

Open Science: hopes, challenges and the intervention of ROSiE project

Responsible Open Science in Europe

Forum on Digital Ethics in Research | 17-18 October 2022

The ROSiE logo is a large red speech bubble with a white square inside. The text 'ROSiE' is written in white, with the 'O' containing a small white square icon.

ROSiE

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research and innovation programme under GA No 101006430



Consortium



University of Oslo



University of South-Eastern Norway



National Technical University of Athens



Austrian Agency for Research Integrity



European Citizen Science Association



European Network of Research Ethics Committees



Federation of Finnish Learned Societies



The High Council for the Evaluation of Research and Higher Education



National Research Institute for Agriculture, Food and Environment



Universidade do Porto



Universidade Católica Portuguesa



University of Latvia



University of Tartu



Main aim and objectives

Aim

“Develop practical tools aimed at ensuring RE/RI in OS and citizen science”



EXPLORE: A systematic inventory of RE, RI, social, and legal implications and challenges of OS; scanning of existing technologies and platforms that safeguard responsible OS.



GUIDE: Promoting responsible OS; operational guidelines for relevant stakeholders; complement to the ECoC within the OS framework; guidance on existing technologies and platforms for responsible OS.



ENGAGE: A consultation and stakeholder engagement with the stakeholder community; creating and facilitating a community of practice to gather knowledge on RE/RI in OS from other European projects.



EQUIP: A RE/RI Knowledge Hub for OS; training materials for RE/RI aspects of OS.



Outputs

Relationships (tensions, challenges, overlaps) between RI, the wider RE perspective and OS.

By analysing different EU national CoC on RI.

- The layers of confusion surrounding responsible research are manifold. Responsibility in research is spread across a vast area embracing RE, RI, OS, RRI, and science communication that it is difficult to define what a responsible investigator
- These areas are usually treated independently
- Only in the Austrian and the French codes do these issues have been treated within the same document.

[EXPLORE]



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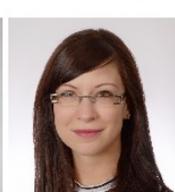
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[GAGE]



Outputs

Stakeholders' views, attitudes and practice of responsible OS and a number of key recommendations resulting of the analysis of the findings of stakeholder engagement activities (<https://rosie-project.eu/stakeholders/>).

Recommendations on policy advice

- A policy environment conducive to responsible open science requires aligned action on the European, national and institutional level
- Create a sufficiently large pool of adequately qualified educators
- Follow an incentive-driven approach due to its better ability to motivate researchers to genuinely endorse and internalise open science norms
- RFOs have a central role in fostering OS

[ENGAGE]



Outputs

Incorporation of publicly available results of networks and research projects into the work of ROSiE through the establishment of the Cross-SwafS Stakeholder Forum meeting (<https://rosie-project.eu/forum/>)

[ENGAGE]



