

Interactions with Civil Society in EURAD-2

General framework and some examples



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Why involving civil society in RWM research programmes ?

- Integration of civil society (CS) concerns and views answer requirements of **transparency**. CS members can benefit from interactions in an adapted framework in accordance to the pillars of the **Aarhus Convention (access to information, access to participation, etc)**.
- It can contribute to an establishment of **mutual trust**, as long as CS actors are not instrumentalized: risk of citizen-washing.
- Being involved in the core of the RWM research's allows CS members and their organisations, to have access to **information at the very beginning** of the **knowledge chain**.
- Interactions with CS are also a way to ground **mutual improvement** of understanding with researchers in R&D topics, in the spirit of the **Safety Culture (INSAG4)**. CS involvement can contribute to the **quality of research process**, by taking seriously the expectations and knowledge produced by CS.
- Involving CS actively in research programmes and offering dissemination are two distinct processes, both complementary and necessary.

General feedback about Interactions with civil society in EURAD-1

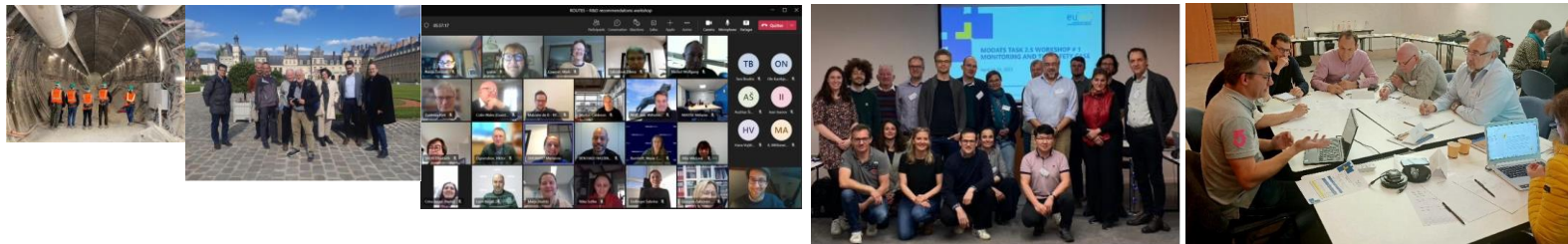
35 CS members organized in 2 groups : 13 CS experts (9 countries) and 22 CS Larger Group members (17 countries).

Many events and contribution to documents : CS members organized 16 workshops, participated into 28 other EURAD events, contributed to 13 Deliverables and to 30+ Milestones, presented works in 3 EURAD training courses, 2 Lunch-and-Learn Sessions.

Weakness : less involvement than planned (25 members involved in last year, out of 35), notably due to no replacement procedure.

Major outcome : A fruitful implementation of the Aarhus Convention in the frame of an European scientific research programme is possible under conditions.

The fruitful experimental methodology was proven. EURAD-2 was ready for having a third level of CS involvement, with broader audience and more linked to local stakeholders.



Examples of contributions of CS members in terms of deliverables in EURAD

More can be found on [NTW](#) and [EURAD](#) websites.

ROUTES WP
waste management routes
in Europe from cradle to
grave

Deliverables: [D9.16](#) Shared solutions for European countries
[D9.17](#) Transparency in establishment of national radioactive waste facilities: Criteria for good transparency, national case studies and recommendations
[D9.18](#) Public participation in technical aspects of Radioactive Waste Management (RWM), such as the development of Waste Acceptance Criteria (WAC), the management of challenging wastes and safety case development

UMAN WP
understanding of
uncertainty, risk and safety
by different actors

Deliverables: [D10.14](#) Pluralistic analysis of site and geosphere uncertainty
[D10.15](#) Pluralistic analysis of uncertainty related to human aspects
[D10.16](#) How to manage uncertainties in a pluralistic way and in a long-term perspective?
[D10.17](#) Synthesis report of WP UMAN outcomes from a civil society point of view

MODATS WP
(monitoring)

Deliverable: [D17.5](#) Monitoring enhanced system understanding, multi-party dialogue

**R&D technical
WPs**

Deliverable: [D3.5](#) Final report integrating the R&D performed in CORI, including applications to the safety case. CORI: Cement-Organic-Radionuclide-Interactions.

