



CHANCE project

(Contract Number: 755371)

Communication Action Plan

DELIVERABLE (D6.2)

Work Package 6

Author(s): **Bruggeman Christophe, Vanhoof Annelore (SCK CEN)**

Reporting period 1: 01/06/2017 – 31/03/2022

Date of issue of this report: 25/03/2022

Start date of project: 01/06/2017

Duration: 58 Months

<i>This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 755371;</i>		
Dissemination Level		
PU	Public	X
CO	Confidential, only for partners of the CHANCE project and EC	

History chart			
Status	Type of revision	Partner	Date
Draft	Initial version 1 (non-standard template)	SCK CEN	11/2017
Draft	Initial version 2	SCK CEN	01/2018
Draft	Final version	SCK CEN	03/2022

Reviewed by

Denise Ricard (ANDRA, coordinator)

Approved by

The Executive Board



1. Introduction

This report describes the Communication Action Plan which has been developed and used for the CHANCE project. As a reminder, the description of Work Package 6 is given here: *WP6 - Dissemination and training activities [Months: 1-58] SCK•CEN, ANDRA, ENEA, JUELICH, INCT Task 6.1: : Communication and dissemination Start date : 1 ; End date: 48 Task Leader: SCK•CEN ; Contributors: Andra, INCT. Given the difference in scope and objectives of these work packages, it will be of high value to come up with a cohesive, consistent and concise communication strategy that highlights both the methodological, technical and scientific achievements made within the project. More specifically, a dissemination and communication action plan will be developed to identify the key messages to be delivered, the target audiences to be addressed, the method to address them, and the timing of dissemination (D6.2). A first version of this document will be available in its first version at month 6. It will be updated after each periodic report, at month 20 and 38, and will be submitted as a deliverable (D6.2) at month 58. This action plan might be revised or amended according to outcome of the study undertaken in WP6.3. As a communication tool with the broader community, a public website (D6.1) will be constructed and maintained for disseminating project objectives, major results and achievements, trainings and workshops. The website will also contain an intranet (secure) site which will serve as a knowledge portal where project partners can upload and review documents. The establishment of this intranet and extranet will be achieved at the onset of the project, and adequate resources will be foreseen for proper maintenance. Apart from this website, also other communication tools will be developed which help in the raising of awareness concerning the project, its goals and results. These tools will include flyers, posters or presentations which may be used stand-alone or by the different project partners upon participation to national and international events (conferences, workshops, etc.) related to radioactive waste management. Special attention will be taken to develop dedicated communication material for member states with less advanced programs (LAPs).*

Thus, the Communication Action Plan is a document which is subject to continuous updates throughout the course of the project, allowing new developments and special actions emerging from other WP tasks to be taken up on an *ad hoc* basis.



2. Communication and dissemination activities within CHANCE

2.1 Rationale

Dissemination of results and progress is integral part of the CHANCE project and is also stated as an obligation by the European Commission: “(...) *each Beneficiary must – as soon as possible – ‘disseminate’ its results by disclosing them to the public by appropriate means (...), including in scientific publications (in any medium)*” (CHANCE Grant Agreement, Article 29.1, p.46). Therefore, communication and dissemination must be taken up and kept in mind by all CHANCE partners and several means are proposed within this document to provoke such dissemination actions.

Generally stated, the goal of communication is to raise awareness concerning the CHANCE research topics and developments, and to inform the CHANCE stakeholders about the project’s progress and achievements. More specifically, the goals can be formulated as follows:

- To gather and obtain feedback from relevant stakeholders on current practices in characterization of conditioned nuclear waste and to formulate best practices and propose new developments.
- To inform stakeholders on new developments and results obtained related to the characterization of conditioned nuclear waste; more specifically on advancements related to the following techniques:
 - Calorimetry as a non-destructive technique to reduce uncertainties on the inventory of radionuclides
 - Muon tomography as a non-destructive technique to control the content of large volume nuclear waste
 - Cavity ring-down spectroscopy to characterize outgassing of radioactive waste.
- To reach out to the broader nuclear community and its stakeholders in order to increase awareness on the characterization of conditioned nuclear waste.
- To inform the interested public on characterization of conditioned nuclear waste for its safe disposal in Europe

2.2 General internal rules for dissemination

(From CHANCE Grant Agreement, 29.1, p.45)

A beneficiary that intends to disseminate its results must give advance notice to the other beneficiaries of at least 45 days - unless agreed otherwise -, together with sufficient information on the results it will disseminate.

