The EOSC partnership: elements and approaches towards a successful implementation of EOSC

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European Commission

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Open Science at the centre of European research policy

2020 • Commission Communication on **'A new ERA for Research & Innovation'**

2021 • Council Recommendation on **'A Pact for Research and Innovation in Europe'**

Council Conclusions on the **'Future governance of the European Research Area'**

2022 • Council Conclusions on **'Research assessment and implementation of Open Science'**

2023 • Council Conclusions on **'High-quality, transparent, open, trustworthy and equitable scholarly publishing'**

European Commission

Open Science – EC's current fields of actuation
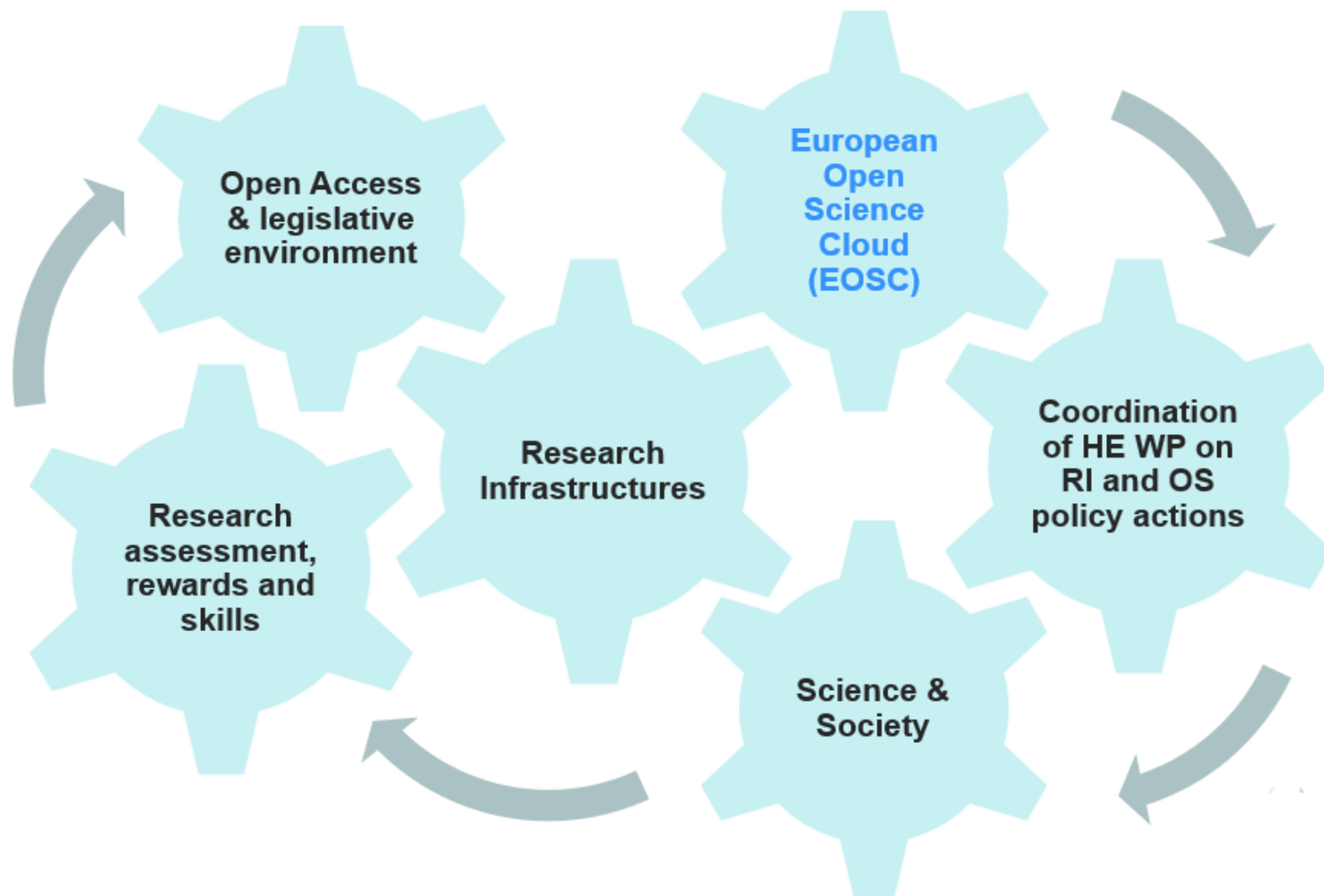
Council Conclusions on the Future Governance of the ERA
ERA Policy Agenda 2022-24

