HARMONISED BEST PRACTICES, REGULATIONS AND STANDARDS IN WASTE MANAGEMENT AND DECOMMISSIONING

EU-HARPERS project overview

SNETP FORUM TECHNICAL SESSIONS – 2 June 2022

Réka Szőke

This project has received funding from the Euratom research and training programme 2021-27 under grant agreement No 101060028

SNETP Scientific Committee agreed on the labelling of the project in 2021.

CERTIFICATE
SNETP LABEL

SNETP LABEL

Date of certificate issuance: *24/09/2021*
Certificate number: *2021NUG0093*

The SNETP Scientific Committee during its meeting held on *24 September 2021* awarded the SNETP Label to the project idea identified as **HARmonised PracticEs, Regulations and Standards in waste management & decommissioning** (HARPERS) with the technical content reviewed and published through SOIP.

Signed for and on behalf of the SNETP Scientific Committee.

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SNETP
Sustainable Nuclear Energy Technology Platform

This project has received funding from the Euratom research and training programme 2021-27 under GA No 101060028

Presentation outline

- Specific needs that inspired the project
- Short overview
- Overall goal
- Project structure
- Cooperation and synergies
- Expected outcomes

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Specific needs that inspired the project

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- Different national regulations in decommissioning and waste management hinder establishing broader markets for services (e.g., cross-border treatment and processing) → limits job and business growth opportunities.
- Implementation of advanced or breakthrough technologies is slow due to regulatory uncertainties or variations.
- Valuable repository volumes are occupied by wastes which could otherwise be recycled or freely released.
- Risk of negative public perception of the nuclear sector if environmental and sustainability issues regarding waste streams are not handled efficiently.

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Short overview

Title: **HAR**monised **P**ractic**E**s, **R**egulations and **S**tandards in waste management and decommissioning

Response to EURATOM call HORIZON-EURATOM-2021-NRT-01-08:
Towards a harmonised application of the international regulatory framework in waste management and decommissioning

Participants: Consortium of 25 partners from 13 countries

Duration: 3 years, planned June 2022 through May 2025

Budget: 3.1 M€ (2.4 M€ EC contribution)

Agreed start date: 1st of June

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Overall goals

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Establish & clarify the benefits and added value of more aligned and harmonised regulations, practices and standards in decommissioning and radioactive waste management.

Identify the obstacles and issues preventing implementation of a more common regulatory framework.

The high-level benefits of more aligned and harmonised regulations are related to:

- *larger degree of implemented sustainability,*
- *greater business opportunities,*
- *better understanding between various groups serving the wider market,*
- *improved cost efficiency,*
- *waste minimization,*
- *improved final disposability of waste*.

Realisation of these high-level benefits would contribute to enhancing the overall safety and economics of the nuclear sector.

