



The EOSC Tripartite collaboration

National EOSC tripartite event – Ireland

Dublin, 28 September 2022

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Science is in transition



Image by Nick Youngson CC BY-SA 3.0 Alpha Stock Images

The **Open Science (OS) paradigm** affects the whole research cycle and all its stakeholders

It implies sharing knowledge and tools:

- “as early as possible” in the research process;
- “as openly as possible”;
- “as FAIR as possible”;

not only within a discipline but also between disciplines and society at large.

Open Science: a Political Priority of the Union



2016: Council Conclusions on the ‘**Transition Towards an Open Science System**’

2018: EC Recommendation on ‘**Access to and Preservation of Scientific Information**’

2020: EC Communication on the ‘**New ERA**’

2021: Council Recommendation on a ‘**Pact for R&I in Europe**’

2021: Council Conclusions on the ‘**Future Governance of the ERA**’ including the ‘**ERA Policy Agenda**’

2022: Council Conclusions on ‘**Research Assessment and Implementation of Open Science**’

EC strategy for Open Science

- **Improve the practice of research and innovation:**
 - Open access to scholarly publications,
 - RDM and FAIR digital outputs,
 - Reproducible results,
 - Research integrity,
 - Societal engagement & responsibility.
- **Develop proper enablers:**
 - Rewards and incentives,
 - Skills and education,
 - Open Research Infrastructures (including EOSC and ORE),
 - Legal & regulatory environment
- **International context of Open Science**

EOSC in the European Data Strategy

(February 2020)



The EU will create a single market for data by:

- ❑ Setting clear and fair rules on access and re-use of data;
- ❑ Investing in next generation standards, tools and infrastructures to store and process data;
- ❑ Joining forces in European cloud capacity;
- ❑ Pooling European data in key sectors, with EU-wide common and interoperable data spaces;
- ❑ Giving users rights, tools and skills to stay in full control of their data.

*“**EOSC** is the basis for a science, research and innovation data space that will bring together data resulting from research and deployment programmes and will be connected and fully articulated with the sectoral data spaces.”*

(European Data Strategy, COM(2020) 66 final)



OS and EOSC in the ERA Policy Agenda 2022-2024

ERA Priority Area:

“Deepening a truly functioning internal market for knowledge”



Action 1 (out of 20):

“Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Open Science Cloud”

- Commitments by 24/27 MS
- Three outcomes by end of 2024
- Synergies with other ERA actions:

Data legislative framework for research
Research Infrastructures
Green/digital transition

Reform of the Research Assessment
International cooperation
ERA monitoring mechanism

How to implement the EOSC?

- **A community-driven process**
- Gradual implementation based on **mutual alignment at European, national and institutional levels**
- **EOSC Tripartite governance**: Current implementation phase (2021-2030) steered by the EC, the Member States and Associated Countries and the EOSC Association representing the voice of the community
- **EOSC European Partnership to pooling resources**: Horizon Europe grants & procurement plus in-kind additional activities by the members of the EOSC Association
- Emerging issues: **operational consolidation** of the EOSC federation and **sustainability models**



Courtesy of the EOSC Association.

Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC)

Version 1.0
21 June 2021

Independent
Expert
Report

EOSC Executive Board

Research and
Innovation

Roadmap

- 2021-2022: Deploying EOSC foundations
- 2023-2024: Deploying value-added services for scientists
- 2025-2027: Engaging with industry and society
- Continued: Web of FAIR data and services for science