European Research Area Policy Agenda

Overview of actions for the period 2022-2024

Research and Innovation

ERA ACTION 1

Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Science Cloud (EOSC)

OUTCOMES

1. Deploy Open Science Principles and identify Open Science best practices
2. Deploy the core components and services of EOSC and federate existing data infrastructures in Europe, working towards the interoperability of research data
3. Establish a monitoring mechanism to collect data and benchmark investments, policies, digital research outputs, open science skills and infrastructure capacities related to EOSC

https://data.consilium.europa.eu/doc/document/ST-14308-2021-INIT/en/pdf

ERA Action 1: Enable sharing of research knowledge, data and tools including through the EOSC

Let's co-create EOSC

Courtesy of the EOSC Association

- **A community-driven process** (25 MS and several AC and other stakeholders are committed)

- **Gradual implementation** based on mutual alignment and pooling of resources at European, national and institutional levels
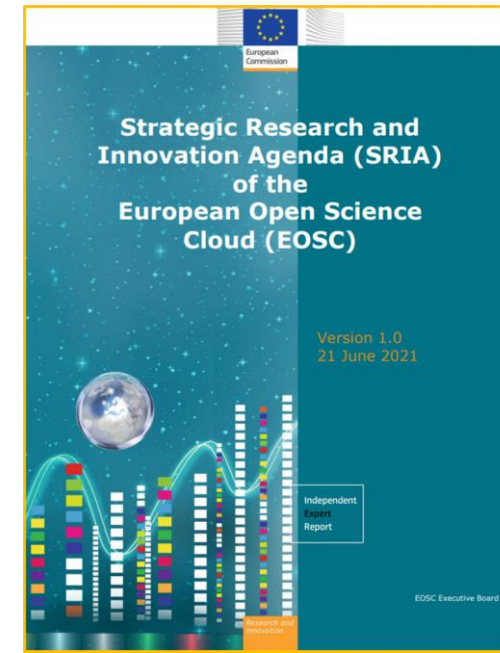

eosc

European Commission on behalf of the EU

EOSC Association representing the research community

EOSC Tripartite Governance

Member States & Associated Countries
Involved in the EOSC Steering Board

With direct support by:

➢ **EOSC European co-programmed Partnership** to pool commitments and resources along priorities set in the EOSC Strategic Research and Innovation Agenda

➢ **EOSC tripartite governance** to ensure dialogue and strategic coordination between the European Commission, the Member States and Associated Countries and the EOSC Association

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

Version 1.0
21 June 2021

OUTCOMES – Putting into Praxis

Deploy Open Science principles and identify best practices

- Use cases / country pages
- EOSC outreach / NTE
- Invest in data stewards and FAIR practices
- EOSC implementation of Macro-Roadmap

Deploy the core components and services of EOSC, federate existing research data infrastructures in Europe....
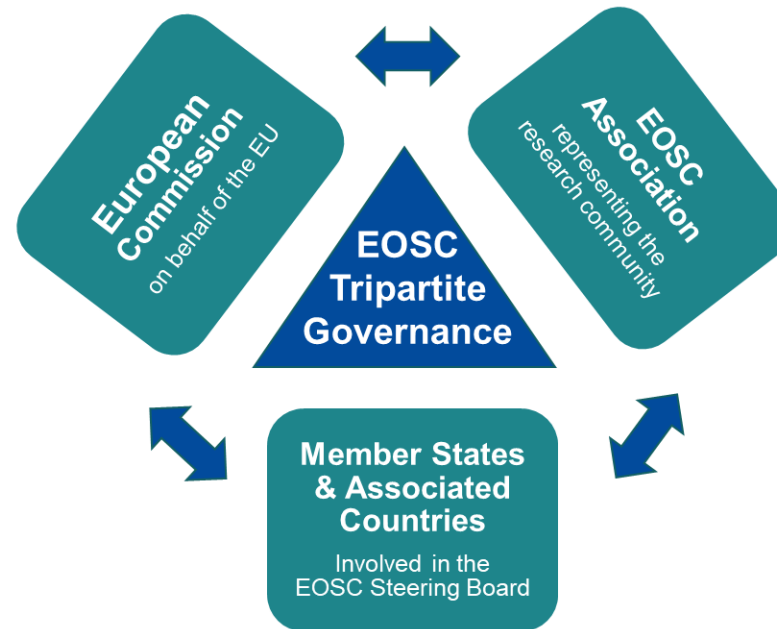
- Deploying, operating and evolving the 'EOSC EU Node' and expanding the EOSC federation
- EOSC thematic demonstrators: e.g. European Covid-19 data platform, Blue Cloud Initiative
- Community frameworks for quality control and interoperability of Research Digital Objects

Establish a monitoring mechanism to collect data on investments, policies, digital research outputs, skills...

