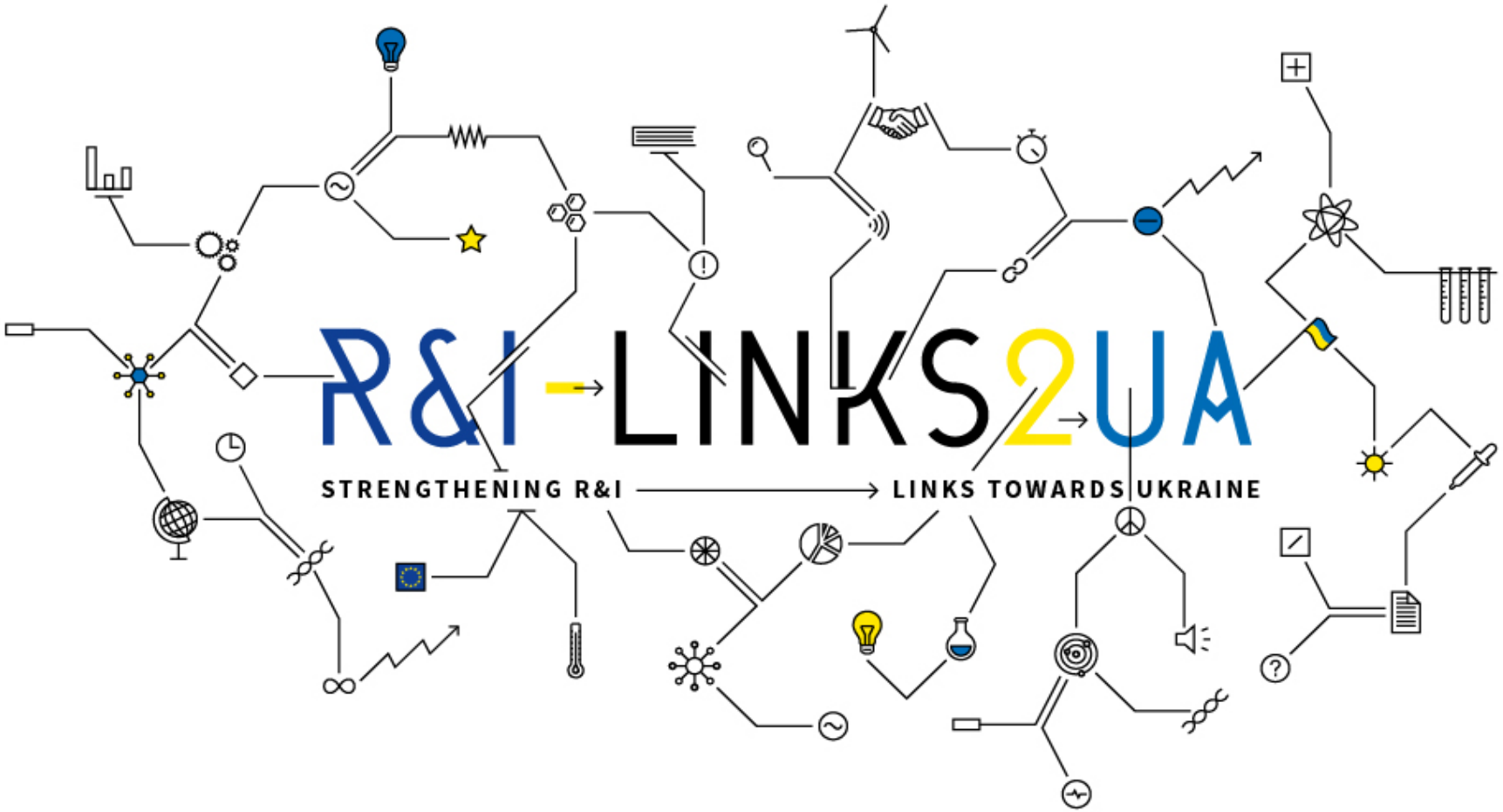


RRI

INTRODUCTION

GORAZD WEISS, CENTRE FOR SOCIAL INNOVATION

2. RRI – RESPONSIBLE RESEARCH AND INNOVATION

RRI – some definition

"Responsible Research and Innovation is a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technological advances in our society)."

