



ΕΕΑΕ ΕΛΛΗΝΙΚΗ ΕΠΙΤΡΟΠΗ ΑΤΟΜΙΚΗΣ ΕΝΕΡΓΕΙΑΣ
GREEK ATOMIC ENERGY COMMISSION

How to deal and to solve the challenges in protecting workers, public and environment in a Circular Economy with materials containing elevated levels of NORM in a sustainable way?

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Challenges - Solutions

Regulatory control of industries involving NORM is still a challenge and an open issue in many MS.

- Industries are under the regulatory control of many competent authorities
Integrated approach is a key factor to avoid repetition and bureaucracy (synergies with the other authorities)
- The implementation of **a robust radiation protection system** in industries involving NORM effectively promotes the objectives of a Circular Economy

Characterization of materials and processes and realistic dose assessments are safety keys for both an efficient and effective regulatory control as well as the further optimization of protection.

- a measuring network needs to be established
- The role of the existing European networks and platforms is considered crucial
- Technological advances and related research findings should be incorporated in the characterization and the dose assessment



Challenges - Solutions

Management of NORM residues

- Especially when large amounts of NORM are involved (i.e. fertilizer plants after dismantling)
- Management options: reuse or recycling

Training / informing workers

- There may exist a safety culture in general but there **is limited experience / knowledge** in radiation protection
- Training should be provided in a systematic way and in line with the provisions of the European BSS.

Communicate the NORM issue to the public

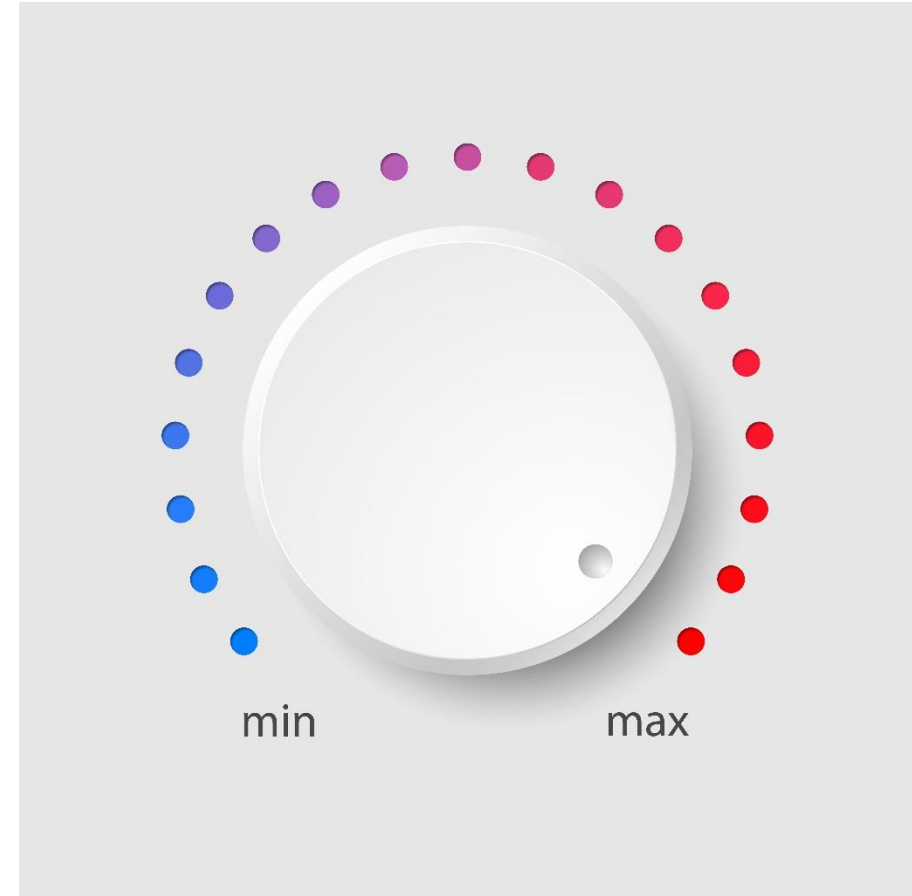
- Transparency/Openness – information dissemination by the regulatory authority
- Trust
- **Role of education** (circular society)



Challenges - Solutions

Implementation of an effective regulatory control framework

- Graded approach
- Proper implementation process and procedures



Thank you very much!



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