

Responsible Open Science in Europe

We develop and openly share practical tools that ensure research ethics and research integrity in open science and citizen science

About

ROSiE is a three-year project funded by HORIZON2020. Its mission is to cocreate with all related stakeholders novel practical tools to foster a responsible open science and citizen science.

Contribution

Provide customized solutions through an interdisciplinary knowledge hub bound to actively pursuing open approaches in science and research, while complying with relevant legal frameworks and ethical standards.

Responsible OS

Opening of data should be made in such a way that is fully aligned with the General Data Protection Rule while providing safeguards for the integrity of the opened data.



Objectives

A systematic inventory of <u>RE, RI, social, and</u> legal implications and challenges of OS; scanning of existing technologies and

Promote responsible OS; <u>operational</u> guidelines; complement to the ECoC within the OS framework; guidance on existing technologies and platforms for responsible OS.

Consultation and stakeholder engagement with the stakeholders; create and facilitate a <u>community of practice</u> to gather knowledge on RE/RI in OS from other European projects.

A RE/RI <u>Knowledge Hub</u> for OS; <u>training</u> materials for RE/RI aspects of OS.

A selection of ROSiE's outputs

Strategic Policy Paper on Responsible Open Science

- It addresses various crosscutting issues and challenges in Open Science, Research Ethics, and Research Integrity.
- It equips policymakers, research institutions (RPOs and RFOs), publishers, researchers, and the public with the necessary tools and knowledge to facilitate the transition towards action and practice-oriented policy methods.

Responsible Open Science guiding principles:

- **1. Quality, ethics, and integrity:** Transparency, scrutiny, sustainability, and reproducibility
- **2.** Collective benefit: Collaboration, participation, and inclusion
- **3. Equity, diversity, and fairness:** equality of opportunities and inclusiveness

The guiding principles for responsible Open Science provide a framework for enabling conditions and practices within which the above values are upheld in the implementation of Open Science, at the following areas:

- A. Open Access
- B. Open Data Open reproducible research Open Science evaluation

Policy Document Complementing the ECoC (The ROSiE General Guidelines on Responsible Open Science)

- It represents a step forward by transforming ROSiE's outputs into a set of guidelines that are designed to support stakeholders in embracing Responsible Open Science practices and provide practical tools and knowledge.
- It establishes the first-ever guidance document on Open Science in Europe, showcasing the ROSiE project's commitment to advancing the field.
- By adopting the ROSiE General Guidelines for Responsible Open Science, stakeholders across the research landscape can actively contribute to the promotion of responsible Open Science.
- Through this collaborative effort, we aim to foster transparency and societal impact in Europe and beyond.

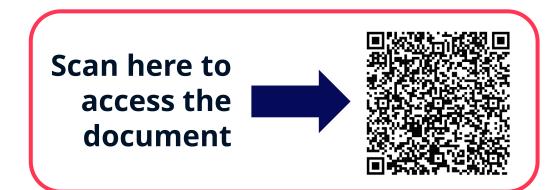
It consists of 64 points on the following areas

- Research Environment and Infrastructures \bullet
- Protection of Research Participants, the Environment, Ecosystems, ulletand Cultural Heritage
- Open and Reproducible Research Practices A. Open research practices

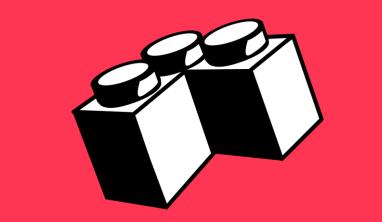
- Open Science policies
- Open Science tools
- G. Citizen Science



- Open data В
- Open Methods and Tools
- Citizen Science D.
- E. Training and Education
- **Research Evaluation**
- Inclusivity



ROSIE Knowledge Hub (KH) A practical tool for Responsible Open Science



To implement a versatile structure, for the end-user to be able to construct her/his own portfolio of building elements



The entrance to ROSiE KH has many options in different thematic areas connected to Open Science.