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Project structure

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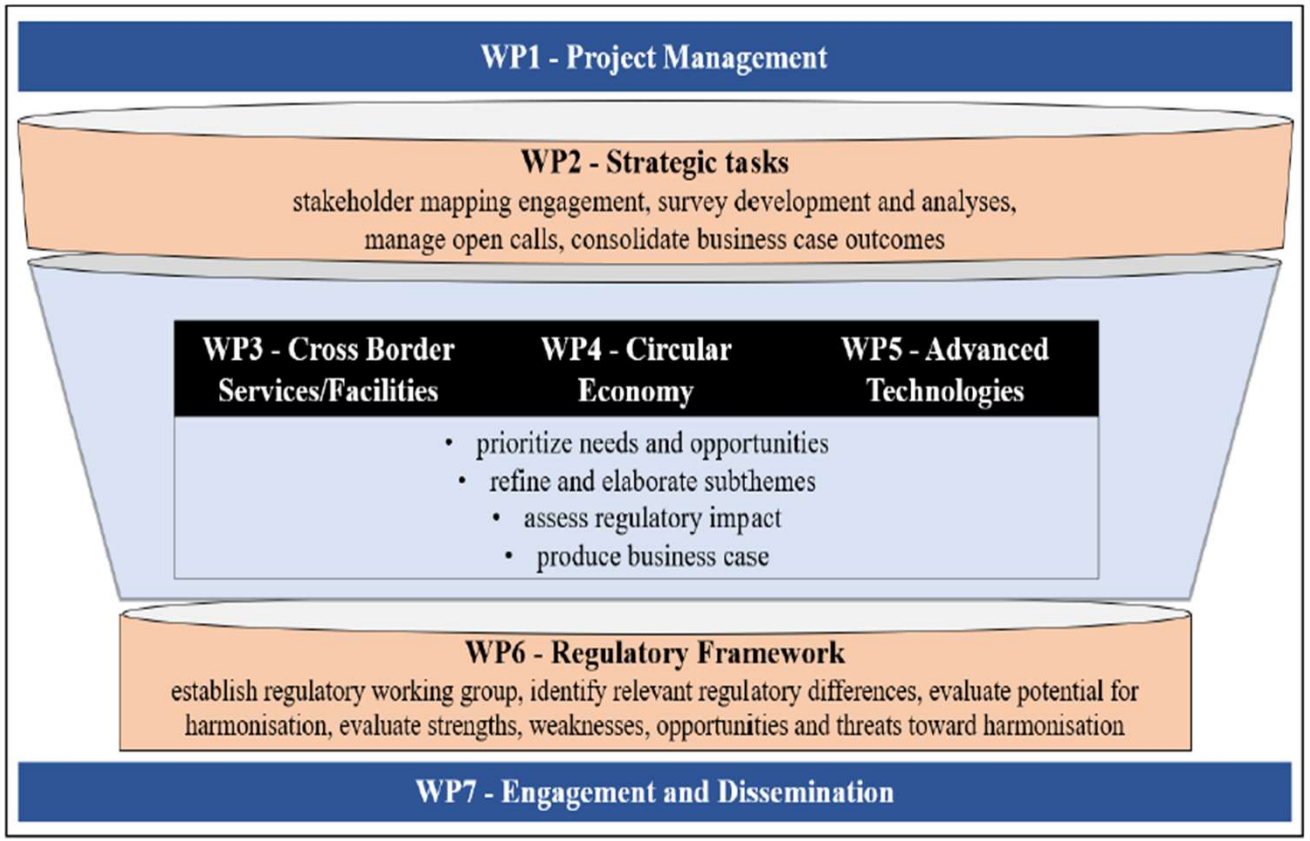