- EOSC-readiness by the MS and AC
- Progress of the EOSC Partnership along on its Key Performance Indicators
- In-kind contributions by the EOSC Association and its members
- Other OS practices, policies, infrastructures, data and services in Europe

European Commission

EOSC Tripartite governance

- Policy development
- INFRAEOSC destination
- Guiding strategic developments & consultation
- Collaboration with EOSC A as well as MS/AC

…

European Commission on behalf of the EU

EOSC Association representing the research community

EOSC Tripartite Governance

Member States & Associated Countries
Involved in the EOSC Steering Board

- Representing the community
- Uptake of ongoing developments
- In-Kind contribution (AAR)
- Contribution to orientation of INFRAEOSC destination
- Conceptional work in Task Forces
- Collaboration in strategic developments

…

- Consultation and collaboration with EC
- providing data & information on national developments
- harmonizing and supporting policy making

…

European Commission

INFRAEOSC Destination

Co-programmed European Partnership → **Strategic Research & Innovation Agenda**

INFRAEOSC Destination

2021: 6 topics | 59 M€

2022: 4 topics + Pu Pr | 65 M€

2023: 6 topics + 2 GIB | 70 M€

2024: 6 topics | 64 M€

EOSC co-programmed European Partnership

EOSC European Partnership MoU

Strategic R&I Agenda: basis for defining the annual priorities in line with the Strategic Plan for Horizon Europe

EOSC Association: input and advice to the EC for identification of R&I priorities and definition of HE call topics

European Commission: takes into account EOSC A input and advice for call topics' preparation

→ **Call topics subject to Horizon Europe comitology procedures**

EOSC MoU: eosc.eu/sites/default/files/EOSC_Memorandum_30_July_2021.pdf
EOSC SRIA: eosc.eu/sria

EOSC Strategic R&I Agenda

Strategic Research & Innovation Agenda
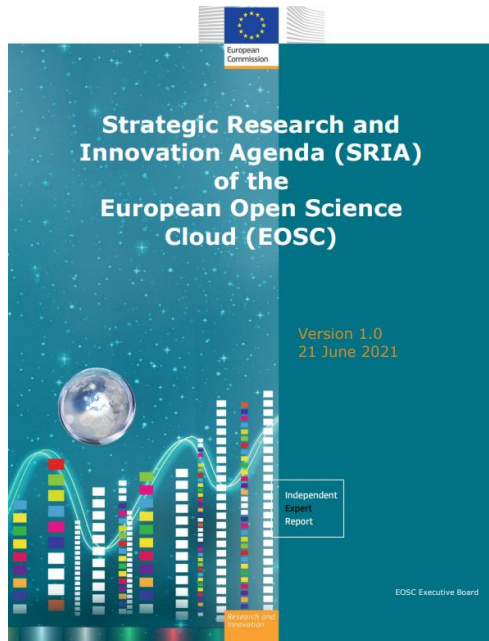
3 General objectives → 9 Specific objectives → 14 Operational objectives

14 Action Areas

Identifiers	Rules of participation
Metadata and ontologies	Landscape monitoring
FAIR metrics/certification	Business models
AAI	Skills and training
User environments	Rewards and recognition
EOSC interoperability framework	Widening public/private/global
Resource provider environments	Communication

Roadmap

INFRAEOSC 2021-2022 calls

2021 / 6 topics / 59 M€

1: Supporting an EOSC-ready digitally skilled **workforce**   *SKILLS4EOSC*

2: Supporting the development and coordination of activities of the **EOSC Partnership**   *EOSC-FOCUS*

3: Deploying EOSC-**Core** components for FAIR   *FAIRCORE4EOSC*

4: Innovative and customizable **services** for EOSC   *AI4EOSC, EuroScienceGateway, FAIR-EASE, RAISE, SciLake*

5: Enabling discovery & **interoperability** of federated research objects across sc. Communities *FAIR-IMPACT*

6: FAIR and open data sharing in support of **cancer** research   *EOSC4CANCER*

2022 / 4 topics + 1 Pu Pr / 65 M€

1: Services & tools to underpin a **research assessment** system that incentivizes OS practices   *GRASPOS*

2: Improving & coordinating technical infrastructure for institutional OS **publishing** across Europe   *CRAFT-OA*

3: FAIR and open data sharing in support of healthy oceans, seas, coastal and inland **waters**

   AquaINFRA & BlueCloud-2026

4: Support for initiatives helping to generate **global** standards, specifications & recommendations for open sharing of FAIR

   research data, publications and software *RDA TIGER*

• Public procurement on EOSC **Core & services**

INFRAEOSC Destination in WP23-24

Continue to develop the EOSC in a more cohesive and structured manner so that it becomes a fully operational enabling ecosystem for the whole research data lifecycle.