Infrastructure Res	earch Integrity Resear	rch Ethics	Legal	Social	Policy	Training
Aim		O	ojective	es		
To map, identify and analyze the potential for misconduct in various areas of open science practice and in different scientific disciplines, and to identify and analyze current ethical, social and legal approaches to responding to questionable practices.			 To map and examine the research integrity, disciplinary, epistemic and citizen science dimensions (including the challenges, implications, opportunities) of open science 			
			To investigate the potential tensions between applications of research integrity standards and open science in scientific practice			
Methodology			 To validate how open science objectives and principles could further foster research integrity principles, including that of the European Code of Conduct 			
Apping exercise	2	4. To provide a global (low and middle income countries) perspective on t European open science initiatives and policies, taking into account the context of existing global inequalities and benefit-sharing obligations				
mapping exercise Elteratures	urvey	5 7	- develop - tradi			athing and

The building blocks of each thematic category can be found in this level. Infrastructure Research Integrity Research Ethics Legal Social Policy Training

Recommendations



Description of the normative How open science (OS) affects principles and good practices outli



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Mapping

and Open Science

Research Integrity, Research

This level contains the content of each building block.

Issues of Research Integrity and Open Science

< back to Knowledge Hul



r Research Integrity (ECoC) is the most important guidance document on the EU level in the rese teority realm. It outlines four fundamental principles of research integrity – reliability, honesty, respect and accountability – and describe od research practices in eight contexts: 1) research environment, 2) training, supervision and mentoring, 3) research procedures, 4) practices and management, 6) collaborative working, 7) publication and dissemination and 8) reviewing, evaluating a ting. Since the transition to open science affects the entire research system, each of the eight contexts deserves closer scrutiny. In the ctedwith stakeholders within the framework of ROSiE, many issues directly and indirectly related to research integrity wer dressed, although in general interviewees consider open science mostly, if not entirely, conducive to research integrity because it increase ansparency and has the potential to mitigate the reproducibility crisis experienced by several fields of research in recent years.

Changes in the research environment were mentioned as a crucial precondition for a successful transition to open science by most

A user's guide features at ROSiE's website to provide generic information on the use of the KH.

RESIE Responsible Open Science in Europe

A user's guide to the Knowledge Hub

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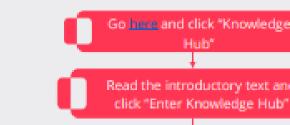
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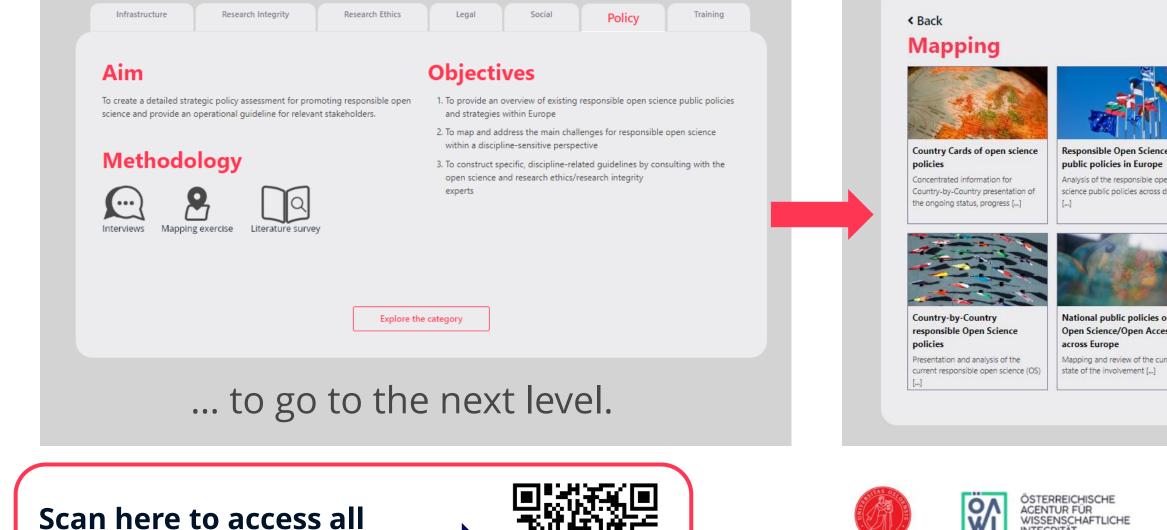




