might specifically be useful to you. Or any gaps/needs that would like to be addressed.

- 1. Support in establishing a national R&D programme (e.g., via WP3 – Alternatives RWM strategies (ASTRA))**
 - EURAD-2 can provide a framework for supporting the development of a national R&D roadmap aligned with EU-wide R&D priorities, supporting Cyprus in initiating basic own-run research programme.
- 2. Capacity-building and knowledge management (e.g., via WP2 – Knowledge Management (KM))**
 - Access to EURAD-2's systematic training, guidance documents and knowledge preservation tools would help Cyprus overcome challenges in sustaining expertise, especially in the absence of a national TSO structure and limited national resources.
- 3. International collaboration and shared long-term solutions (e.g., via WP14 – Near-surface disposal optimisation based on knowledge and understanding (SUDOKU) and WP3 – ASTRA)**
 - Participation in dialogue on international or shared disposal options for DSRS (e.g., borehole disposal or regional repositories) would help Cyprus explore viable alternatives and revise its national programme based on realistic, sustainable options.
 - Hopefully WP3 and 14 could offer a platform for SIMS countries to share experiences and examine adaptable models from other Member States – indirectly supporting shared long-term solutions.

How can EURAD-2 help Cyprus / SIMS? (2)

Describe how EURAD-2 could help you in the implementation of the national radioactive waste management programme. Point out any Work Packages that might specifically be useful to you. Or any gaps/needs that would like to be addressed.

4. Clarification of roles and models of governance (e.g., via WP3 – ASTRA and WP2 – KM)

- Lessons from EU countries on structured cooperation between regulatory authorities and WMOs could inform legal and institutional arrangements in a SIMS country like Cyprus, helping to address the current challenge in formal RA and WMO / TSO cooperation.
- WP3 covers system-level analysis and strategic planning, which may include roles of stakeholders and institutional cooperation frameworks, especially when evaluating different national strategies.

5. Financial planning and disposal costing (e.g., via WP3 – ASTRA and WP14 – SUDOKU)

- EURAD-2 can assist in building scenarios and cost estimations for RW / DSRS management and disposal, including the development of scenario-based assessments, taking into account technical feasibility, regulatory constraints and financial implications of different strategies.
- Can support understanding the cost impact of long-term storage vs. disposal, compare in-country vs. shared disposal models and the development of realistic financial provisions in the absence of a defined long-term solution.
- Can help Cyprus explore and model costing of interim storage, long-term storage or eventual disposal of disused sealed radioactive sources (DSRS).

How can EURAD-2 help Cyprus / SIMS? (3)

Describe how EURAD-2 could help you in the implementation of the national radioactive waste management programme. Point out any Work Packages that might specifically be useful to you. Or any gaps/needs that would like to be addressed.

6. Networking and peer review opportunities (e.g., via the whole EURAD-2 Community and WP2 – KM)

- Involvement in EURAD-2 provides access to shared EU knowledge, tools, and experiences, EU-level peer exchanges and good practices, which can guide Cyprus in adapting its national strategy despite its small inventory and resource constraints.
- Participation in organized community events, twinning arrangements, peer reviews, workshops, training and technical exchange workshops.
- Benefit from capacity-building efforts, including targeted support to less advanced programmes.