Expected impacts:
- Transforming the way research outputs are shared and exploited
- Facilitating multi-disciplinary cooperation
- Increasing volumes of FAIR research data and other outputs
- Improving trust in science

➢ All software developed should be open source, licensed under CC0 or open source licenses.
➢ All projects expected to participate in concertation activities in the framework of the EOSC Partnership.

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INFRAEOSC 2023 call

6 topics / 69 M€

1: Build on the **science cluster** approach to ensure the uptake of EOSC by research infrastructures and research communities   *OSCARS*

2: Development of community-based approaches for ensuring and improving the quality of scientific **software and code**   *EVERSE*

3: Planning, tracking, and assessing **scientific knowledge production**   *OS TRAILS*

4: Next generation services for operational and sustainable **EOSC Core** Infrastructure   *EOSC BEYOND*

5: EOSC Architecture and **Interoperability** Framework

6: Trusted environments for **sensitive data** management in EOSC   *SIESTA, EOSC ENTRUST, TITAN*

- GIB: HE repository   *HORIZON-ZEN*   +   EOSC monitor   *EOSC TRACK*

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WP23 INFRAEOSC projects
9 projects / 68 M€ / 136 unique participants / 176 participations

WP 20-23 INFRAEOSC projects
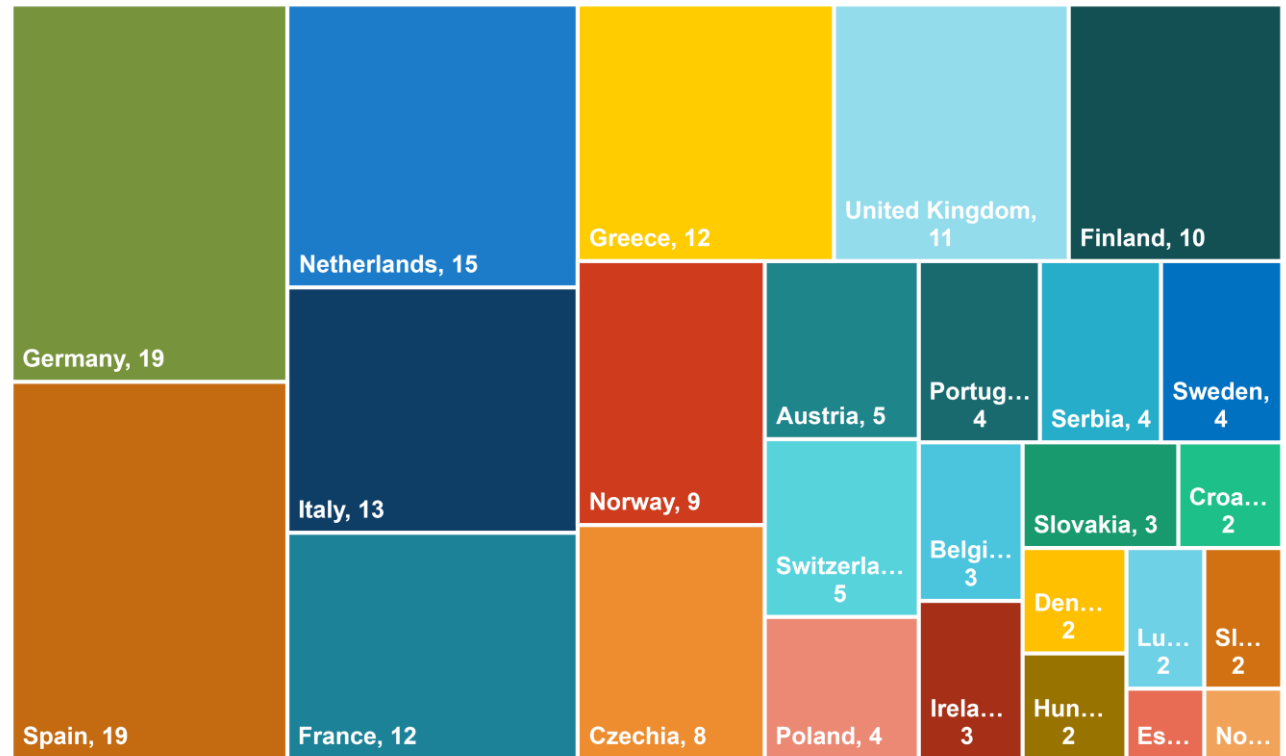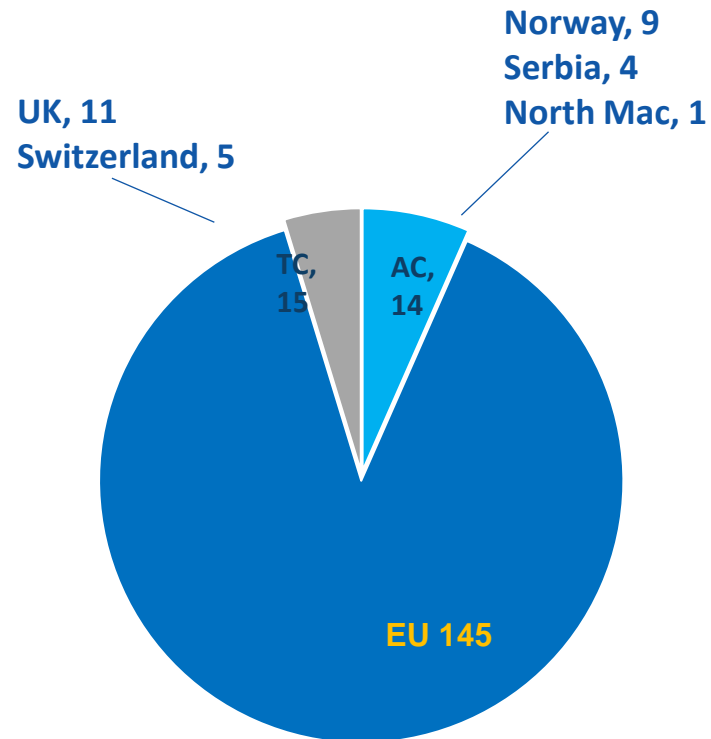
INFRAEOSC – 2024 Destination

