



# EUROPEAN POLICYBRIEF



## FIRST TIME4CS POLICY BRIEF

Triggering systemic institutional changes in RPOs to promote citizen science: preliminary policy implications and policy-relevant findings of TIME4CS project

30/06/2022

### INTRODUCTION

Institutional changes are required to respond to the increased interactions between R&I stakeholders in society. Through institutional changes, research funding and performing organisations become more “porous” and accept inputs from citizens and civil society organisations that used to be considered outsiders to the world of R&I. Examples include citizen science, extended peer review in funding agencies, co-creation of public policies, agenda setting in research and innovation programmes, co-production of research and innovation content, co-design of R&I programmes, and co-evaluation of proposals, activities or other R&I funding decisions.

Good practices are widespread in Europe in terms of citizens' and citizens' associations engagement in science; formal, informal and non-formal science education; gender equality in science; research ethics and integrity; open access to research results including data. The good practices in these five fields are much more easily, efficiently and sustainably implemented when the organisations funding, performing or associated to R&I have adapted significantly their governance frameworks to open up through a process of institutional change.

Sharing openly the results and outcomes of research should contribute to greater involvement of all stakeholders in R&I, a better and more sustainable engagement with citizens and society as a whole, and more a scientifically interested and literate society. The call for funding to which TIME4CS responded, aimed to support a significant number of impactful and sustainable institutional changes in partner organisations. Consortia are expected to evaluate their activities and provide evidence of societal, democratic, economic and scientific impacts of institutional changes.

Citizen science or Open collaboration within science and with other knowledge actors including citizens have been an integral part of the EU's Open Science policy priority and the European Research Area. Active engagement of citizens and society in science has been recognized to improve research and its outcomes; and reinforcing societal trust in science.

With the launch of the Horizon Europe funding programme, citizen engagement has become a horizontal pre-requisite of successful proposals, and correspondingly, access to funding, therefore in addition to the evident advantages of engaging citizens and society in research activities, even inexperienced research actors need to think strategically how to engage with citizens and society and how to be the ambassadors of the responsibility of science to society.

The TIME4CS project, in line with these evolutions, supports the integration of citizen science and public engagement in R&I in a selection of Research Performing Organisation (RPOs) with a specifically formulated methodology including knowledge transfer, mutual learning and structured expert support, eventually triggering systemic institutional changes.

The methodology of the project includes working with RPOs that have integrated citizen science into their activities and procedures. In these organisations, there are usually a function with a role to support citizen science activities. This can be in the form of a person with a coordinating role or an appropriate promotion policy that pays attention to public engagement and citizen science. These organisations can then identify and share their practices with a set of organisations that are interested in integrating citizen science into their practices. The latter organisations are called “Implementers” while the leading organisations are recognised as “Front Runners”. The project includes a series of events and workshops to promote knowledge transfer among the two kinds of organization.

## EVIDENCE AND ANALYSIS

Regarding the main goal, which is to follow the organisational implementation of citizen science, the project has not yet entered the phase of evaluating its results and therefore these will not be reported here.

Yet, the first phase of the project is providing useful information that can be used within the design of R&I policies. The first part focused on the setting up the collaborative structures, the knowledge sharing and mutual learning mechanisms, the roadmap construction and the mapping and analysis of citizen science institutional change adoption in relation to the consortium RPOs.

The second phase – ongoing at the time of the drafting of this Policy Brief – focuses on the implementation of the institutional Roadmaps with the support of the collaborative structure, the knowledge sharing and mutual learning mechanisms and the evaluation framework.

While one of the main outcomes of the mapping activities – Deliverable 1.2 Best practices repository of TIME4CS front-runners - compiles a set of practical recommendations for those interested in adopting citizen science institutional changes, the project also delivers a Qualitative Comparative Analysis of 38 RPOs. This analysis compared their characteristics and attempted to suggest what are the success factors of institutional changes in support of citizen science. The observations of the analysis indicate that a higher level of institutional integration of citizen science is achieved if the path followed by RPOs includes a combination of the following items: 1, the development of citizen science projects from different disciplines; 2, having multiple citizen science champions and having senior management champions; 3, the availability of an institutional plan that includes or considers citizen science and public engagement. A full description of the methodology and results is set out in Deliverable 1.3 Lessons learnt repository of TIME4CS. A peer-review article that is describing the methodology and the finding is currently in preparation.

TIME4CS practical experiences are to be further elaborated and formulated in the policy context in RP2.