Source: von Schomberg, 2011:9

RRI is an inclusive approach to research and innovation (R&I), to ensure that societal actors work together during the whole research and innovation process. It aims to better align both the process and outcomes of R&I, with the values, needs and expectations of European society.

Source: *http://ec.europa.eu/programmes/horizon2020/en/h2020-section/science-and-societ*

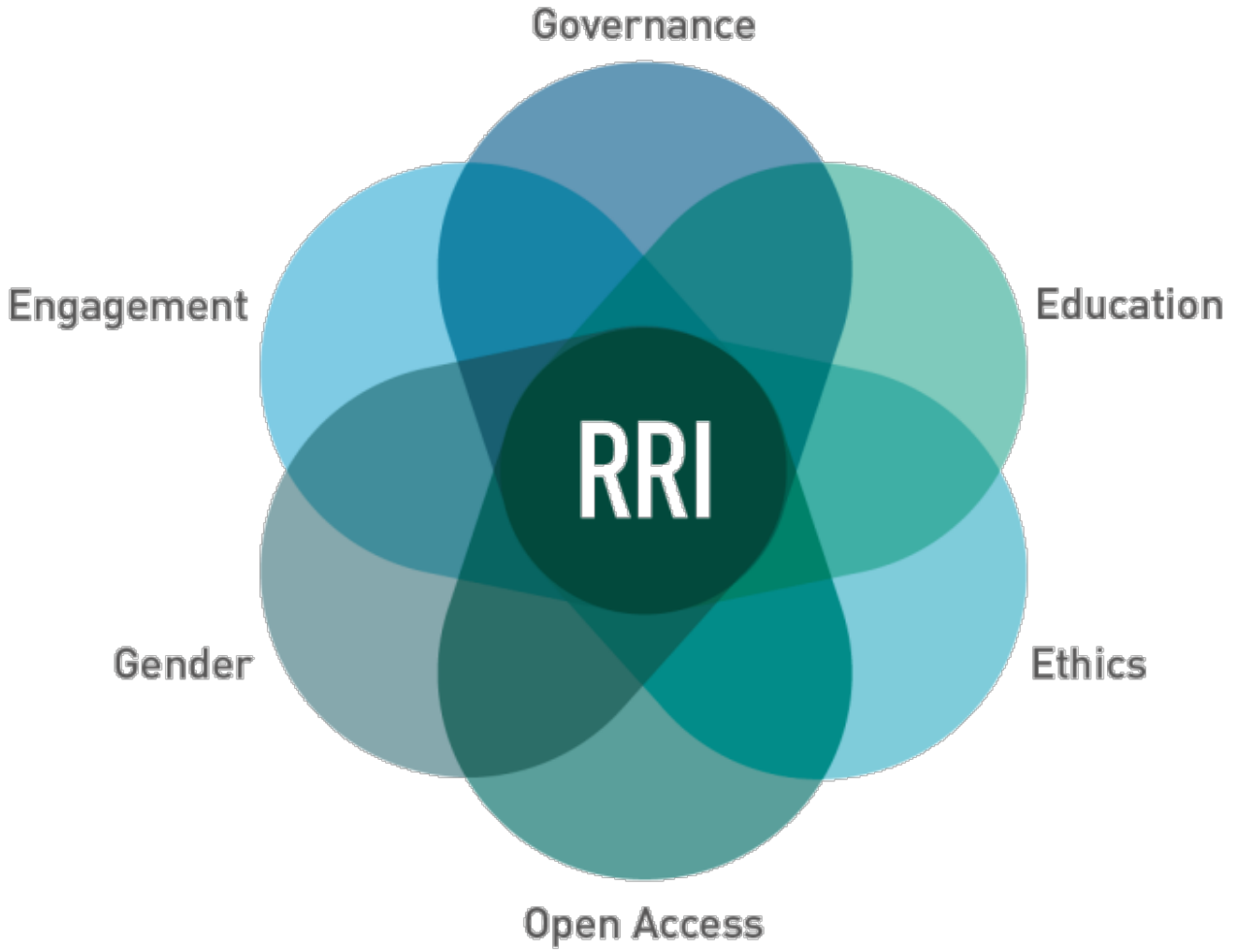
RRI in Practice

Policy context

In practice, RRI consists of **designing and implementing R&I policy that will**:

- engage society more broadly in its research and innovation activities,
- increase access to scientific results,
- ensure gender equality, in both the research process and research content,
- take into account the ethical dimension, and
- promote formal and informal science education.