COESO



CO-CHANGE



ETHNA



GRACE



HYBRIDA



INCENTIVE



INTEGRITY



RESBIOS



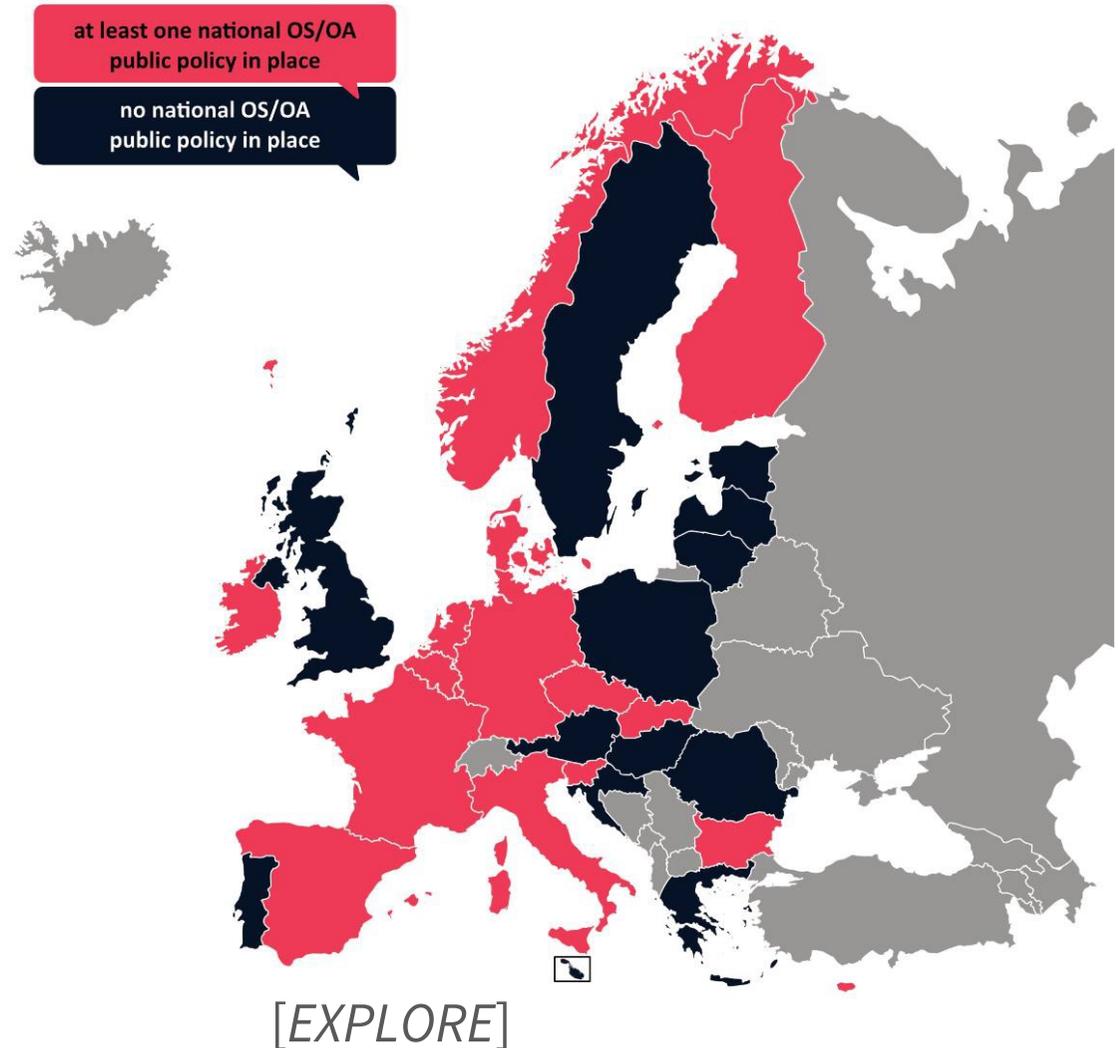
SUPER MORRI



Outputs

An overview of good practices and gaps of existing responsible OS public policies in Europe at the national level in 22 selected countries

OS has in the recent years extensively grown in Europe´s research environment, with a broad involvement from all actors involved, from the supranational level with the EU as the main actor, to the national, regional, institutional and citizen level.



Outputs

The national country cards

FRANCE

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Bodies involved in OS	●	
National Policies on OS	●	
National Laws on OS	●	
National Funder Policies on OS	●	
National Data Repositories	●	
Involved in INFRAEOSC-5b call	●	

GREECE

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity		●
Authorities responsible for OS	●	

AUSTRIA

OVERVIEW	Yes	No
Active in Open Science	●	
Research Ethic & Integrity	●	
Authorities responsible for OS	●	
National Policies on OS		●
National Laws on OS		●
National Funder Policies on OS	●	
National Data Repositories		●
Involved in INFRAEOSC 5b call	●	

[EXPLORE]



Outputs

Development of training materials for OS.



For RPOs



Social Sciences

- Handouts
- Readings



Natural Sciences

- Handouts
- Readings



Humanities

- Handouts
- Readings



Health Sciences

- Handouts
- Readings

For trainees

For trainers

Instructions

- Instructions

Training modules

1. Ethical and societal foundations of OS, its purpose
2. Open science and data privacy in natural sciences
3. Ethical aspects of citizen science in the context of OS
4. Protection of intellectual property in the context of OS
5. The quality of the research outputs and data sets
6. Responsible sharing and reuse of natural science data
7. Prevention of research malpractice in the context of OS
8. Responsible dissemination/publication practices

[EQUIP]



Outputs

Development of the ROSiE knowledge hub

[EQUIP]



Knowledge Hub

Search function & navigation tool, based on the tagging

SEARCH

The photo will change to present all experts (ROSiE beneficiaries, AB members, Stakeholder Forum members)



Ask an expert!



Outputs

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Ask an expert!

RI RE Social Legal Policy Training Databases ...

The mapping



Responsible research codes

A mapping of the responsible research national codes of all European countries

Mapping results



RI and OS relationship

An analysis on how the different official codes of conduct on research integrity across Europe approach open science objectives.

[EQUIP]



Implementation challenges

[GUIDE]

1 Economic disparities between countries -
Technical challenges for LMICs

2 Cultural differences - Closed science culture
from more seasoned researchers

3 Gender, ethnicity, age inequalities and
differences in institutional settings

4 GDPR-related provisions are sometimes
written in a non-optimal way

5 IPR and patenting create barriers to OS –
privately funded and industrial research



Gaps in national policies and regulatory frameworks

[GUIDE]

1

Despite disparities in legislations and structures, governance structures are in place in Europe

2

OS policies at national level are at very different stages of development

3

Most public policies are short and not very detailed (regarding discipline-related particularities)

4

The extent to which data can actually be opened still differs between countries, even in the EU



Recommendations

[GUIDE]

- 1 Integrate OS into curricula from the undergraduate level onwards
- 2 Provide sufficient funding for opening up research
- 3 Allow research participants control over the information that should be released
- 4 OS policy should consider that transitions are likely to follow uneven trajectories



Thank you for your attention!

ROSiE

 rosie-project.eu

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 [ROSiE Responsible Open Science in Europe](https://www.linkedin.com/company/rosie-responsible-open-science-in-europe)

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