

# OPENING WORDS – TASK 4 WORKSHOP

Subtask 4.2

14/06/2021 • Elisa Leoni (IRSN)



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## ROUTES OVERALL OBJECTIVES

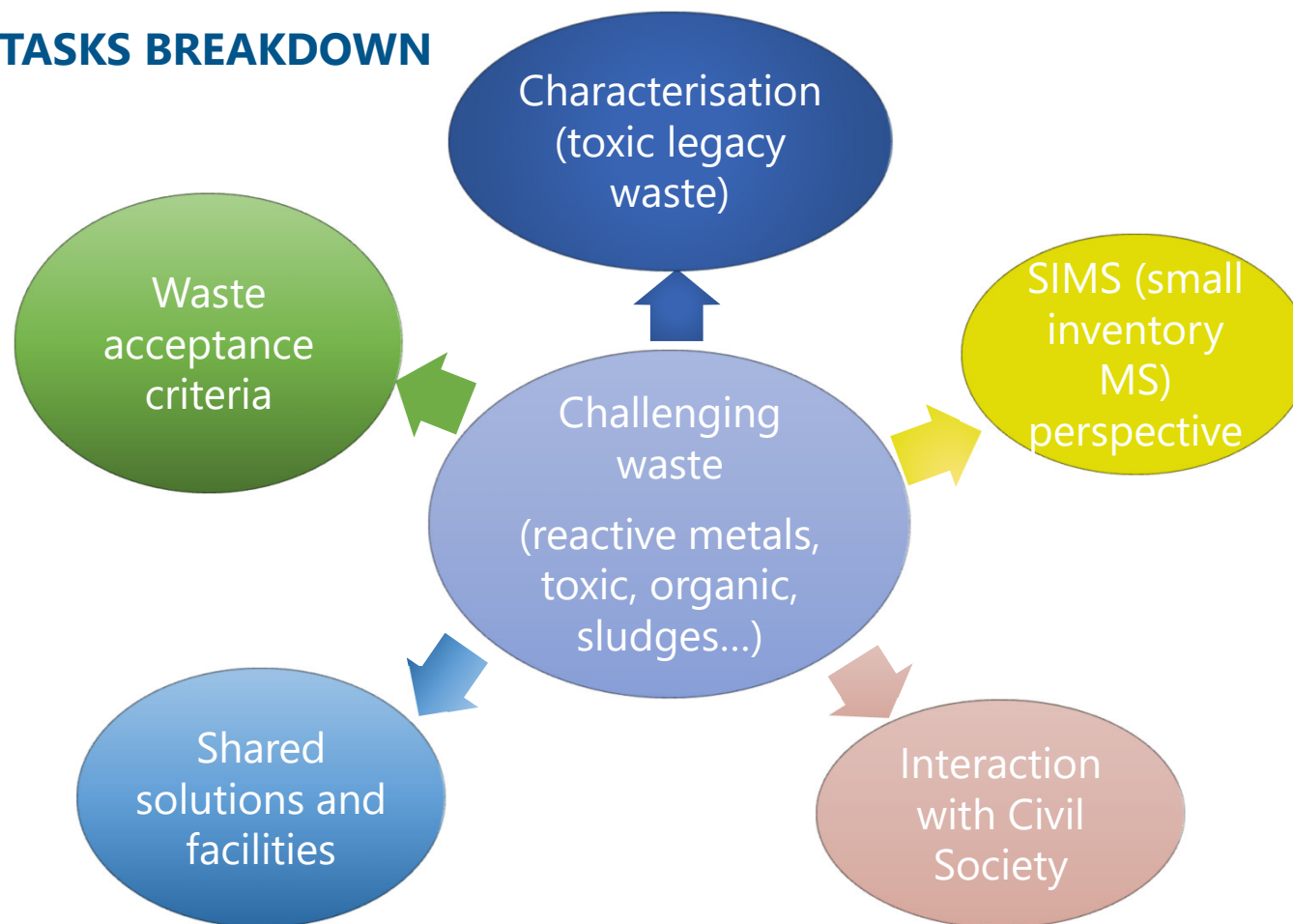
Sharing **experiences and lessons learnt**