RRI DIMENSIONS



1. ETHIC

- Ethics is **an integral part of research from the beginning to the end**. It is only by getting the ethics right that research excellence can be achieved. Ethical research conduct implies the application of fundamental ethical principles and legislation to scientific research in all possible domains of research – for example biomedical research, nature sciences, social sciences and humanities.

- Focuses on (1**) Research integrity**: the prevention of unacceptable research and research practices; and (2) **Science and society**: the ethical acceptability of scientific technological developments

The most common ethical issues include:

↗the involvement of children, patients, vulnerable populations

↗the use of human embryonic stem cells,

↗privacy and data protection issues,

↗research on animals and non-human primates.

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STRENGTHENING R&I ——→ LINKS TOWARDS UKRAINE

2. OPEN ACCESS

- Addresses issues of accessibility to and ownership of scientific information**. Free and earlier access to scientific work might improve the quality of scientific research and facilitate fast innovation, constructive collaborations among peers and productive dialogue with civil society.**

European Open Science Agenda

- ↗ Fostering and creating incentives for open science
- ↗ Removing barriers for open science
- ↗ Mainstreaming and further promoting open access policies
- ↗ Developing an open science cloud
- ↗ Embedding open science in society more responsive to societal and economic expectations

3. GENEDR EQUALITY

- The ideal of gender equality in RRI is a society where the **representation of feminine and masculine** values in research and innovation **are balanced.**

↗ Fostering gender balance in research teams, in order to close the gaps in the participation of women.

↗ Ensuring gender balance in decision-making, in order to reach the target of 40% of the under-represented sex in panels and groups and of 50% in advisory groups.

↗ Integrating the gender dimension in research and innovation (R&I) content, helps improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation.

4. Science Education

- Focuses on (1) **enhancing the current education process to better equip citizen with the necessary knowledge and skills, so they can participate in research and innovation debates**; and (2) **increasing the number of researchers** (promote scientific related jobs).

- **Innovative formal and informal science education teaching and learning** is important in order to raise both young boys' and girls' awareness of the different aspects encompassing science and technology in today's society and to address the challenges faced by young people when pursuing careers in Science, Technology, Engineering and Mathematics (STEM).

5. PUBLIC ENGAGEMENT

- Public engagement in Responsible Research and Innovation is about **co-creating the future with citizens and civil society organisations,** and also bringing on board the **widest possible diversity of actors that would not normally interact with each other, on matters of science and technology.**