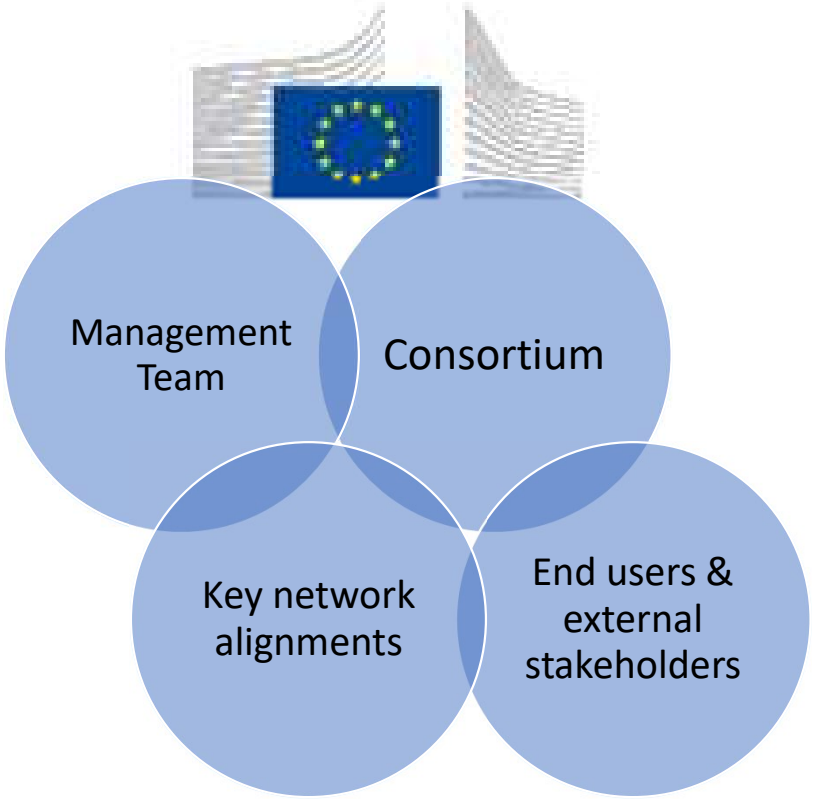

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Cooperation and Synergies

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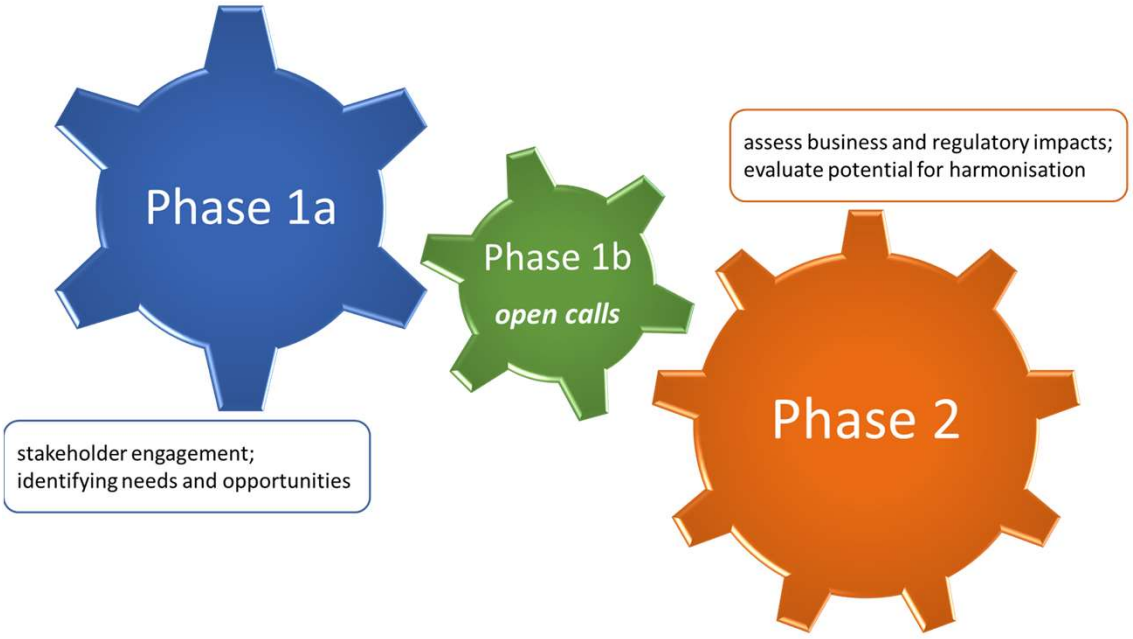
The project aims to reinforce the activities of the European Joint Programme EURAD, PREDIS and SHARE projects; international cooperation is encouraged.



Phase 1a: establishing a wide MS stakeholder community + associated engagement → define priority areas for Phase 2.

Phase 1b: open calls for expert contributions on defined priority areas, includes possibility for 3rd parties to contribute.

Phase 2: further development of priority topics including deeper engagement with the stakeholder community; assessing business and regulatory impacts.

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Specific to SNETP, the proposal directly addresses the SNETP SRIA regarding decommissioning, dismantling and waste management high level topics of:

- minimisation of waste production by operational measures, efficient dismantling, development of advanced waste treatment and conditioning technologies;
- development of new technologies and approaches to deliver decommissioning safer, cheaper and faster and sustainable, to enhance waste treatment processes, and to minimise waste arising through design, operation and decommissioning;
- allow the use of nuclear codes and standards that are different to the ones that are normally used in the country that hosts the nuclear facility;
- common licensing rules and procedures of new technologies;
- common regulations and standards at the EU level.

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Expected outcomes

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The project will:

- enhance existing commitments to facilitate sharing and exchange of knowledge and experience,
- develop strategies for shared treatment & storage facilities, cross border services & cooperation,
- explore additional mechanisms to build capacity in MS,
- assess and clarify the benefits and any disadvantages of **harmonisation**,
- deliver S&T-based solutions and share best practices by engaging and supporting coordination between different actors through TSOs and regulators,
- define conditions and opportunities for a **highly safe, circular economy**.

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PROJECT PARTNERS

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Consultancy Meeting on New and Emerging Technologies to Advance Decommissioning Projects

Aims to launch a new collaborative activity on data management and modelling activities in decommissioning, including the use of BIM approaches.

The planned collaborative activity may include:

- compilation of experiences in using a range of digital tools/technologies to address specified 'use cases', including resource needs and resulting benefits,
- analysis of applicability and of different tools/technologies for different purposes,
- (Where possible) development of a library of models with different levels of complexity.

Participation via National Missions

Thank you!

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