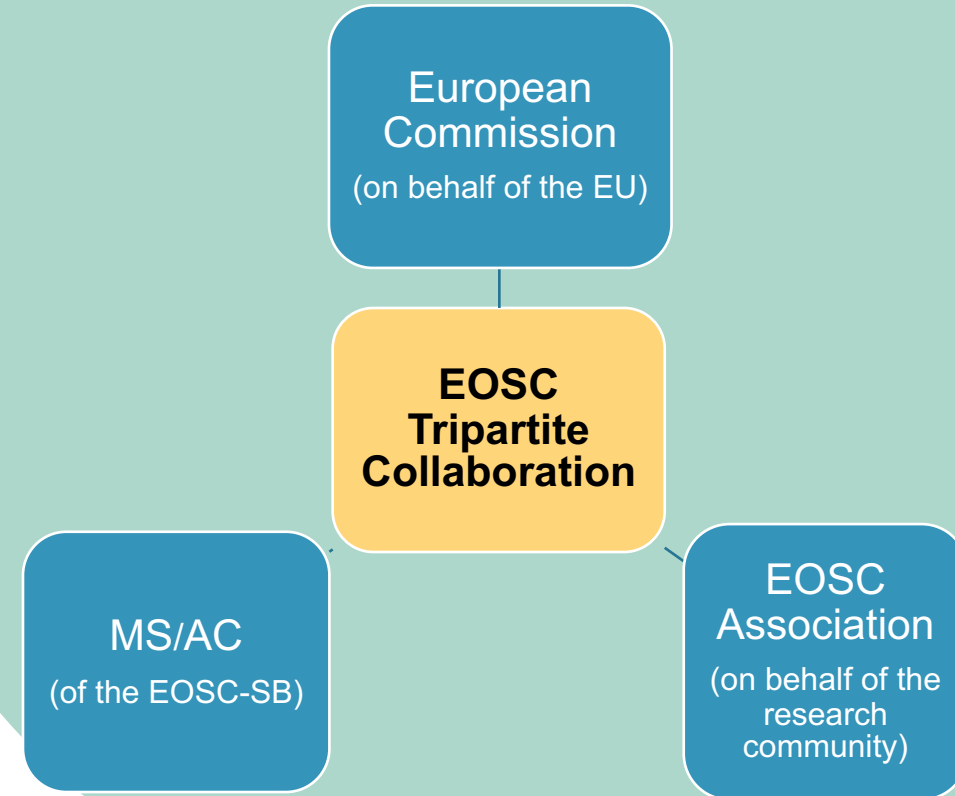
Three implementation levels

- European (Horizon Europe)
- National / regional (Additional activities)
- Institutional: (Additional activities)

EOSC tripartite collaboration – a level playing field for EOSC implementation discussion and coordination

Consensus in 2021 to accelerate implementation of

- the deployment of a viable EOSC platform for use by the research communities;
👉 *EOSC procurement (ongoing)*
- the deployment of a single joint capacity to monitor the uptake of open science and respective contributions to the EOSC;
👉 *EOSC Observatory*
- alignment of policies, investments, and practices at European, national/regional, and institutional levels to foster synergies and leverage effects of the conducted actions.
👉 *EOSC tripartite catalogue (being populated)*



New set of resources for EOSC from Horizon 2020

- Investments in EOSC via Horizon 2020 grants amounted Million
- Actions of direct EOSC-relevance were included in the European Research Infrastructures (incl. e-Infrastructures):
 - WP 2016–2017: EUR 70 Million under the calls “European Open Science Cloud for Research”, “Data and Distributed Computing e-infrastructures for Open Science” and “Platform-driven e-infrastructure innovation”
 - WP 2018 – 2020: EUR 250 Million under a dedicated call “Implementing the European Open Science Cloud”

Horizon Europe Projects (2021 calls: EUR 70 Million)

[FAIR-EASE](#)

[FAIRCORE4EOSC](#)

[FAIR-IMPACT](#)

[WorldFAIR](#)

FAIR EArth Sciences & Environment services
Core Components Supporting a FAIR EOSC
Expanding FAIR Solutions across EOSC
Global cooperation on FAIR data policy and practice

[BY-COVID](#)

[EOSC4Cancer](#)

BeYond-COVID
A European-wide foundation to accelerate Data-driven Cancer Research

[Skills4EOSC](#)

[AI4EOSC](#)

Skills for the European Open Science Commons: Creating a Training Ecosystem for Open and FAIR Science
Artificial Intelligence for the European Open Science Cloud
leveraging the European compute infrastructures for data-intensive research guided by FAIR principles

[EuroScienceGateway](#)