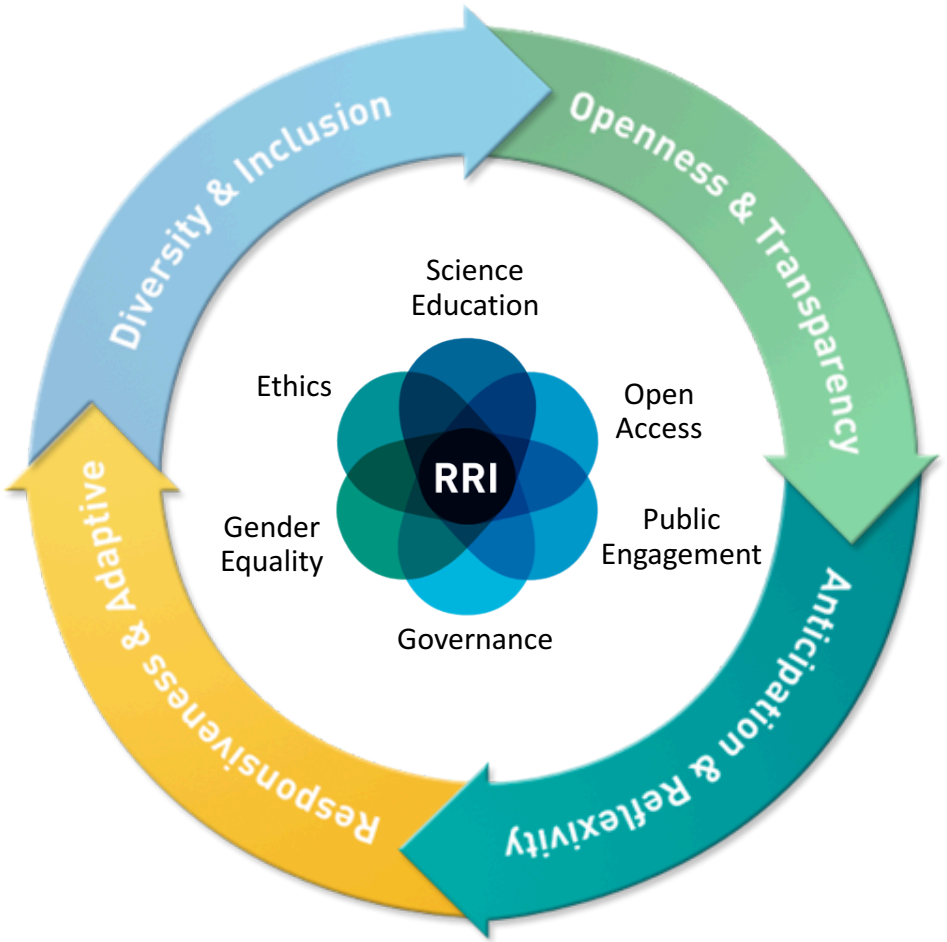
The process of **R&I is collaborative and multi-actor**:

= > all **societal actors** (researchers, citizens, policymakers, industry, educators, etc.) **work together during the whole research and innovation process** in order to align its outcomes to the values, needs and expectations of European society.

Implementing public engagement in Horizon 2020 => Building participatory Research & Innovation (R&I) actions

RRI RING

PROCESS REQUIREMENTS



OUTCOME REQUIREMENTS

LEARNING Outcomes

- Engaged publics
- Responsible actors
- Responsible Institutions

R&I SYSTEM Outcomes

- Ethically acceptable
- Sustainable
- Socially desirable

Solutions to Societal challenges

- Health & demographics
- Innovative & reflective societal
- Food & water
- Climate & resources
- Energy
- Transport
- Security

