

Main aim: To analyse RRI related discourses and pathways to implementation, including barriers and drivers, in 22 research conducting and research funding organisations, in 12 European and non-European countries, in order to identify, understand, disseminate and promote RRI implementation best practices that can be scaled up at European and global levels.

Our analytical approach to RRI (informed by the European RRI Tools project) includes both the European Commission RRI keys - ethics, societal engagement, gender equality, open access/science and science education - and process dimensions that are often regarded as central to RRI: diversity and inclusiveness, anticipation and reflexivity, openness and transparency, and responsiveness and adaptation (AIRR)



Snapshots from workshops conducted winter 2017 with key stakeholders in the national R & I systems

Main lessons from 12 national RRI workshops:

RRI has multiple meanings which have implications for practice, and RRI uptake in national policy and institutions varies considerably

- All stakeholders support the keys, but some do not regard them as related to RRI
- Some embraced RRI as an umbrella framework that could be useful at an institutional level, while others feared it might just be a new fad
- There are many RRI-like activities, but they remain fragmented and locally organized
- The concept of *responsibility* in research and innovation is mostly not related to the keys in general; only to some (like ethics)
- The AIRR dimensions are by some seen as quite abstract, but a few organisations embrace them explicitly
- In Germany, RRI is related to the more important concepts of sustainability and grand challenges
- In most non-European countries, RRI as a policy concept does not exist but there are pockets emerging where there are links to European groups
- However, in China, RRI has been written into the *13th Five Year Plan for Science, Technology and Innovation*
- RRI has an affinity with the five development concepts in China, i.e., innovation, coordination, green development, opening up, and sharing
- The Access, Equity and Inclusion Framework may be seen as a potential contribution from India to the RRI discourse
- In the Australian workshop, research integrity and impact were two terms that frequently arose
- Cultural tradition, development stage, and social structure should be considered when implementing RRI in non-European countries
- Many stakeholders did not relate to science education, as defined by the European Commission
- The importance of societal engagement varies across countries

RRI faces deeply engrained norms, organisational cultures and institutional barriers

- Evaluation and funding of research mainly based on economic and science-internal quantitative criteria (Top Level research, Excellence Initiatives) hinders the application of RRI (e.g. inclusion of stakeholders)
- Fear of compromising excellence, losing autonomy and feelings of being accused are barriers to RRI
- The fragmentation of the policy and economic systems jeopardizes the diffusion and uptake of RRI beyond research organizations and higher education institutions
- However, the lack of understanding around the challenges of new science and technology could provide a potential risk motivating the exploration of the RRI concept
- EU funding requirements and attention to RRI is an important driver in organisations, but “RRI washing” must be avoided
- The usefulness of RRI indicators are controversial in many organisations; instead some see RRI as primarily a learning process
- Challenge: find ways to utilize RRI as a positive force of anticipation, co-creation and reflection, while avoiding RRI becoming a new branch on the tree of bureaucratic regulation

RRI requires resources, committed leadership and agency, - and sufficient time for the cultural change to happen!

Partner institution	Main contact
Oslo and Akershus University College/Oslo Metropolitan University (NO)	Ellen-Marie Forsberg (coordinator)
Karlsruhe Institute of Technology (DE)	Miltos Ladikas
University of Exeter/University of Bristol (UK)	Richard Owen
Commissariat à l'Énergie Atomique et aux Énergies Alternatives (FR)	Alexei Grinbaum
University of Padova (IT)	Federico Neresini
Applied Research and Communications Fund (BG)	Zoya Damianova
Stichting Katholieke Universiteit (Nijmegen) (NL)	Luca Consoli
Wageningen University (NL)	Phil Macnaghten
Chinese Academy of Science and Technology for Development (CN)	Yandong Zhao
Research and Information System for Developing Countries (IN)	Sachin Chaturvedi
Arizona Board of Regents (US)	David Guston
Fundacao de Desenvolvimento da UNICAMP (BR)	Marko Monteiro
The University of Queensland (AU)	Peta Ashworth

Authors
Ellen-Marie Forsberg,
Miltos Ladikas, Richard
Owen

Coordinator Ellen-Marie Forsberg
Ellenmarie.Forsberg@oslo.met.no

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[Twitter.com/RRIPRACTICE](https://twitter.com/RRIPRACTICE)



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