At the same time, in the limited TIME4CS sample of four RPOs a trend is already to be noted. The top-management of the institutions responded pro-actively to the call to adopt citizen science in their strategy

and practices, as articulated by the EC funding programmes, H2020 and Horizon Europe. But notwithstanding the top-down approach, the individual researchers generally lack the understanding of its potential positive impacts for them and for society as a whole, therefore they result to be not-interested to engage. In other words, the bottom-up approach is missing, making the sustainable adoption of citizen science as a research methodology very challenging. TIME4CS aims to fill in this gap by supporting the partner RPOs to raise awareness, build corresponding capacity and start leveraging on the interest of individual researchers in citizen science to support bottom-up initiatives.

If the TIME4CS trend will be supported by further samples in the near future, the TIME4CS bottom-up engagement strategies could be translated into a further set of practical recommendations for implementing organizations as an exploitable project product.

## POLICY IMPLICATIONS AND RECOMMENDATIONS

As mentioned above, the project is in the middle of the implementation of the tailored institutional roadmaps, therefore has no policy recommendations to make yet. The policy implications of the findings will be based on the more complete observation set collected by the end of the project and formulated in the 2<sup>nd</sup> Policy Brief due the end of the project.

## SUSTAINABILITY AND LEGACY

[D1.1 Collection of Case Studies of institutional adoption of CS](#)

[D1.2 Best practices repository of TIME4CS front-runners](#)

[D1.3 Lesson learnt repository of TIME4CS](#)

[D2.1 First version of the Compilation of roadmaps and Grounding Actions for the Implementers – First Version](#)  
[Reflection tool for Institutional Changes in Citizen Science](#)

[D5.1 Evaluation and Impact Assessment Plan](#)

These project outputs are available on the TIME4CS Zenodo community at

<https://zenodo.org/communities/time4cs/>

## PROJECT OBJECTIVES AND METHODOLOGIES

The overall objective of TIME4CS is to facilitate the implementation of sustainable institutional changes in Research Performing Organisations (RPOs) by promoting Public Engagement (citizens and citizens associations) and Citizen Science in science and technology.

TIME4CS aims to achieve this in 4 Intervention Areas (IAs): 1, Research, 2, Education & Awareness, 3, Support resources & Infrastructure and 4, Policy & Assessment.

For each IA, specific Grounding Actions (GAs) were defined by the RPOs to implement, paving the way to systemic institutional changes in terms of public engagement and citizen science.

The project methodology is based on the knowledge transfer and mutual learning, and involves two main types of actors: Front-Runners and Implementers. The Front-Runners are TIME4CS partner RPOs (UCL, UZH and AU) who have outstanding expertise in CS and have already experienced institutional changes in one or more of the abovementioned IAs. The Implementers are further TIME4CS beneficiaries (CRG, UniSR, KTU & T-UCC) who are in the early stages of embracing CS in their organization, but are dedicated to facilitate institutional changes with all the challenges and to integrate CS to their strategy and work approach.

The process of knowledge transfer is intended to be multidirectional: a dynamic and living exchange of capacity building and mutual learning. The capacity building is tailored to the Implementers needs and consists of several training activities (physical and virtual) open to public beyond the project's beneficiaries and that aim at building new capacities and a community of practice around TIME4CS. The mutual learning

programme leads to the development of a tailored specific action plan for each Implementer (the institutional Roadmap), including a set of specific and detailed actions to implement (GAs).

The whole process is supported by the development, set-up and facilitation of the knowledge transfer approach, the definition and implementation of institutional changes as of the institutional Roadmaps and corresponding GAs, and finally the implementation of a robust evaluation and monitoring framework appraise the effectiveness, impact and validity of the implemented actions by three facilitator partners, APRE, ESF and ZSI.

Finally, as a Science with and for Society (SwafS) funded project, TIME4CS actively engaged with other SwafS projects through regular exchange of information, mutual promotion and dissemination of results, organization of joint activities and through participation to European Citizen Science Association (ECSA) working groups for citizen science and Open Science projects.

## PROJECT IDENTITY

**PROJECT NAME** Supporting sustainable Institutional Changes to promote Citizen Science in Science and Technology (TIME4CS)

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#### FUNDING SCHEME

Horizon 2020: SwafS-23-2020 Grounding RRI in society with a focus on citizen science

#### DURATION

January 2021 – December 2023 (36 months)

#### BUDGET

EU contribution: 1 499 127.50€.

#### WEBSITE

<https://www.time4cs.eu/>

#### FOR MORE INFORMATION

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#### FURTHER READING

[D1.2 Best practices repository of TIME4CS front-runners](#)  
[D1.3 Lesson learnt repository of TIME4CS](#)  
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*This policy brief reflects only the author's view and the European Commission/REA is not responsible for any use that may be made of the information it contains.*