Any other beneficiary may object within – unless agreed otherwise – 30 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly



harméd. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

(From CHANCE Grant Agreement, 29.2, p.46)

Each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results.

In particular, it must:

(a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript for publication in a repository for scientific publications; Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.

(b) ensure open access to the deposited publication – via the repository – at the latest: (i) on publication, if an electronic version is available for free via the publisher, or (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.

(c) ensure open access – via the repository – to the bibliographic metadata that identify the deposited publication. The bibliographic metadata must be in a standard format and must include all of the following: 1) the terms “Euratom” and “Euratom research and training programme 2014-2018”; 2) the name of the action, acronym and grant number (i.e., NFRP-2016-2017 CHANCE 755371); 3) the publication date, and length of embargo period if applicable, and 4) a persistent identifier.

(From CHANCE Grant Agreement, 29.4, p.47)

Unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination results (in any form, including electronic) must: a) display the EU emblem and b) include the following text: “This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 755371”.

Moreover, any dissemination of results must indicate that it reflects only the author’s view and that the Commission is not responsible for any use that may be made of the information it contains (CHANCE Grant Agreement, 29.5, p.47).

2.3 Target audience

Different groups are targeted by the CHANCE project and its dissemination activities. The CHANCE target audience groups are defined as follows:

- CHANCE partners
- End users (WMOs, repository operators, nuclear regulators and waste producers)
- European community involved in RW management (EC, IGD-TP, scientific community, nuclear waste community, policy makers, etc.)



- Decision makers
- Researchers and broader scientific community
- Larger public interested in RW management

Each dissemination activity must be targeted to at least one relevant target audience, using the means appropriate to reach this audience. It is reminded that the end users are formally gathered in the CHANCE End-User Group (EUG).

2.4 Key messages

Key messages are the concepts that you want your audience to remember from the communication campaign. Below follow some examples of key messages which are likely to emerge from the CHANCE project:

- A comprehensive overview and understanding (in terms of current status and limitations) of current characterization methods and quality control schemes for conditioned radioactive waste used nowadays in Europe.
- An assessment of already-identified and novel new techniques which need to be developed, tested and validated in order to improve the characterization of conditioned radioactive waste.
- Research results, methodological, technical and scientific achievements obtained within the scope of the project, mainly related to the three techniques that are studied (calorimetry, muon tomography, cavity ring-down spectroscopy)

Key message	Target audience	Communication channel	Timing
Overview of current characterization techniques + limitations	End-user group	EUG meetings	See below
	Nuclear waste management community	Website, reports, etc.	
	Policy makers		
	Other stakeholders, larger public		
Assessment of techniques to improve characterisation	End-user group	EUG meetings	See below
	Nuclear waste management community	Website, reports, etc.	
	Policy makers		
Scientific achievements related to development	End-user group	EUG meetings	



of techniques within the project	Nuclear waste management community	Website, reports, scientific papers, conference proceedings, presentations, workshops and trainings, etc.
	Broader scientific community	

2.5 Communication and dissemination tools

a) Internal communication within the project

Internal communication means communication among the CHANCE partners. Such communication may include updates (on research performed, status of deliverables, etc.), questions, remarks, etc. CHANCE partners are encouraged to communicate regularly with each other, especially within each of the respective Work Packages, in order to foster discussion and to ensure good project progress. Internal communication may be performed by phone, email, videoconference, etc.