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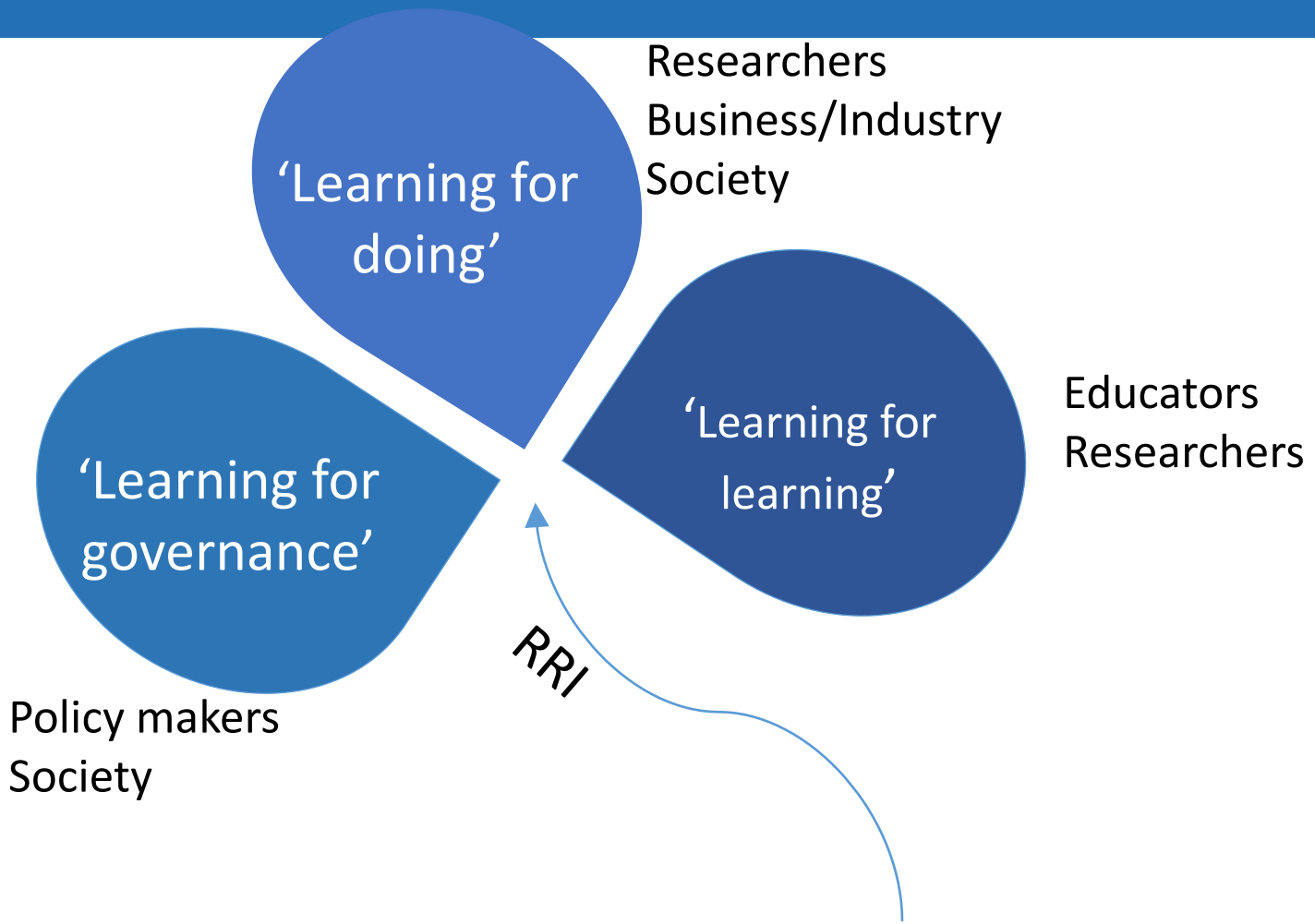
RRI as a learning process