Identifying **R&D needs** for a better management of challenging waste

Opportunities for collaboration and **sharing**

**Countries** with programmes at different stages of development, with different amounts and types of radioactive waste

## ROUTES: TASKS BREAKDOWN



## EURAD ROUTES: A LOOK BACK (Y1/Y2)

- The main objective was to establish the « State of the art » based on:

- Participants inputs (questionnaires, specific queries)
- Literature review

**Data gathering**

Classification/categorisation/first list of challenging waste

**D9.4 (available on the EURAD website)**

Waste Acceptance Criteria

**MS88 (available on the EURAD website)**

Shared solutions

**D9,12 (Draft)**

Scoping of ROUTES from the CS 's perspective

**D9,15 (available on the EURAD website)**

Knowledge of disposal options for SIMS

Review on characterization method

**D9,10 (September 2021)**

**D9,7 (December 2021)**

14/06/2021

Subtask 4.2 Workshop

eurad

## EURAD ROUTES: YEAR 2

- **Collection and analysis of case studies: TASK 2**

- Learn from the past !
- Information gained on experiences and lessons learnt is often more relevant and representative than information gained by looking at collated inventories or too high-level approach.

Sharing **experiences and lessons learnt**

Case studies on challenging waste

**D9.5 (December 2021)**

- **March, 24 – Management of Sludge and SIERS**
- **March, 30 – Management of Organic Wastes**
- **April, 14 – Management of Bituminized Wastes**
- **May, 7 – Management of Graphite and Decommissioning Waste**
- **May, 18 – Management of DSRS**
- **May, 25 – Management of particular spent fuel and Ra/Th/U Waste**



## EURAD ROUTES: YEAR 2

- **Collection and analysis of case studies: TASK 6**

- No example of real shared facility
- Facilities treating or having treated foreign waste
- Example of mobile systems (which can represent a valuable alternative to develop a shared solution particularly for small inventory MS)

