



EUROPEAN POLICYBRIEF



THE MISSING PIECES FOR RRI:

IMPLEMENTATION AND INSTITUTIONALISATION

APRIL 2021

INTRODUCTION

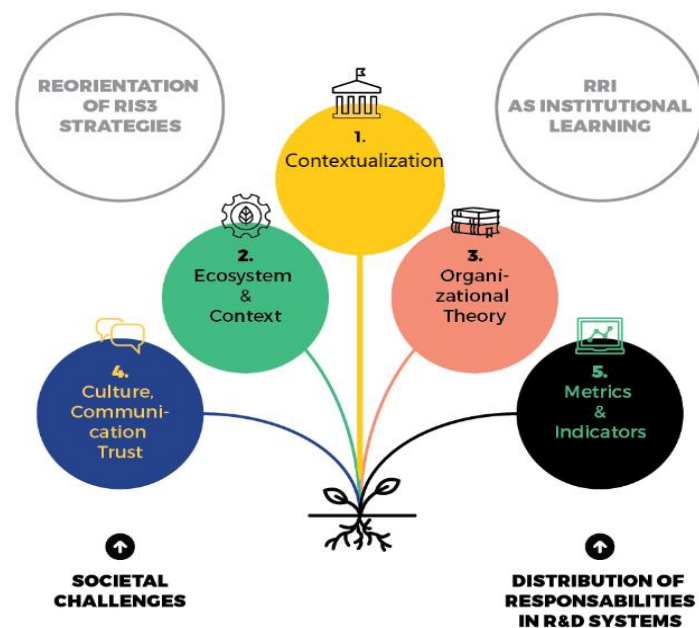
A formidable effort has been pushed forward by the European Commission (EC) towards the adoption of Responsible Research and Innovation (RRI) in the European Research Area (ERA) during the last decade (2010-2020). This effort was triggered through the Rome Declaration (Council of the European Union, 2014) and it has been mainly channelled throughout the allocation of significant funds in the Horizon 2020 Framework Program for Research and Innovation towards the design, setting up and implementation of EU funded projects.

However, after a decade of efforts towards the mainstreaming of RRI in the European research and innovation (R&I) landscape there are still several barriers that have deterred the institutionalization and social appropriation of RRI at different research organizations in the EU (Novitzky et al., 2020). This policy brief is based upon the Deliverable 1.1 Stocktaking Report of the Co-Change project (Tabarés Gutiérrez et al., 2020) that provides a state-of-the-art review and provide a synthesis of relevant RRI project results, scholarly papers and expert deliberation that focus on RRI implementation as institutional and organisational change.

EVIDENCE AND ANALYSIS

The analysis consisted of a systematic literature review of 29 scholarly papers (Scopus database) focusing on RRI and organisational change, a stocktaking of 23 EU-funded projects (CORDIS database) providing relevant insights into the institutionalisation of RRI and the conclusions of 3 virtual workshops organised by the Co-Change project with the participation of 11 representatives of EU-funded RRI projects, Co-Change Sounding Board members and other RRI experts.

The stocktaking synthesis has resulted in the identification of two major drivers that facilitate the adoption of RRI, five pillars of RRI as organizational change, and two windows of opportunity for implementing RRI at the institutional level.



Two major drivers that facilitate the adoption of RRI in organisational contexts:

- **The emergence of societal challenges** – Science, technology and innovation expected to be responsive to societal needs
- **The (re-)distribution of responsibilities between stakeholders in the research and innovation system** – Multiple actors expected to collaborate with each other on sharing responsibilities collectively

Five pillars of the effective implementation and deep institutionalisation of RRI at organisational level:

- **Contextualization** – Implement RRI based on institutional self-understanding that take into consideration the structures, rules, and values of the target organization and institutional field
- **Ecosystem approach** – Understand and build upon the institutional embeddedness, network relationships and inter-dependencies of the target organization
- **Organisational theory** – Apply a theoretically and empirically grounded framework for organizational change
- **Metrics and indicators** – Combine qualitative and quantitative impact assessments, include impact narratives and the anticipation of potential future impacts beyond official project duration
- **Communication, culture and trust** – Follow an open communication of RRI, build and maintain trust and support experimentation in order to mitigate resistance to change and motivate uptake as an adaptive, creative learning process

Two windows of opportunity for enhancing the institutionalisation of RRI in the near future:

- **RRIsing smart specialisation strategies** – There is a need for a geographically contextualised implementation of RRI which integrates RRI into regional innovation policies via smart specialisation strategies in order to better realise the transformative potential of RRI
- **RRI as a tool for institutional learning** – There is a need for the democratisation of research and development (R&D) governance that institutionalises learning by developing and strengthening the

self-reflective capabilities of the research and innovation system supported by all types of top management decision-making (academic, business, civic and governmental organisations)

POLICY IMPLICATIONS AND RECOMMENDATIONS

- **Maintain and strengthen communication efforts** for building a general awareness of, engagement with, and responsiveness to societal challenges
- **Incentivise new collaborations for sharing responsibilities for institutional change** between diverse stakeholders and actors representing differing perspectives in the research and innovation system
- **Promote the development and sharing of knowledge and methodologies on institutional self-assessment and organisational change** towards RRI implementation in research funding and performing organisations
- **Support an European research and innovation ecosystem that incentivises and rewards the deep institutionalisation of RRI** into the organisational routines and structures of research funding and performing organisations
- **Provide safe space for experimenting with future-oriented impact assessment** of RRI implementation
- **Integration of RRI into smart specialisation strategies** by setting expectations and provide guidance
- **Allocate funding for action-learning based interventions** in the current research and innovation system in order to develop institutional capacities for self-reflection, learning and transformation

SUSTAINABILITY AND LEGACY

<https://cochangeproject.eu/outcomes>

PROJECT OBJECTIVES AND METHODOLOGY

The Co-Create Change in Research Funding and Performing (CO-CHANGE) project is aimed at building transformative capacity and leadership for responsible research and innovation (RRI) through systemic change coalitions around different change labs, that will initiate and implement institutional changes. Eight change labs co-create and implement RRI related practices for institutional change in research funding and performing organisations, allowing the project to learn about the institutionalisation of RRI practices in the selected organisations and their ecosystems.

PROJECT IDENTITY

PROJECT NAME	Co-Create Change in Research Funding and Performing (CO-CHANGE)
COORDINATOR	Peter Biegelbauer, Austrian Institute of Technology (AIT), Vienna, Austria Peter.Biegelbauer@ait.ac.at
CONSORTIUM	Austrian Institute of Technology (AIT), Centre for Innovation Systems & Policy, Vienna, Austria Council of Tampere Region (PL), Tampere, Finland Environmental Social Science Research Group (ESSRG), Budapest, Hungary Fundación TECNALIA Research & Innovation (Tecnalia), Bizkaia, Spain TU Delft, Delft, The Netherlands University of Novi Sad, Faculty of Agriculture (PFNS), Novi Sad, Serbia Vienna Science and Technology Fund (WWFT), Vienna, Austria VTT Technical Research Centre of Finland (VTT), Espoo, Finland
FUNDING SCHEME	H2020-SwafS-2019-1 SwafS-05-2018-2019 Grounding RRI practices in research and innovation funding and performing organisations
DURATION	February 2020 – January 2023 (36 months)
BUDGET	EU contribution: 1 498 833.75 €
WEBSITE	https://cochangeproject.eu/
FOR MORE INFORMATION	Contact: Mika Nieminen (VTT, Finland) - mika.nieminen@vtt.fi and Raúl Tabarés Gutiérrez (Tecnalia, Spain) - raul.tabares@tecnalia.com Ezeikiela Arrizabalaga (Tecnalia, Spain) Nina Rilla, Santtu Lehtinen, Jatta Tomminen (VTT, Finland) Bálint Balázs, György Pataki (ESSRG) Peter Biegelbauer and Caroline Lackinger (AIT, Austria)
FURTHER READING	Council of the European Union, 2014. Rome Declaration on Responsible Research and Innovation in Europe. 21 November 2014, 2 p. Novitzky, P., Bernstein, M.J., Blok, V., Braun, R., Chan, T.T., Lamers, W., Loeber, A., Meijer, I., Lindner, R., Griessler, E., 2020. Improve alignment of research policy and societal values. Science, Vol. 369, Issue 6499, pp. 39-41 https://doi.org/10.1126/science.abb3415 Tabarés Gutiérrez, R., Arrizabalaga, E., Nieminen, M. Rilla, N., Lehtinen, S., Tomminen, J., 2020. D1.1 Stocktaking Report. Version 2.0. Co-Change project, https://storage.googleapis.com/co-change/d1-1-stocktaking-report.pdf