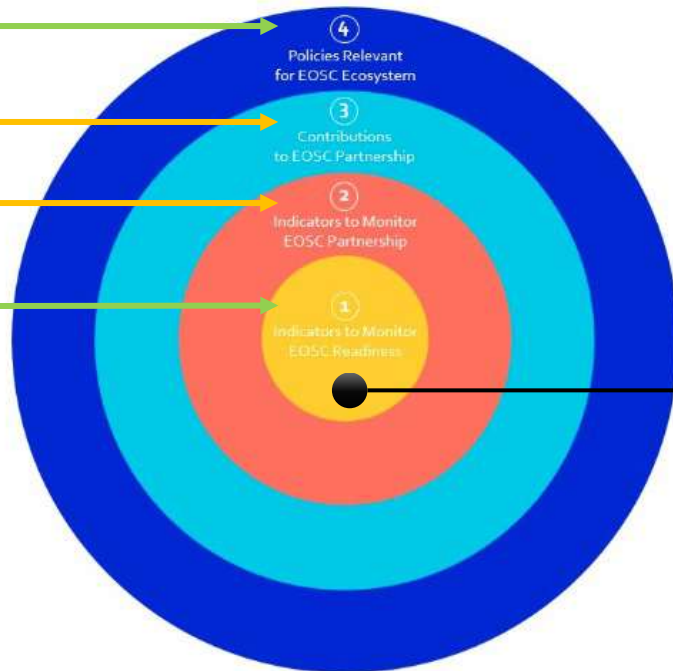
[RAISE](#)

[EOSC Focus](#)

[e-IRGSP](#)

Research Analysis Identifier SystEm
EOSC Focus
e-Infrastructures reflection group support programme

Support to policy discussion – example from the EOSC-SB survey 2021



EOSC Association

EOSC Steering Board

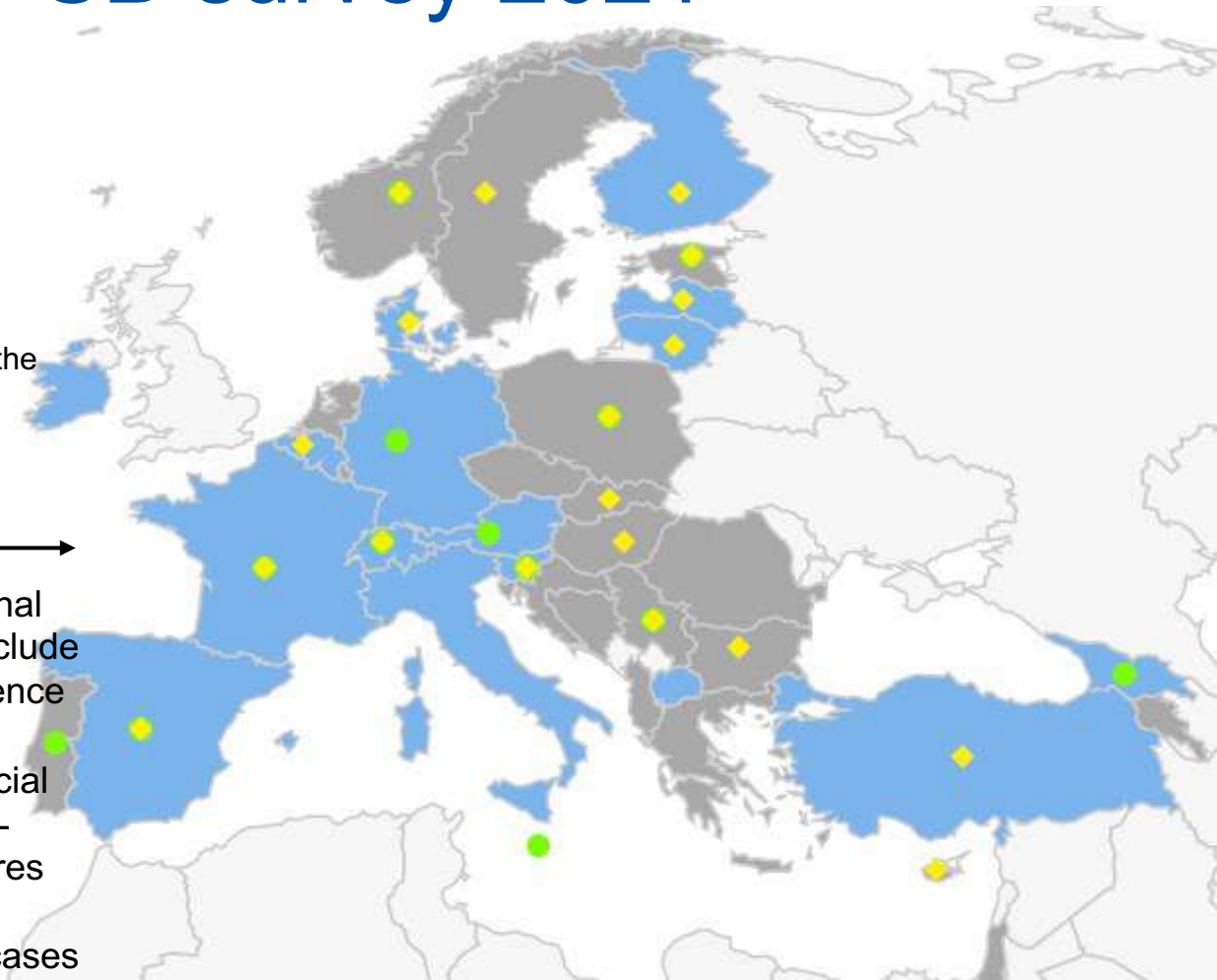
2021 survey monitor 45 countries:

- 27 EU MS
- 16 AC
- 1 with Observer status in the EOSC-SB expert group
- 1 other country (CH)

● Countries with national policy on RIs that include aspects of open science

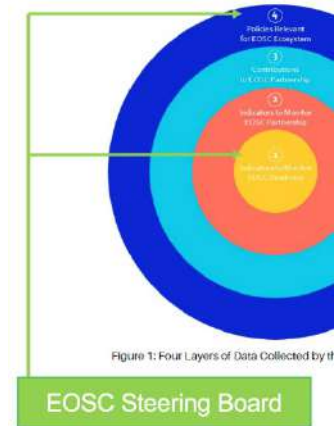
◆ Countries with financial strategies for EOSC-relevant infrastructures

● Countries with use cases and best practices on RIs that include aspects of open science

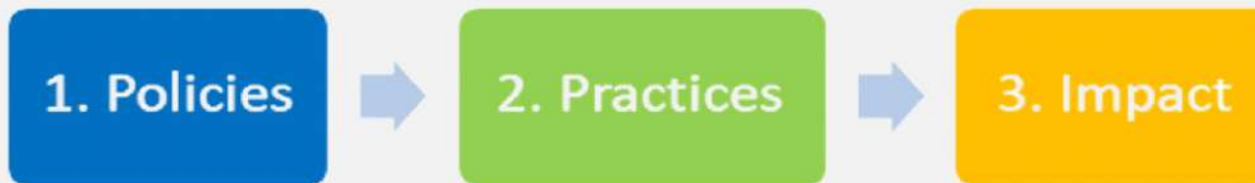


<https://eoscobservatory.eosc-portal.eu/>

Further data for policy discussion expected by EOSC-SB indicators (for layer 1 and 4)



Open Science the new normal by 2030



	POLICIES	PRACTICES
PUBLICATIONS	National Policy on X [Y/N] Financial Strategy on X [Y/N] RPOs with Policy on X [#] RFOs with Policy on X [#]	National Monitoring on X [Y/N] Best Practices on X [Y/N] Financial Investments in X [€] Output Indicator for X [#]
DATA		
SOFTWARE		
SERVICES		
INFRASTRUCTURE		
SKILLS/TRAINING		
ASSESSMENT		
ENGAGEMENT		