Sharing **experiences and lessons learnt**

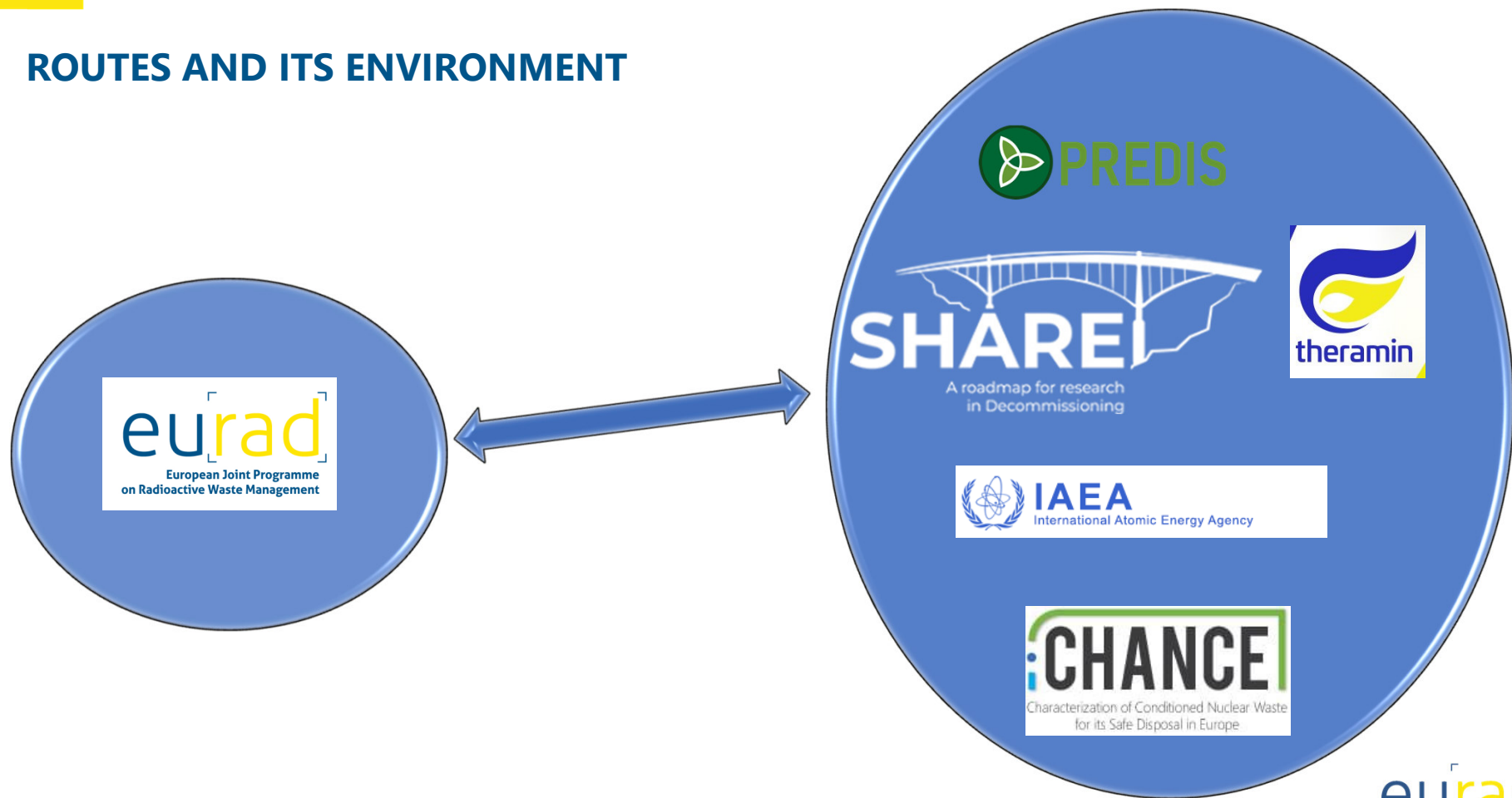
Shared solutions Case Studies



**D9.16 (December 2021)**

- **More than 40 case studied analyzed**
- **Country-specific sessions**
- **A specific questionnaire has been developped in order:**
  - to gather for each selected case study further information about lessons learned from past experiences,
  - the level of interest of the country in sharing technology/service
  - mechanisms in place for and the involvement of the Civil Society

## ROUTES AND ITS ENVIRONMENT





## INTERACTIONS AND LE1 COLLABORATIONS FOCUS ON EURAD-ROUTES/PREDIS/ERDO WEBINARS ON WAC

- The first webinar was held on 21<sup>st</sup> April 2021 – its primary aim was to share information about recent/ongoing initiatives on WAC.
  - <https://predis-h2020.eu/wac2-webinar-20-5-2021/>
- The second webinar was on 20<sup>th</sup> May and focused on needs and challenges relating to WAC from different stakeholder perspectives.
  - <https://predis-h2020.eu/wac2-webinar-20-5-2021/>
- Some takeaways: harmonisation of WAC
  - **Harmonisation of (preliminary) WAC among countries could be useful** but will depend heavily on the level of detail at which such harmonisation is to be applied as well as who (waste generator, WMO, regulator, etc) is responsible for its application. Some criteria could be applied at a high level.
  - Harmonization is essential. However, harmonization across all aspects of waste management over all inventories everywhere is neither credible nor desirable. Rather, in this context, **sharing of knowledge, experience and information can be considered somewhat akin to harmonizing.**
  - **Harmonization should be viewed as an opportunity** not only for identifying best practices, etc., but also for **market opening** and **increased transparency**.



## Slide 8

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### LE1

The idea here is to show that the work done under ROUTES will bring briks to the wall.