ICS coordination (PMO Task 8)

Deliverables: [D1.13](#) List of CS group members
[D1.15](#) Integrated review of the ICS activities in EURAD
[D1.16](#) Evaluation of the experimental model of interaction with CS

Strengths and opportunities of CS activities in EURAD-1

How fruitful CS activities were made possible in EURAD in terms of governance ?

- Plurality of expertise through the **balance of colleges** (WMO, TSO, RE)
- Collaboration of **CS through TSO college and SITEX.Network**,
- **Openness and transparency** of major events (annual events, WP annual meetings), role of CS observer (PMO, GA)
- **ICS** directly in WPs (StSt & R&D) and in transversal ICS meetings (ICS workshops), **with dedicated budget**,
- **Dialogue** between researchers and civil society members **in a continuous manner**,

What were the outreach of EURAD results through civil society organisations ?

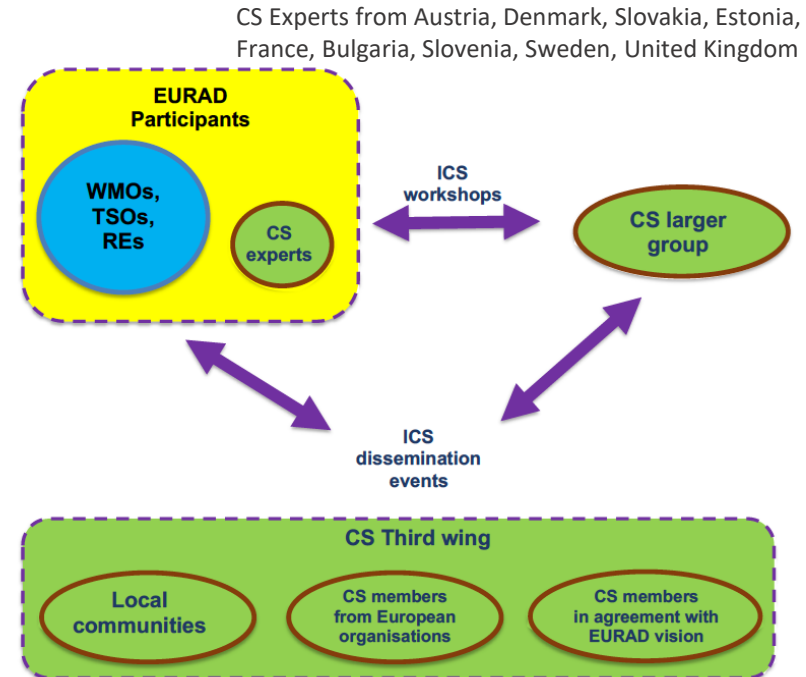
- **Better** national and international **follow-up of RWM**,
- **Higher depth of conceptual structures** behind RWM subjects, with safety at the center,
- Conceptualisation of **new methodologies for interactions** such as the PEP serious game,
- **Other classical dissemination activities** such as technical visits and participation to events.

How to make it even more fruitful ?

- **More flexibility**, notably enabling replacement procedure of involved CS members (done in EURAD-2)
- **Enlargement of the publics involved** (third wing of the EURAD-2 model, see next slide)
- **More involvement in R&D topics and in knowledge management** activities, as contribution to shared safety culture

CS involvement in EURAD programmes : How ? - Triple Wing Model

- **Model of pluralistic interactions developed and tested in European projects (SITEX-II, JOPRAD, EURAD-1)**
 - **CS experts** with technical and socio-technical background or/and experience on the involvement of CS in scientific and technical issues, involved in research activities translating scientific/technical results for exchanging with
 - **A larger group of dedicated CS representatives** (CS organisations, representatives of local communities, individual experts)
- **Addition of a third wing in EURAD-2**
 - Organisation of dissemination events to include additional types of publics : local communities, students, CS members from European organisations like representatives of EESC

