



Transforming Open Responsible Research  
and Innovation through CHARM



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# Work Package 7: Public Engagement

Marjanneke Vijge (WP7 leader),  
Annisa Triyanti, Dries Hegger, Peter Driessen, Kirsten  
Hollaender



# Structure

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# Objective

**Objective 7.1:** To collect and share existing modalities and practices for stimulating co-creation of challenge-driven research and innovation with societal stakeholders and to further “democratisation of science”.

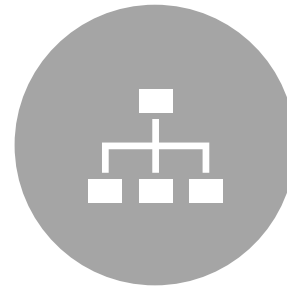
**Objective 7.2** To collect and share existing practices to balance between mono-disciplinary, excellence-driven research and global challenge-driven transdisciplinary research and innovation.



# Concepts



**Public engagement:** “the myriad of ways in which the activity and benefits of higher education and research can be shared with the public”



**Transdisciplinary science:**

“Science that integrates knowledge across academic disciplines and with non-academic stakeholders to address societal challenges”

Science: Research AND Education

*Our research attempted to explore diverse understanding and application of these concepts in different universities*



# Actions and deliverables

## OBJECTIVE 1



**D7.1 - Stimulating co-creation of challenge driven R&I**



**Existing experiences**

Structure and policies, incentives and disincentives at 4 levels: individual, university, societal stakeholders, and systemic



**Best practices:**

Retrospective and reflective discussion on underlying contexts and barriers

## OBJECTIVE 2



**D7.2 - Balancing excellence driven research and transdisciplinary research and public engagement report**



**Existing experiences**

Reflections: Existing experiences on balancing mono-disciplinary and transdisciplinary science



**Best practices:**

Higher-level abstractions:

- Debate on open science
- Democratisation of science,
- Future university roles and
- Recommendations

**Status: finalisation of the two reports (deliverables)-> submission to the EC by the end of March**



# What, how, where we are



5 universities in 5 European Countries



31 good practices of public engagement and transdisciplinary science



66 semi-structured interviews



6 online questionnaires

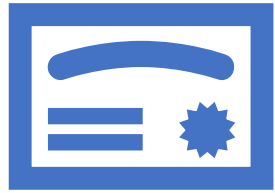


11 focus group discussions

Qualitative analysis



# Main results (Structure and policies-1)



## Open science policy

Public engagement, rewards and recognition, open education, fair data sharing



**Most universities highlighted PE/TD as at least one of the focus elements, either in their strategic plans, units, centres, team/individual research projects within the university**

**UU:** Open science and Strategic plan 2021-2025

**ELTE:** Plan to establish the Third mission strategy

**TCD:** Strategic Plan 2020-2025 highlights civic action as the first of its “CORE” principles

**UB:** UB’s Science and Technology Centres (CCIT-UB) among other institutes, open access model

**UM:** MUSE (Montpellier University of Excellence)



# Main results (Opportunities and challenges-2)

Level	Opportunities	Challenges
Individual	<ul style="list-style-type: none"> <li>• Intrinsic moral obligations of individuals</li> <li>• Curiosity</li> <li>• Networking and a sense of belonging</li> <li>• Mutual learning</li> <li>• Bringing transdisciplinary closer to younger generations through <b>education</b></li> <li>• <b>Validation of scientific research</b></li> <li>• Professional responsibility (designated role related to public engagement)</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of <b>possibility of promotions/benefits</b> for a career lack of funding support and capacity building programme</li> <li>• <u>Extra</u> workload, limited time, mental stress, risk of conflicts</li> <li>• COVID-19 challenges</li> </ul>
University	<ul style="list-style-type: none"> <li>• Supportive university structure and policies (Open science, rewards and recognition)</li> <li>• Diverse and bottom-up initiatives at department and programme group level, individual level through projects and <b>dedicated role on public engagement</b></li> </ul>	<ul style="list-style-type: none"> <li>• Lack of visibility and impact of current policies and structures in place</li> <li>• <b>The complexity of the university structure and implications</b></li> <li>• Limited financial resources and administrative support</li> <li>• Slowness in bureaucracy</li> <li>• <b>Difficulties to harmonize</b> considerable differences between the needs, concerns and possibilities of different disciplines</li> </ul>