ELEONI, 6/9/2021

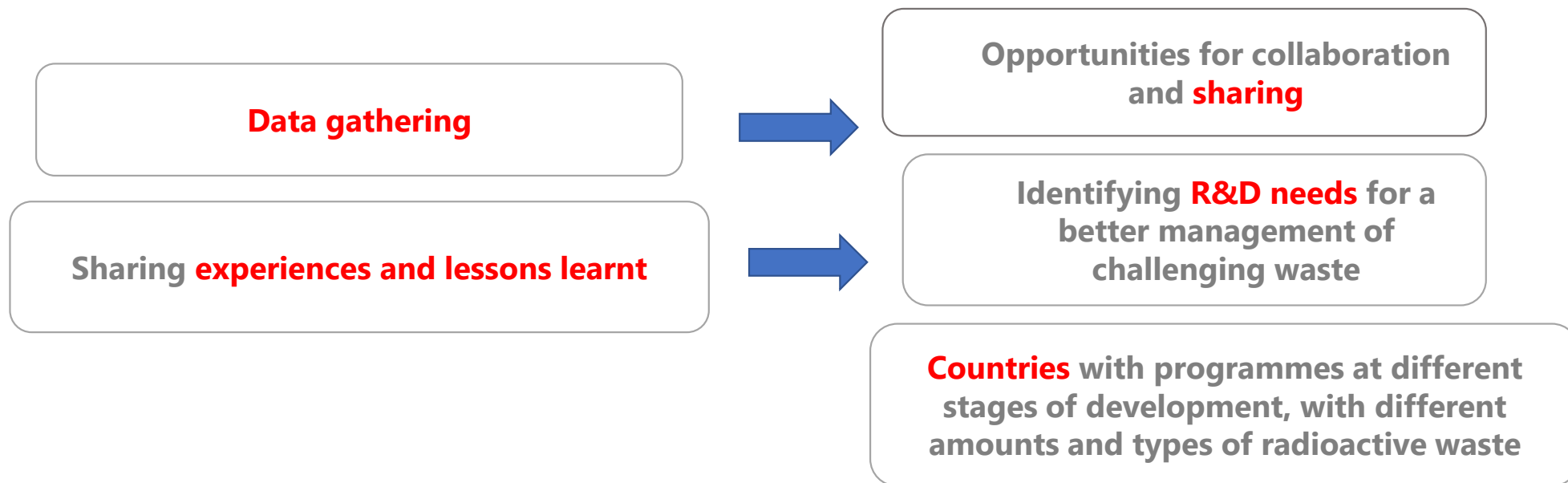


## INTERACTIONS AND COLLABORATIONS FOCUS ON EURAD-ROUTES/PREDIS/ERDO WEBINARS ON WAC

- Some takeaways: WAC and their absence
  - Predisposal and disposal WAC should optimally be formulated together; if disposal is unavailable, good international practices can be followed.
  - Adoption of practices similar to the UK's Letter of Compliance process can help in formulating WAC when disposal solutions are lacking.
  - Flexibility in waste treatment/conditioning should be directly proportional to the uncertainty of a disposal solution.
  - In many cases, there is no option to postpone conditioning (i.e., storage of raw waste is not permitted). **It would be useful to know how these situations are universally handled.**
  - Does a new "final conditioning" step need to be introduced into predisposal waste management?
- Some takeaways : Shared solutions and specificities of SIMS
  - **Shared approaches/solutions regarding predisposal (especially characterization)** and regulatory activities are needed.
  - **The sharing of waste management facilities (fixed installations, modular or mobile options) should be explored.**
  - **Cross-border cooperation** and otherwise sharing experience in technology implementation would support WAC specification.
  - **Shared disposal facilities remain illusory, but in the future, namely for SIMS and HLW/SNF, they might be inevitable.**

## EURAD ROUTES YEAR 3: MOVING FORWARD

- Based on the work performed in Y1 and Y2, YEAR 3 (June 2021-May 2022)
  - Will be devoted to identify Gaps, R&D needs and opportunities for sharing
  - A specific emphasis will be placed on solutions for SIMS





## EURAD ROUTES YEAR 3

- **ANNUAL MEETING (September)**

- Activities conducted by each task during Y2 will be presented
- Focus on lessons learnt and added value from past cooperation activities
- Presentation of Task 8

- **TASK 8**

- It is an additional task of ROUTES
- Just started: 1st of June 2021
- Main objectives and activities:
  - Collaborative work between SIMS and LIMS
  - Based on the results for SIMS of the work carried out in ROUTES – Task 2-6 regarding challenging wastes inventory, characterization topics, WAC, shared solutions etc.
  - How can these results be tailored for SIMS needs ?



## EURAD ROUTES YEAR 3: TASK 8



### WASTE MANAGEMENT SOLUTIONS FOR SMALL AMOUNTS - SIMS

- WM routes are not defined yet especially for challenging waste
- no entire disposal strategy sufficiently developed or implemented, WAC for disposal are only preliminary or not implemented
- disposal and predisposal solutions often disproportionately expensive
- usually no sufficient human resources and research infrastructures available
- **knowledge transfer, training and skills improvement needed**

## INTENDED INTERACTION WITHIN ROUTES TASKS AND KM WPS

Input from ROUTES

Task 8