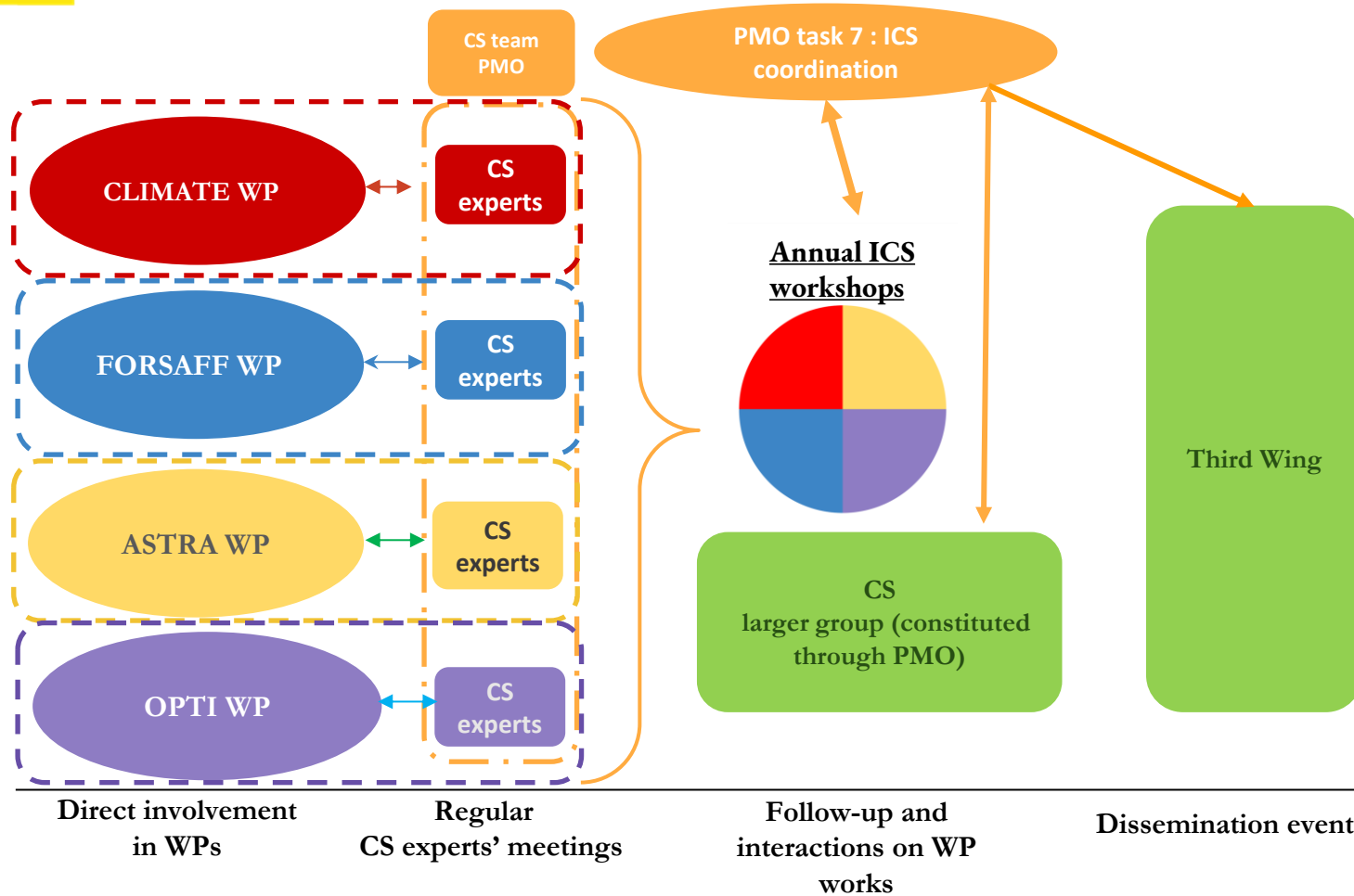


Composition of CS larger group

- Several categories of participants
 - 4 categories of actors and organisations:
 - European and national associations
 - local stakeholders (representatives of local communities, partnerships, local associations)
 - Members of European Economic and Social Committee (EESC)
 - Observers from the EURAD-2 colleges
- **24 members selected by EURAD-2** (according to the available resources to cover the physical participation)
- **3 members from EESC** (1 per CS colleges of EESC: employers, trade unions, NGOs)
- **3 observers coming from EURAD-2 colleges** (1 WMO, 1 TSO, 1 RE)



