



EUROPEAN
COMMISSION

European
Research Area

Carbon-14 Source Term

CAST



Deliverable Title (D7.10)

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Date of issue of this report: 22/05/2017

The project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 604779, the CAST project'		
Dissemination Level		
PU	Public	PU
RE	Restricted to the partners of the CAST project	
CO	Confidential, only for specific distribution list defined on this document	

CAST – Project Overview

The CAST project (CARbon-14 Source Term) aims to develop understanding of the potential release mechanisms of carbon-14 from radioactive waste materials under conditions relevant to waste packaging and disposal to underground geological disposal facilities. The project focuses on the release of carbon-14 as dissolved and gaseous species from irradiated metals (steels, Zircalloys), irradiated graphite and from ion-exchange materials as dissolved and gaseous species.

The CAST consortium brings together 33 partners with a range of skills and competencies in the management of radioactive wastes containing carbon-14, geological disposal research, safety case development and experimental work on gas generation. The consortium consists of national waste management organisations, research institutes, universities and commercial organisations.

The objectives of the CAST project are to gain new scientific understanding of the rate of re-lease of carbon-14 from the corrosion of irradiated steels and Zircalloys and from the leaching of ion-exchange resins and irradiated graphites under geological disposal conditions, its speciation and how these relate to carbon-14 inventory and aqueous conditions. These results will be evaluated in the context of national safety assessments and disseminated to interested stakeholders. The new understanding should be of relevance to national safety assessment stakeholders and will also provide an opportunity for training for early career researchers.

For more information, please visit the CAST website at:

<http://www.projectcast.eu>

CAST
Workshop 1 (D7.10)

CAST		
Work Package: X	CAST Document no. :	Document type:R
Task: 7.4	CAST-2017-D7.10	R = report, O = other
Issued by: COVRA		Document status:
Internal no. :		Final

Document title
Workshop 1

Executive Summary

This report aims to document the initiation of the first CAST workshop, to demonstrate to the European Commission that the milestone MS7 has been achieved.

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1 Preparation

1.1 Audience

The audience of this workshop are professionals working at organisations with responsibilities in the management of radioactive waste [Neeft et al, 2015], for example:

- 1) Waste generators and waste producers;
- 2) Regulators;
- 3) Waste management organisations.

These organisations are located in the European Union and other countries with organisations participating in CAST: Switzerland, Japan and Ukraine. For each country, for each organisation, one person was invited to participate in the workshop. The preparation of the first CAST workshop included making a list with addresses of potential participants. Participants were personally invited. For some potential participants, the invitation included a description that budget was available to reimburse travel costs. The aims of the first workshop were [Neeft et al, 2015]:

- 1) To become acquainted with the research;
- 2) To disseminate the initial findings;
- 3) To allow sufficient opportunity for questions.

1.2 Place

The first workshop was held at COVRA's premises in the Netherlands, because the waste investigated in CAST could be viewed at a single location.

1.3 Documents

The documents intended to be prepared for the first workshop were:

- 1) An announcement documentation (D7.8);
- 2) Progress overview for workshop 1 submitted as a scientific paper (D7.6);

- 3) Overview of achievements for regulators (D7.7).

1.3.1 Announcement

The announcement documentation was in a similar layout as the Newsletter in order to be attractive as well as informative. There was:

- 1) An A4 sized front with a short introduction of CAST and why persons from the three organisations have been invited;
- 2) An A3 sized overview of the origin of waste in a nuclear plant with photographs of waste packages containing the waste investigated in CAST at COVRA's premises and the expected contributions of the invited professionals;
- 3) An A4 sized back with the agenda and logistic details.

The potential participants expected to present their national inventory with respect to the waste investigated in CAST. These participants received a template for this contribution to the workshop.. All presenters confirmed that their presentations could be used for the workshop proceedings.

1.3.2 Progress overview

The progress overview was not ready and therefore the paper written by Williams and Scourse [Williams et al, 2015] was used. The paper provided sufficient information for the waste generators, waste producers and waste management organisations for their preparation to the first workshop.

1.3.3 Documentation for regulators

The document written for regulators comprised the state of the arts of work packages 2, 3, 4, 5 and 6 and the planned experimental work in CAST [Poskas et al, 2016].

2 Workshop held

The workshop was held on 5th and 6th October 2016 at COVRA's premises in the Netherlands. It started with a short introduction about CAST and carbon-14 in terms of radiation protection in the European Union. The national inventories followed subsequently. Each presentation of an organisation not participating in CAST was followed by a presentation of an organisation (mainly waste management organisation) participating in CAST. The guided tours to the waste packages at COVRA's premises were divided in two groups: a group with mainly waste management organisations and a group with mainly regulators. On each day, there was a guided tour. On each day, an example or examples of national safety assessments was presented. Each example showed how a type of waste investigated in CAST was assessed in a country.

3 Proceedings

For the preparation of the proceedings, some participants needed to be asked whether they agreed that their presence was allowed to be included in the proceedings because they had not given a presentation in which their participation was described. They all confirmed the suggested appearance in the proceedings. The proceedings of the CAST workshop comprised the background and objectives of the first workshop, the hand-outs of the presentations, a description of the discussion and from which countries there was participation from a regulator, waste management organisation and waste generator [Buckau, 2017].

References

Buckau G, Bottomley D, Neeft EAC, Workshop 1 Proceedings (D 7.11) CAST report (2017).

Neeft, CAST Workshop 1 Announcement (D7.8), CAST leaflet (2016).

Neeft EAC, Narkuniene A, Montaya V, Buckau G, Dissemination plan (D7.3) CAST report (2015).

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Poskas P, Grigaliuniece D, Narkuniece A, Neeft E, Mibus J, Necib S, Reiller P, Norris S, Capouet M, Overview of achievements on technical results for regulators for Workshop 1 (D7.7), CAST report (2016).