# Main results (Opportunities and challenges-3)

Level	Incentives	Disincentives
Societal stakeholders	<ul style="list-style-type: none"> <li>• Availability of networks</li> <li>• <b>Opportunities for lifelong learning</b></li> <li>• Access to scientific information</li> <li>• Financial support</li> <li>• Increasing quality of services</li> </ul>	<ul style="list-style-type: none"> <li>• Excessive bureaucracy of the university</li> <li>• Lack of interest from the university partners to deal with <b>topics related to inclusiveness for the sake of avoiding conflict</b></li> <li>• Lack of long-term vision of collaboration due to funding limitation</li> </ul>
Systemic	<ul style="list-style-type: none"> <li>• Supported structure and mechanisms at the regional and national level</li> <li>• Existing rewards and recognition system</li> <li>• EU principle directing scientific activity towards addressing global societal-environmental-economic challenges;</li> <li>• Support to open science</li> <li>• Availability of funding</li> <li>• Sustainability as a focus area</li> </ul>	<ul style="list-style-type: none"> <li>• Standardize evaluations to assess the quality of transdisciplinary research</li> <li>• Great competition</li> <li>• Divergence between EU level and national level directives</li> <li>• Frequent structural changes</li> <li>• Short-term public funding</li> <li>• Lack of policy at the national level</li> <li>• Political and economic interest; lack of equality in project funding.</li> <li>• Lack of space (physical and inclusive collaborative space)</li> <li>• <b>Exclusivity of science</b></li> </ul>



# Reflections

## Open Science

- PE & TD at the heart of open science = **science with and for society**
- Open science accelerate PE & TD, providing new approach to disseminating results through digital technologies and modern collaborative tools
- facilitate science dissemination & promotes participatory approach to empower public audiences to be more involved in research.
- Open science is an important way to involve underprivileged society

## Democratisation of science

- Democratisation of science is not a familiar/usable term. Those who are opposing this term concerned about the fact that the term means that science needs to be based on the democratic vote, while that should not be the case
- leveraging European universities' role in providing structures and processes that drive and extend reflective pathways related to open science

## European university role

- Universities carry an important role in further contributing to democratic society and sustainability.
- As a testbed for innovation, inventory of existing good practices and infrastructure
- Constant evaluation is needed for the university to monitor the progress of its role



# Recommendations (1)

## Individual/team level

- To **increase capacity** by participating in and initiating research and educational training programmes at all levels
- **Provide peer support** to colleagues (team science) and explore ways to improve public engagement and utilize transdisciplinary approaches in research and education programmes

## University level

- To **mainstream** public engagement and transdisciplinary science within the general open science visión
- To opening up **effective spaces** for learning and dialogue
- To embed both inter- and transdisciplinary approaches in research and education.
- To provide the **enabling environment**: financial levers, visibility, resources, capacity building and support system in both research and educational programmes,
- To establish a **rewards and recognition system** to incentivise scientists and ensure implementability
- To reflect on the larger role of the university to bridge science with society, especially the **marginalised and disadvantaged communities**, and find a way on how to **assess the progress**



# Recommendations (2)

## Systemic level-National

- To **improve the vision** of science-society interactions, to be perceived as an essential issue at the national level.
- To **diversify and scale-up funding** mechanism
- To **establish and maintain a forum** to foster joint research, then reach out to scientists and inform them about these possibilities.
- To **build an inventory** and inform scientists about existing infrastructure and supports on public engagement
- To **develop communication and cooperation** between the actors of the innovation ecosystem (quadruple helix)
- To **create a national barometer** a common set of indicators to measure the impact of science for public policy.

## Systemic level-Regional level

- To **embrace the autonomy** and **responsibility of the university** to drive open science, including citizen engagement
- To take an active role in the process of **cumulation of knowledge** across university alliances to enable changes on a larger, transformative scale
- To continue **developing funding mechanisms** that will match wide-ranging activities to engage society in science and to solve societal problems



# Discussion points

What are the **key success** factors and **barriers** for public engagement and transdisciplinary science?

How far do we as universities and society want to go in opening up science to society and co-defining research and education?

**Are there boundaries to Open Science**, and if so, which ones?

How can we realise Open Science in an **inclusive and democratic way** while leaving no one behind?

How can we strike the **balance between excellence-driven and challenge-driven research**, between scientific rigour and fundamental science and Open Science?

# TORCH

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MANY THANKS  
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MERCİ BEAUCOUP  
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