(From D1.2 CHANCE – Quality Management Plan)

For coordination and management issues, electronic mail is the regular way of communication. Mailing lists are listed in Annex 1. Considering the number of partners, the recipients must be selected carefully. Contact details of members of each Consortium body will be regularly updated by the Coordinator. To avoid waste of time, the „Subject“ field of each email must mention:

- CHANCE
- The Consortium body to which the email is sent;
- The WP number when the email is relevant to one WP only

b) Deliverables and reports

For document exchanges and storage, SharePoint must be used. Standard document templates are to be used by all partners and are available on Sharepoint (under Documents - WP1 – Templates). Moreover, each deliverable will be validated and approved according to an internal review process (From D1.2 CHANCE – Quality Management Plan):

- 0- Deliverable Lead beneficiary sends the deliverable to the Work Package Leader for a first validation step.
- 1- Work Package Leader sends the deliverable to the Executive Board members at least **45 days** before the delivery date to the EC.
- 2- At least two reviewers are appointed by the Executive Board. In parallel with the review, CHANCE Project Partners are given the opportunity to comment on the report informally.



*Depending on the size and complexity of the deliverable, this step will last **between one and three weeks**.*

- 3- *The Deliverable Lead beneficiary takes into account the different comments received from the reviewers and issues an updated version. Depending on the size and complexity of the deliverable, this step will last **between one and three weeks**. This updated version is sent to the EB members for formal approval of submission.*
- 4- *Depending on the results of the above validation process, the Executive Board decides whether or not to approve the deliverable. The EB has **one week maximum** to ask for additional revisions, after which time any absence of response is considered tacit approval.*
- 5- *Deliverable Lead beneficiary has **two weeks** to take into account the requested corrective actions and send the final version of the deliverable.*

The final version of the Deliverable is validated by the Executive Board and submitted by the Coordinator on the EC Participant Portal.

c) Website

A website (<http://www.chance-h2020.eu/>) has been constructed and will be maintained for disseminating project objectives, major results and achievements, trainings and workshops. WP leaders have provided input for WP description (short summary, deliverables). The website also contains a dedicated End User Group page, and an intranet (secure) site (Sharepoint) which will serve as a knowledge portal where project partners can upload and review documents (see previous paragraph). The Sharepoint will also be used to exchange knowledge and to communicate important milestones.

The news section on the website will be used to communicate the recent updates that are highlighted in the timeline (see below). Project objectives, results and achievements are interesting news items that can be communicated through the website. Within the CHANCE Executive Board a recurring agenda item will deal with questioning the different WPs on news items which can be used to update the website. All requests for website updates have to be sent to the WP6 lead: Christophe Bruggeman (christophe.bruggeman@sckcen.be).

Checklist : Is it News ?

- Why do we need to know? What will change? What solutions are you offering? What makes the issue urgent? What are the consequences if no action is taken?*
- Have you tried to stir your audience's imagination and emotions?*
- How does your work relate to everyday life? Does it link to any broader societal issue? Rather than focusing only on the provision of factual information, is your project research positioned within a broader socio-economic and policy context, so that it will be easier to explain the results and their relevance to policymakers and citizens?*

Website visitors can also make direct contact with the CHANCE project through the email address chance-H2020@sckcen.be, which is mentioned on the Contact page. This email is received by the WP6 lead who will distribute it further to the persons concerned within CHANCE.



d) [End User Group meetings](#)

On a regular basis there will be end user group meetings to inform the end user group. The objective is to collect end-users requirements in terms of characterization, especially links and overlaps between these requirements and waste specifications for different national disposals.

- A questionnaire will be prepared and sent to End-User Group members. It will be used to collate information on national waste management programmes (existing and planned disposal solutions for radioactive waste, waste acceptance specification for each solution including potential free-release, technologies used for conditioned radioactive waste characterization, potential ongoing R&D programme on the topic of conditioned radioactive waste characterization, interest on R&D actions included in CHANCE,...).
- Answers will be analysed to identify key parameters that need characterization, technologies commonly used for conditioned waste characterization and specific problematic issues for conditioned radioactive waste characterization.