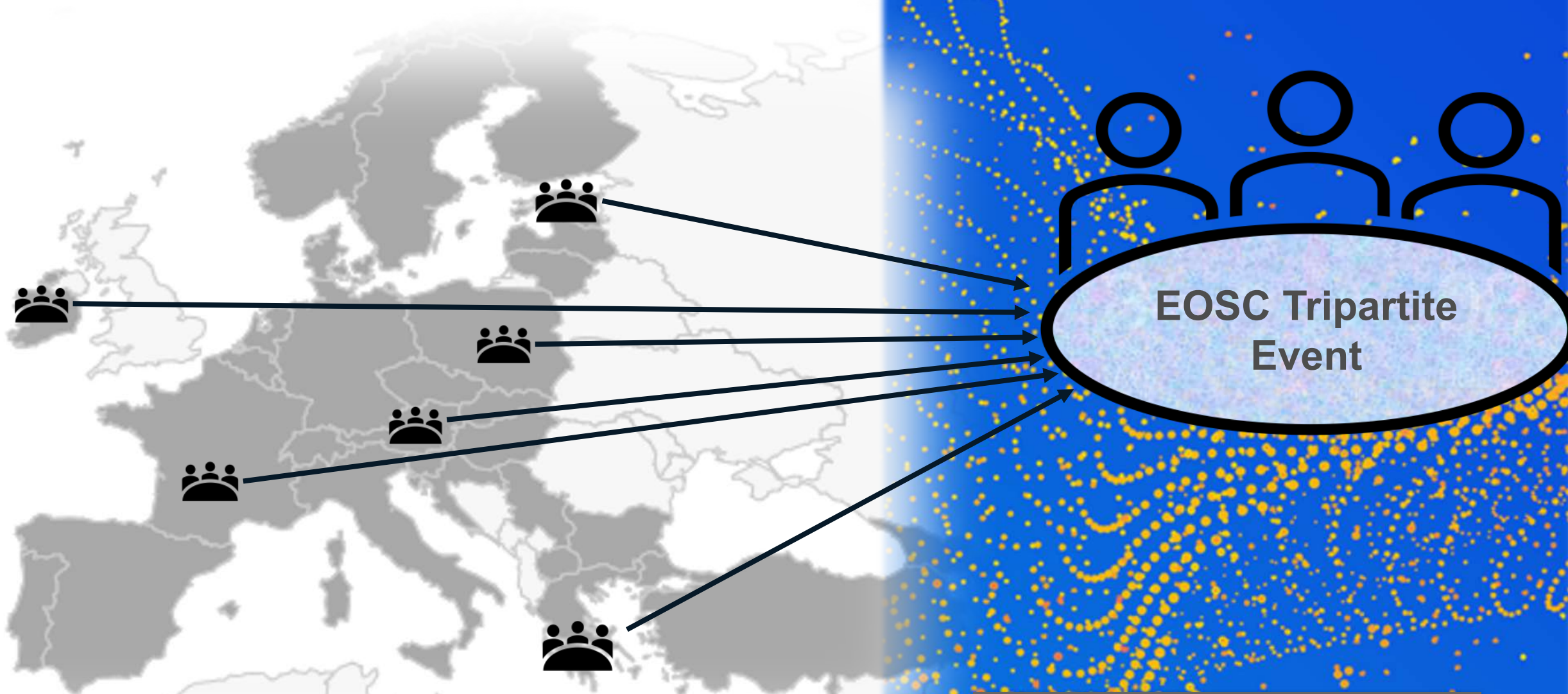
IMPACT
TBD

- Desired impact to monitor**
- Increased reproducibility
 - Increased trust in science
 - Increased research efficiency
 - Increased effectiveness
 - Results taken up by the society

Coordination of outcome of National EOSC Tripartite Events

EOSC SYMPOSIUM 2022

14 to 17 November



<https://eosc.eu/tripartite-collaboration>

<https://events.eoscfuture.eu/Symposium2022>

Example of national coordination initiative: Towards an EOSC Support Office in Austria



Our vision for open science by 2030 is that the research is based on open collaborative work and the systematic sharing of knowledge and data as early and widely as possible in the process, where research digital objects are FAIR and open and reproducible, and citizens, civil society and end-users are involved in the co-creation of the R&I agendas and content.



Thank you



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