Choose one among Infrastructure, Research Integrity, Research Ethics, Legal, Social, Policy, and training...

ROSiE's deliverables at

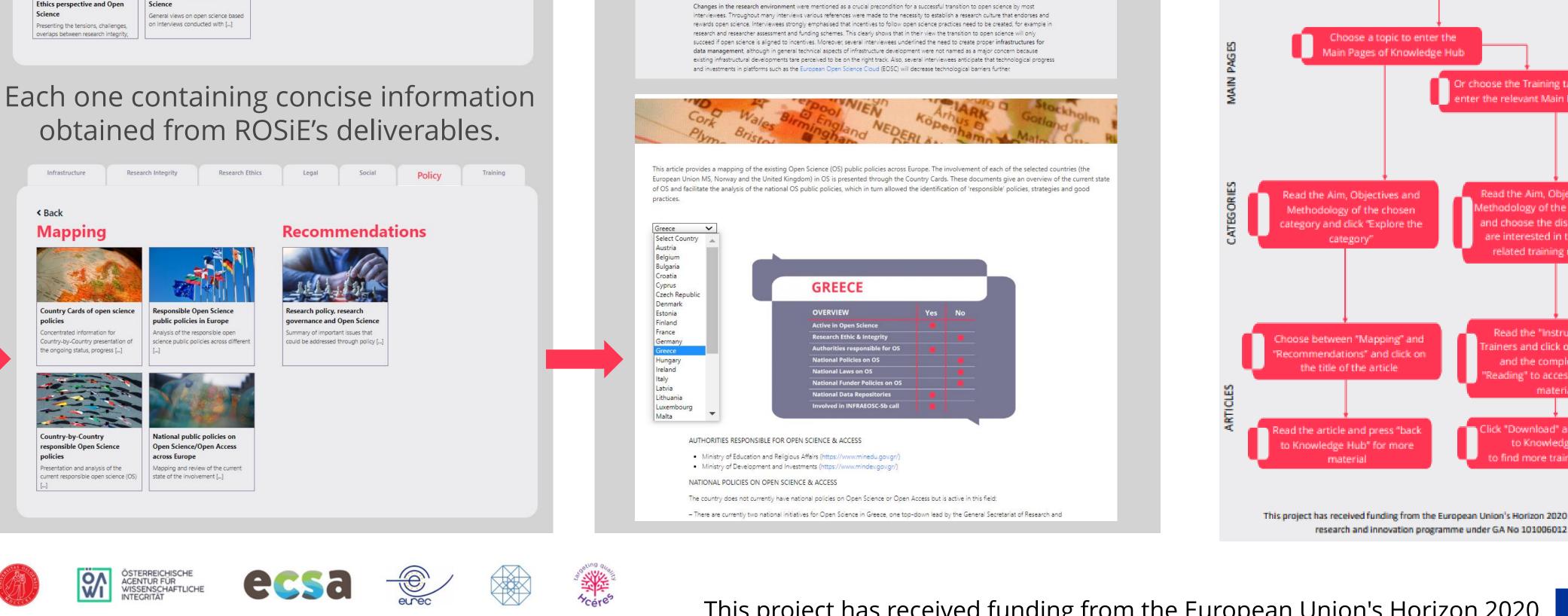
the project's website



ology and conceptual framework for the ethical a

epistemological aspects of open science in various

disciplinary contexts



University of South-Eastern Norway



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