

## Participation in the CHANCE End-User Group

The CHANCE project “Characterization of conditioned nuclear waste for its safe disposal in Europe” aims to address the specific issue of the characterization of conditioned radioactive waste. The project started on 1<sup>st</sup> June 2017 for a 4 years period.

The first objective of CHANCE is to establish, at the European level, a comprehensive understanding of current conditioned radioactive waste characterization and quality control schemes across the variety of different national radioactive waste management programmes in Europe. This work will be based on inputs from end-users such as Waste Management Organisations, storage and/or disposal facility operators and radioactive waste producers. This objective will be addressed through activities of CHANCE work-package 2 “Methodology for conditioned radioactive waste characterization: Problematic wastes and R&D proposal” (WP2).

The second objective of CHANCE is to further develop, test and validate already identified techniques that will improve the characterization of conditioned radioactive waste. Specifically, the work on conditioned radioactive waste characterization technology will focus on:

- Calorimetry as an innovative non-destructive technique to reduce uncertainties on the inventory of radionuclides (work-package 3);
- Muon Tomography to address the specific issue of non-destructive control of the content of large volume nuclear waste (work-package 4);
- Cavity Ring-Down Spectroscopy (CRDS) as an innovative technique to characterize outgassing of radioactive waste (work-package 5).

In order to maximize the impact and relevance of the project, CHANCE project foresees the set-up of an **End-User Group** (EUG). This EUG will provide a general guidance to the project. In particular, it will advise the CHANCE Consortium on the overall programme of activities and on the progress and achievements of the project.

In return, the End-User Group will also be asked to provide specific inputs within WP2.

Within WP2, an evaluation of the requirements and methodologies for the characterization of conditioned radioactive waste used in different national contexts will be made. A questionnaire will be prepared, distributed to the EUG, and used to collate information on:

- Characterization needs for different waste categories
- Methodologies and technologies used for evaluation
- Limits and problematic remaining issues
- R&D needs
- Potential ongoing R&D programme on the topic of conditioned radioactive waste characterization
- Potential applications of R&D actions included in CHANCE (WP3, WP4 & WP5)

The questionnaire will be distributed in November 2017 - first during EUG meeting n°1 and then through CHANCE website and specific mailing. EUG members will be asked to complete the questionnaire, as much as reasonably achievable, by mid-2018.

From mid-2018, the questionnaire responses will be analysed in order to:

- Identify key parameters that need characterization.
- Identify technologies commonly used for conditioned waste characterization.
- Identify specific problematic issues for conditioned radioactive waste characterization.

On the basis of this analysis, a synthesis of commonly used methodologies for conditioned radioactive waste characterization will be presented. This will include a synthesis of end-users requirements and methodology. At this step, the delivery date of this synthesis is February 2019.

On the basis of the outcomes of this task, new R&D needs on characterization of conditioned radioactive waste can be identified. A specific deliverable will present description of the existing techniques, applicability and limits as well as a R&D programme to develop and evaluate innovative technologies complementing current characterization techniques and providing supplementary quality control of conditioned waste, according to end-users requirements. At this step, the delivery date of this report is November 2019.

This task will be carried out in close link with the European Joint Programme on Radioactive Waste Management and Disposal, as the identified R&D needs could be addressed in a future project within the EJP.

EUG members will have the opportunity to review some deliverables of CHANCE project.

During the project, EUG members will be regularly informed about the progress of the CHANCE project and **3 specific EUG meetings** are foreseen. To take part in CHANCE EUG, participation to all EUG meetings is not mandatory.

The EUG meeting n°1 will be held in November 2017. The objectives will be to present to the EUG the CHANCE project, its objectives and expected outcomes, as well as the modalities of the implication of the EUG in the project. Time for discussion will be planned, so that EUG members can express their view of the project and on the modality of their involvement.

A EUG meeting n°2 will be held at the mid-term of the project (November 2018). The objectives will be to present and discuss the progress of the project; its main results reached so far and present the work to be carried out during the second part of the project.

A EUG meeting n°3 will be held at the end of the project, back to back with the final General Assembly and/or final open conference (May 2021). The objective will be to give an overview of the project activities, the main results achieved, as well as the impacts of the project.

As a conclusion, the CHANCE EUG members will:

- be invited to participate in EUG meetings organized by the CHANCE consortium;
- be invited to answer a specific questionnaire related to WP2, and review the two related deliverables;
- Be regularly informed about the project progress.

*All dates presented here are provisional and may change during the project.*

*There is no financial contribution from the project to EUG members.*

**Declaration of Intent**

I ....., as a representative of....., hereby express our commitment into participating to CHANCE End-User Group.

[Name] will be the main point of contact for the purposes of the End-User Group and can be reached at:

- Mailing Address
- Phone Number
- Email Address

.....  
Date

.....  
Signature

This document has not a legally binding character.

A Consortium Party though shall not be obliged to disclose information that will not be publicly available or might be considered by it as confidential.