End-users will also be informed about the project progress, also from the scientific/technical work packages related to the development of novel characterization techniques, and will be invited to provide feedback on specific deliverables.

e) [Scientific Conferences \(presentations, posters\) & Journal Papers](#)

These communication channels can be used to share specific scientific information with a scientific audience. Participants to conferences are invited to upload some footage on the CHANCE website.

f) [General CHANCE powerpoint presentation](#)

A general PowerPoint presentation introducing the CHANCE project has been prepared and is to be used for internal and external communication on the project. A basic set of slides is provided and can be found in the Sharepoint under Documents – WP1 - Templates. Comments on the presentation can be sent to the project coordinator.

g) [CHANCE Style guide](#)

An official logo has been designed and will be used in all communication regarding the CHANCE project.





2.6 Tips & Tricks

The following is taken from the “Horizon 2020 – Communicating EU research and innovation guidance for project participants, Version 1.0, 25 september 2014” document.

Defining your audience:

- ✓ Can your audience help you reach your objectives?
 - Who has an interest in your research?
 - Who can contribute to your work?
 - Who would be interested in learning about the project's findings?
 - Who could or will be affected directly by the outcomes of the research?
 - Who are not directly involved, but could have influence elsewhere?
- ✓ Does the project aim to address both a direct audience and intermediaries to reach more people?
- ✓ What about the possibility of audiences at local, regional, national and European level?
- ✓ Is the audience external (not restricted to consortium partners)?

How to communicate/choose your message:

- ✓ Tell a story, don't just list facts
 - A story is an effective way to make people remember your message. Why not tell one to disseminate your results?
- ✓ Which stories work best?
 - A good story consists of a succession of events with **a beginning, a middle and an end, a scene setter and a plot, a climax and a conclusion, all of this in a rich context.** It is hence more than a list of results achieved. A good story is one with which others can identify, with the project content as a basis, and focused on a person (for example: the researcher). Such stories also allow your message to be conveyed through shared values that will touch people's hearts and provoke emotion, and the promise of a better future.
- ✓ How to write a story?
 - Just search for 'storytelling' on the internet.
- ✓ Connect with your audience
 - What do they already know about the topic?
 - What do they think about it?

- Do they need information and/or persuasion?
- ✓ Have you tested your message?

Keep in mind

With your communication activities you call attention of multiple audiences about your research (in a way that they can be understood by non-specialists) and address the public policy perspective of EU research and innovation funding, by considering aspects such as:

- transnational cooperation in a European consortium (i.e. how working together has allowed to achieve more than otherwise possible)
- scientific excellence
- contributing to competitiveness and to solving societal challenges (eg. impact on everyday lives, better use of results and spill-over to policy-makers, industry and the scientific community).

Good communication:

- starts at the outset of the action and continues throughout its entire lifetime
- is strategically planned and not just be ad-hoc efforts
- identifies and sets clear communication objectives (e.g. have final and intermediate communication aims been specified? What impact is intended? What reaction or change is expected from the target audience?)
- is targeted and adapted to audiences that go beyond the project's own community including the media and the public
- chooses pertinent messages (e.g. How does the action's work relate to our everyday lives? Why does the target audience need to know about the action?)
- uses the right medium and means (e.g. working at the right level - local, regional, national, EU-wide?; using the right ways to communicate - one-way exchange (website, press release, brochure, etc.) or two-way exchange (exhibition, school visit, internet debate, etc.); where relevant, include measures for public/societal engagement on issues related to the action)
- is proportionate to the scale of the action



3. Defined key communication moments

Based on the deliverables and milestone list of CHANCE, key communication moments can be selected. The table below summarises all these moments. This table can therefore be used as a guideline to scope for possible communication activities related to the achievement of (major) CHANCE goals.