STRUCTURE AND METHODS OF ICS ACTIVITIES IN EURAD-2



CS participation in events of EURAD 2 Year 1



- The first **OPTI** workshop on the **23rd and 24th of January** in Delft, hosted by university of Delft
Objective: sharing views of three colleges and CS experts on optimization (Why? How? When? Limits?)
- The **ICS Workshop** on the **24th and 25th of March**, hosted by the Ecole des Mines de Paris in Fontainebleau.
Objective: allow CS larger group members to meet each other, to further discover the topics of EURAD-2 WPs and to provide inputs on work done and to be done.
- The **CLIMATE** pluralistic workshop, on **26th and 27th of March**, also hosted by Ecoles des Mines.
Objective: based on keynote papers from colleges and CS members, leading to a partnering vision about the prior aspects of climate change for RWM research.
- The **FORSAFF** seminar, on **23rd and 24th of April**, in Fontenay-aux-Roses, hosted by ASNR.
Objective: enable several pluralistic exchanges based on concrete cases aiming at better assessing the RWM research needs in terms of SMRs waste specificities.
- The **ASTRA** online workshops **in April and May**
Objective: collect CS voices about different topics: on deep borehole disposals (Task 4 workshop on 16th and 23rd of April) On long term interim storage aspects (Task 3 workshop on 21st of May), on SIMS RWM needs (Task 5 workshop on 28th of May)
- The second **OPTI** workshop on the **3rd and 4th of June** in Prague, hosted by CTU.
Objective: consolidate all visions of optimization as presented by the colleges and CS members.

Next steps for ICS in second year of EURAD 2

Preparing and organising the next events

- ICS workshop n°2
- Climate workshop n°2
- Forsaff seminar n°2
- Astra workshop

Contribution to documents

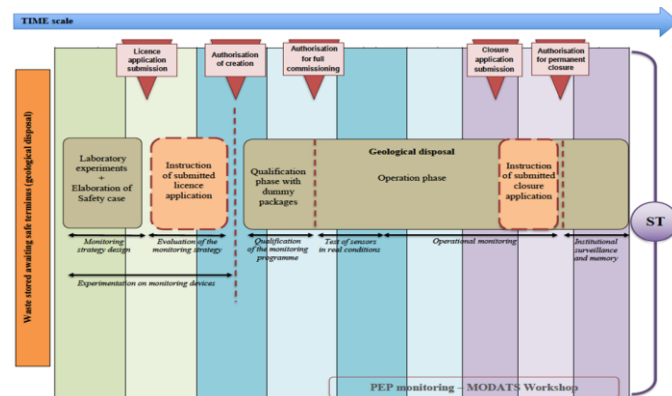
- on identification of research needs
- on recommendations
- on evaluation of ICS activities

Deepening innovative methodologies

- serious game on climate change and SMRs waste
- Contribution to a concrete case on optimization

Preparing the second wave

- accompanying the development of future WPs for EURAD-2



Major technological breakthrough for monitoring

Research offers new opportunities for monitoring strategy

- *Technological breakthrough in battery for wireless sensors*
- *Artificial Intelligence's fast development leads to new computational tool and improvement for implementing digital twin of DGR*


Events linked to Monitoring **M1**

?

Maintaining preservation of data over time

Is the monitoring strategy able to maintain knowledge, data and keeping (active or passive) memory all along the stages of the DGR, including post-closure?

Evaluation criteria **Q10**

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- How to consolidate the fruitful results of EURAD programme in terms of interactions between researchers and civil society ?
 - How to enlarge the dissemination of EURAD results towards different publics ?

Thank you for your attention !