

Generalitat

de Catalunya











Strategic roadmap for the implementation and support of territorial RRI through Citizen Science strategies within S3 priorities - Executive Summary



#### **TRANSFORM**

Territories as Responsive and accountable Networks of S3 through new Forms of Open and Responsible decision-Making

This executive summary of the "Strategic roadmap" for the implementation and support of territorial RRI through citizen science strategies within S3 priorities" aims at helping regional public administrations who wish to enable citizens' and R&I stakeholder engagement actions in their local

The roadmap has been developed within the framework of TRANSFORM, an EU H2020 project, committed to transforming territorial research and innovation governance and opening up regional R&I policymaking so as to better align territorial research and innovation with citizens' views, needs, and expectations.

TRANSFORM provides regional public authorities and other interested R&I actors with inspiring examples and practical suggestions, emerging from real regional settings and experimentations, on how to implement RRI principles through sound methodologies to engage citizens and multiple stakeholders.

# **METHODOLOGY**

In Catalunya, three partners - Science for Change (cluster leader), the Catalan Government (Generalitat de Catalunya) and the research group OpenSystems from University of Barcelona - worked together to implement a citizen science exercise. Citizen science is a way of doing science in which citizens are invited to participate in one or multiple phases of the scientific process, from the definition of the research question to the analysis of results, including the choice of method and the data collection. On the one hand, this ensures that scientific projects are linked to social needs and, on the other, it increases citizens' knowledge of and trust in science.

## **EXPECTED BENEFITS**

#### The expected benefits of TRANSFORM in Catalonia are:



- Fostering the transformation of the local policy-making cycle towards more responsible and transparent approaches, involving citizens and other territorial actors in research and innovation projects through citizen science.
- Fostering evidence-informed local and regional policies and more aligned with societal needs and values.
- Increasing the knowledge and skills of the actors of the research and innovation ecosystem to incorporate RRI principles into their projects, strategies and business as usual.
- Fostering dialogue between academia, policymakers and citizens to better address the complex challenges that society is currently facing.
- Increasing scientific literacy among citizens and empowering them to actively participate in research and innovation projects that address issues that directly affect them.
- Inspiring the regional public authority on how to practically include citizens' views in research and innovation by experimenting with citizen science methodologies.
- Encouraging that citizen science receives the institutional support it needs to develop its full potential and consolidate itself as a discipline at regional level.



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### **ACTIONS**



The first activity consisted in the setting-up of a Think Tank, with 47 members of the R&I ecosystem, to increase knowledge on RRI and citizen science and co-design two citizen science pilots to tackle socioenvironmental challenges.

Then, the pilots were developed.

The <u>waste pilot</u> was intended to contribute to the improvement of the selective collection system in the municipality of Mollet del Vallès (Barcelona). To this end, a digital game called Dilemma-R was co-designed and used as a citizen science tool involving secondary school students.

The <u>health pilot</u> was intended to contribute to the improvement of clinical approach and health services to the disease endometriosis. To this end, a group of patients was set up to deepen their experiences and co-create recommendations for health professionals and policy makers.



### **IMPACT**



From a local point of view, both pilots have generated results that have been taken into account by the local competent authorities when designing policies, now more aligned with social needs. From the regional point of view, the pilots have encouraged RRI and citizen science to be integrated in RIS3CAT 2030 and some of the funding programmes that are developed within this framework (Shared Agendas, Regions of Knowledge Programme, Public Procurement program for innovation). Also Think Tank members (both those participating in the implementation of the pilots and those not) have increased their knowledge on RRI and citizen science and learnt first-hand about the practical benefits of applying citizen science in R&I projects.

#### **KEY LESSONS LEARNED**

- To develop citizen science projects with a real transformative potential in the territory the involvement of the competent authorities from the beginning and the co-design of the project are key.
- The design and implementation of citizen science projects within a multistakeholder working scheme requires a change in mindset and practices, developing greater flexibility, resilience, mutual trust and active listening.
- Defining a common goal and creating a shared language are key to the success of the process.
- Involving different stakeholders in projects can lead to uncertainties or changes during the course of the project and is advisable to be open to this. Conversely, it also makes it possible for unexpected opportunities to arise.
- Engaging citizens is a complex and laborious process that requires specific strategies and time, especially to comply with the premise of inclusiveness that is part of the spirit of citizen science.



# **Key stakeholders**

The waste pilot was developed by the Catalan cluster together with the City Council of Mollet del Vallès and with the support of the Autonomous University of Barcelona. The pilot on health was developed together with the Hospital de la Santa Creu i Sant Pau, and with the support of the Health Quality and Assessment Agency of Catalonia (AQuAS).



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