5 topics / 61 M€ / opening 6 December 2023 / deadline 12 March 2024

**RIA
16M€
2 projects**

EOSC-01-01: FAIR and open data sharing in support of the mission adaptation to **climate change**

**CSA
4M€
1 project**

EOSC-01-02: Supporting the **EOSC Partnership** in further consolidating the coordination and sustainability of the EOSC ecosystem

**CSA
5M€
1 project**

EOSC-01-03: Enabling a network of EOSC federated and trustworthy **repositories** and enhancing the framework of generic and discipline specific services for data and other research digital objects

**RIA
8M€
1 project**

EOSC-01-04: Long-term access and **preservation** infrastructure development for EOSC, including data quality aspects

**RIA
28M€
4 projects**

EOSC-01-05: Innovative and customizable **services for EOSC Exchange**

**Plus 1*:
Opening: 13 June 2024
Deadline: 19 September 2024**

*Subject to HE comitology procedures

**CSA
3M€
1 project**

**EOSC-02-01**: Future Engagement Model for the EOSC Federation

RIA: Research and Innovation Action; CSA: Coordination and Support Action
RI WP 23-24: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-3-research-infrastructures_horizon-2023-2024_en.pdf

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Indicative mapping of SRIA AAs to INFRAEOSC 2023-'24

Integration of EC-funded projects into EOSC partnership & Overall EOSC Objectives / Strategy

- Common branding

- Macro-Roadmap

- Activities by the EOSC Association

- Requirements for projects

- Continuous reporting to EC

- EOSC Policy Brief

- Connection to the work of the Task Forces

- Coordination meetings

- EC funding of coordination activities

- Development of integration supporting measures

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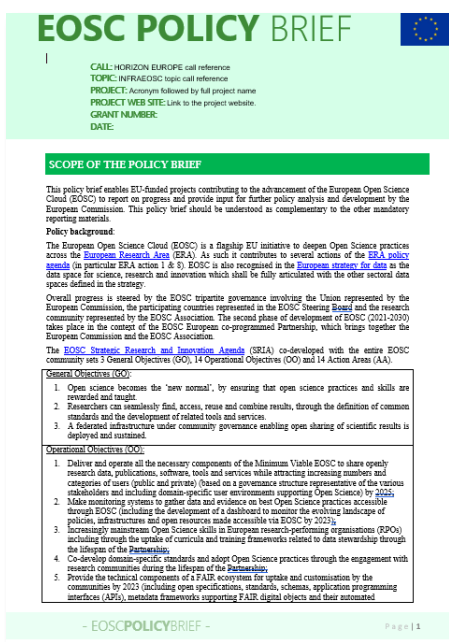
Workshop:
INFRAEOSC Projects: Sustainable Pathways to Exploitation of Key Results

Thank you

European Commission