RRI as a societal learning process

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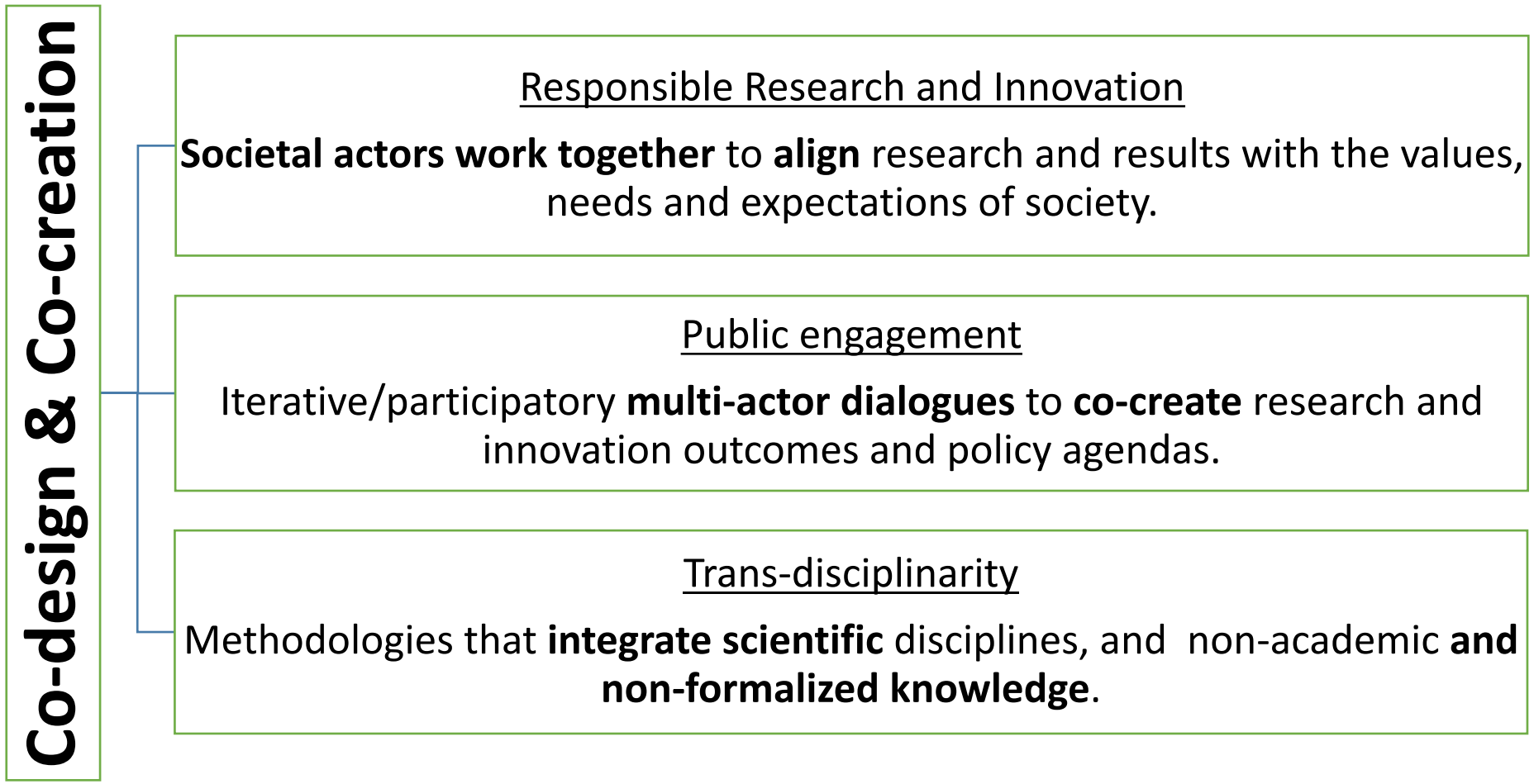
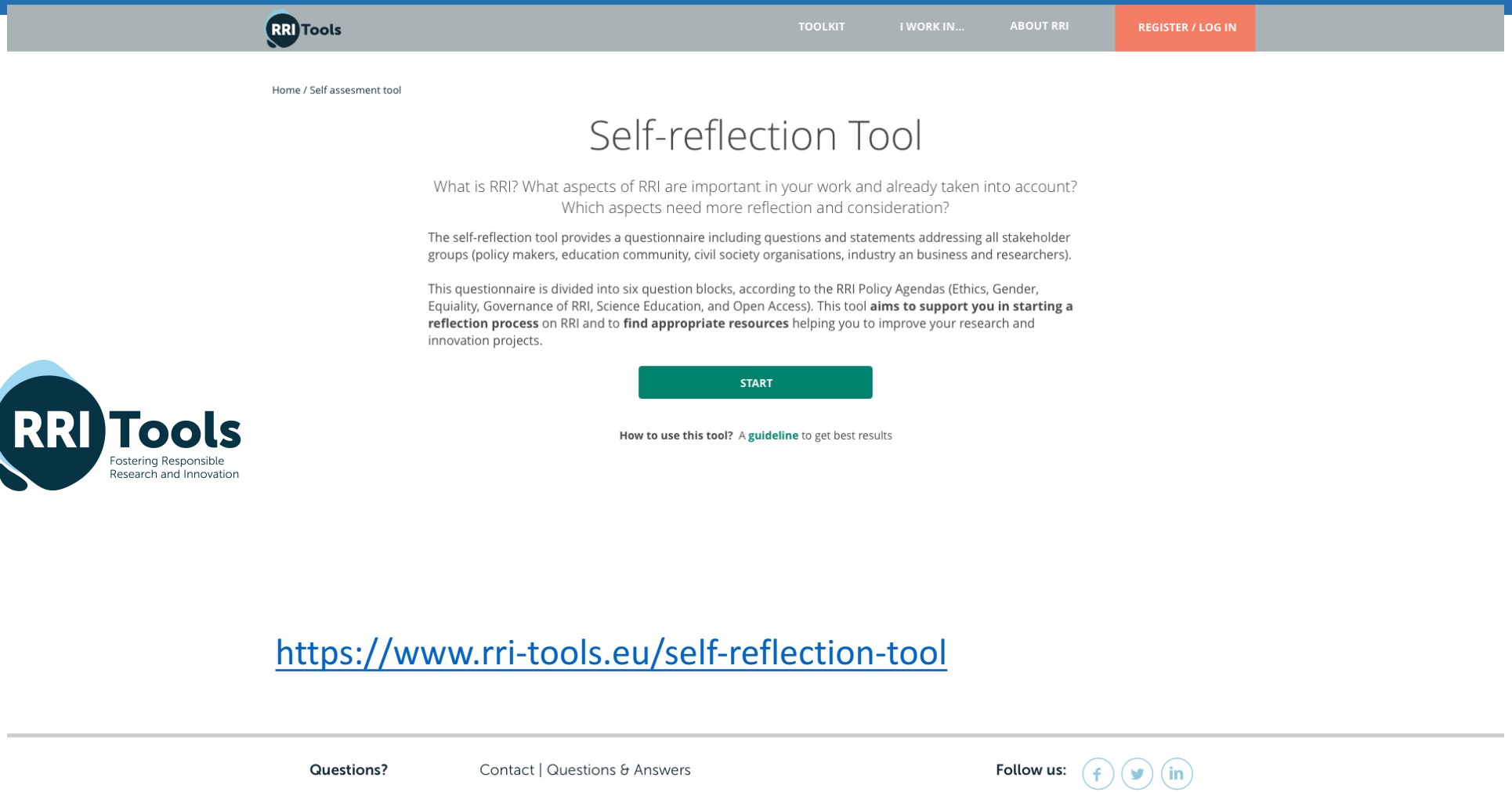
Stakeholder integration