Deliverable Title		Communication tool	Type	Dissemination level	Month
CHANCE Quality Management Plan	WP1	Sharepoint	Report	Confidential, only for members of the consortium (including the Commission Services)	6
End-User-Group Questionnaire	WP2	EUG meeting	Report	Public	6
Applicability of calorimetry to real waste characterization	WP3	News item – update + journal paper	Report	Public	12
Calorimeter prototype	WP3	News item + journal paper	Demonstrator	Public	12
Minutes of General Assembly n°1	WP1	Sharepoint	Report	Confidential, only for members of the consortium (including the Commission Services)	15



Report detailing the performance of the detector system	WP4	News item	Report	Public	15
Topical day on waste characterization	WP6	Workshop	Report	Public	18
Synthesis of commonly used methodology for conditioned radioactive characterization	WP2	News item -update	Report	Public	21
Report on the performance of the system reconstructing known blocks of material	WP4	News item	Report	Public	21
Report on validation of transitions of rotation / vibration on HCl, specification and development of the equipment	WP5	News item + journal papers	Report	Public	24
Report on study of the release behaviour	WP5	Journal paper	Report	Public	24
Study of social and ethical aspects of innovative waste management	WP6	News item	Report	Public	24



Minutes of General Assembly n°2	WP1	Sharepoint	Report	Confidential, only for members of the consortium (including the Commission Services)	27
Report on the tuned algorithms and their performance	WP4	News item	Report	Public	27
Report on experimental validation of the transitions with ³⁶ Cl standards and detection limit	WP5	News item + journal papers	Report	Public	30
R&D requests in the field of conditioned radioactive characterization	WP2	News item -update	Report	Public	30
Results of experimental investigation of calorimetry applicability	WP3	News item + journal paper	Report	Public	36
Hot test results	WP4	News item + journal papers	Report	Public	36
Report on validation of CRDS for radiocarbon detection performances with liquid scintillation counting techniques	WP5	Journal paper	Report	Public	36



Minutes of General Assembly n°3	WP1	Sharepoint	Report	Confidential, only for members of the consortium (including the Commission Services)	39
Practical training course on instruments and techniques developed within CHANCE	WP6	Training	Report	Public	42
Minutes of General Assembly n°4	WP1	Sharepoint	Report	Confidential, only for members of the consortium (including the Commission Services)	48
Conclusion of the exhaustive study of uncertainties related to NDA characterization methods in conjunction with calorimetry	WP3		Report	Public	48
WP4 Final report	WP4	News item	Report	Public	48
Report on laboratory tests of the equipment on graphite samples and comparison of CRDS performances with IRMS and LSC measurement	WP5	News item	Report	Public	48
Report on study of the release behaviour of radiocarbon from another type of waste	WP5	Journal paper	Report	Public	48
CHANCE synthesis	WP6	Conference + newsitem	Report	Public	48

Note: the above table is to be regarded as a guideline only, set at the beginning of the project. Actual delivery of reports has been and will be subject to progress (including eventual delays) of tasks and work packages within the project.



4. Impact of covid-19 crisis

The CHANCE project, like many others, is impacted heavily by the global covid-19 pandemic. In terms of communication actions, this entails that live meetings or face-to-face events could not be scheduled during most of the 2nd half of the project.

- Conferences and workshops were either suspended or postponed;
- Travelling was impeded;
- Trainings could not be given in a face-to-face setting.

In order to keep communication of CHANCE project and results going, the following mitigating measures are taken:

- Some conferences, workshops or stakeholder group meetings will be scheduled in a virtual setting. In such setting, CHANCE project and results can still be conveyed to the target audience, although informal networking and communication opportunities will be limited;
- Face-to-face training can be replaced by training in the form of webinar series. Webinars can be recorded and made available to watch also afterwards for interested audiences.