RESOURCES:



https://www.rri-tools.eu/self-reflection-tool

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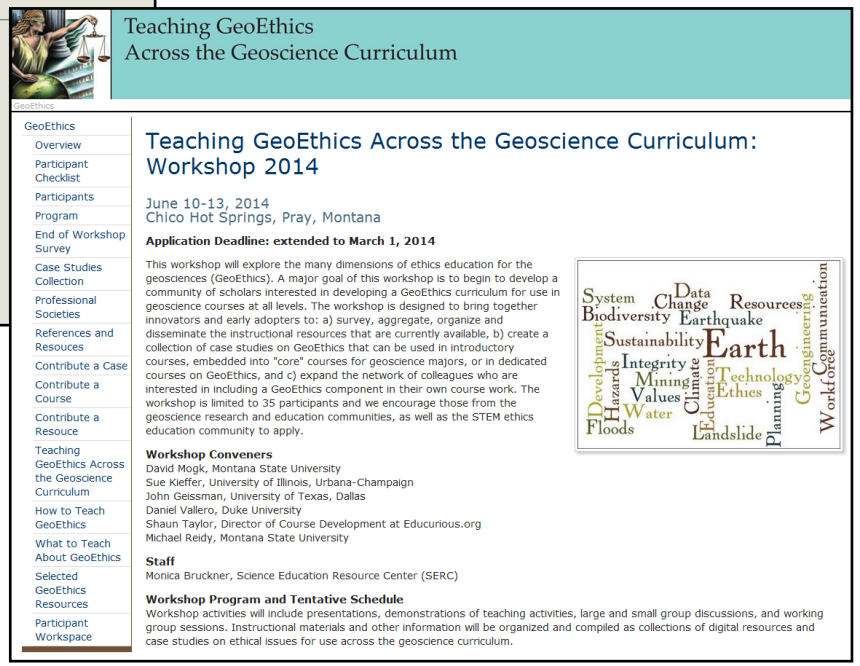
1. Choose one Policy Agenda

Training courses & guides



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Q&A

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THANK YOU FOR YOUR ATTENTION!

CONTACTS:

Gorazd Weiss, Project Coordinator

Email: weiss@zsi.at

CENTRE FOR SOCIAL INNOVATION (ZSI)

Linke Wienzeile 246

A - 1150 Vienna

AUSTRIA

Tel. ++43.1.4950442-39

Fax. ++43.1.4950442-40

/www.zsi.at

https://ri-links2ua.eu/