



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

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European Commission

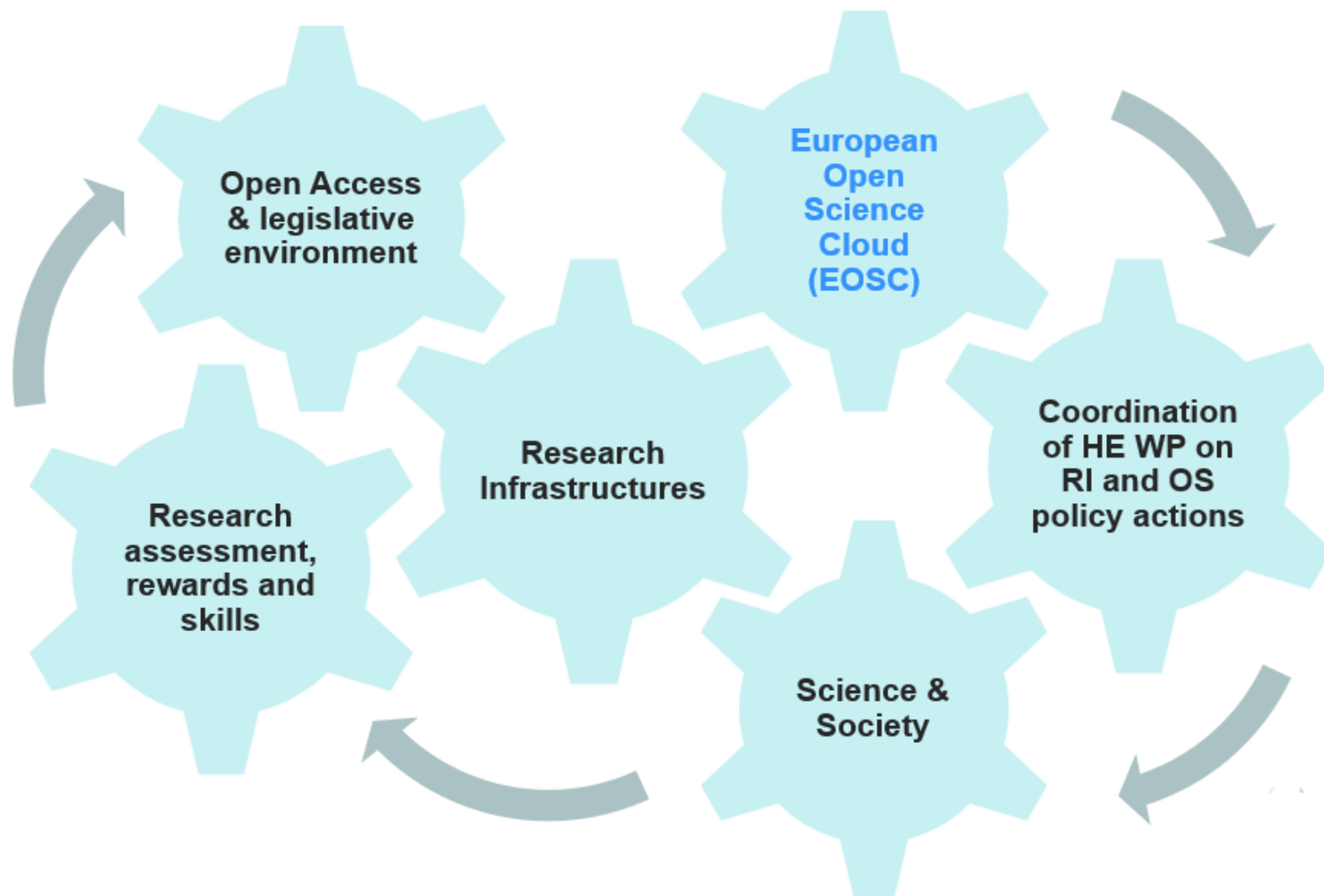
30 January 2024 | EOSC Winter School 2024



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'**

Open Science – EC's current fields of actuation



Council Conclusions on the Future Governance of the ERA

ERA Policy Agenda 2022-24



2 | EUROPEAN RESEARCH AREA POLICY AGENDA: Overview of actions for the period 2022-2024

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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

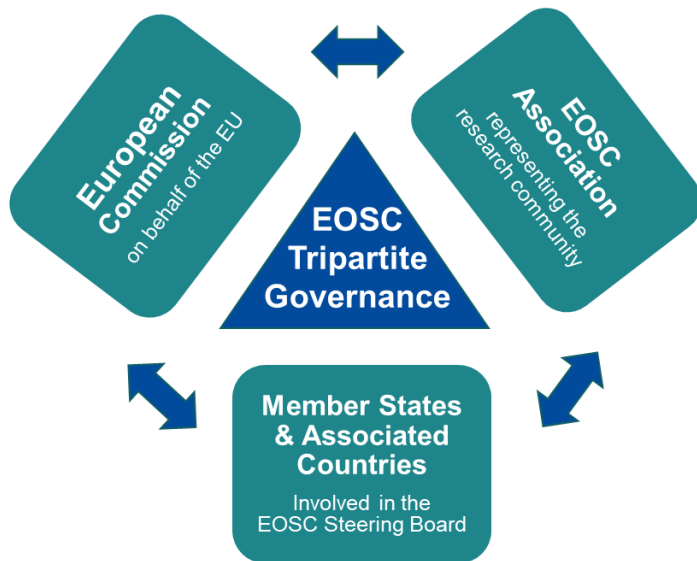
1. Deploy Open Science Principles and identify Open Science best practices
2. Deploy the core components and services of EOSC and federate existing data infrastructures in Europe, working towards the interoperability of research data
3. Establish a monitoring mechanism to collect data and benchmark investments,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

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

- **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

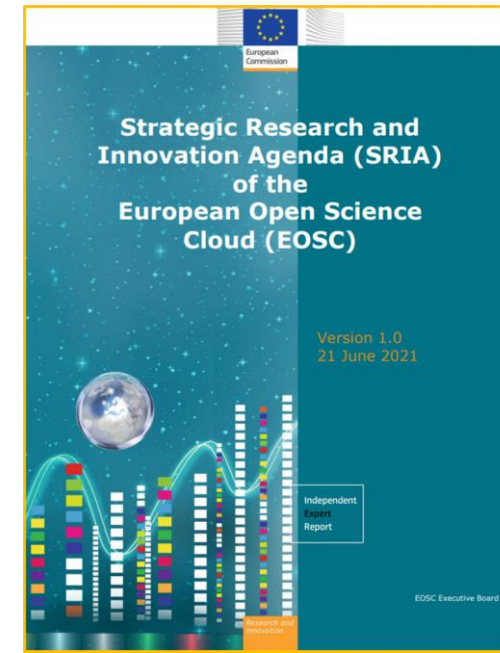


Courtesy of the EOSC Association



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



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....**

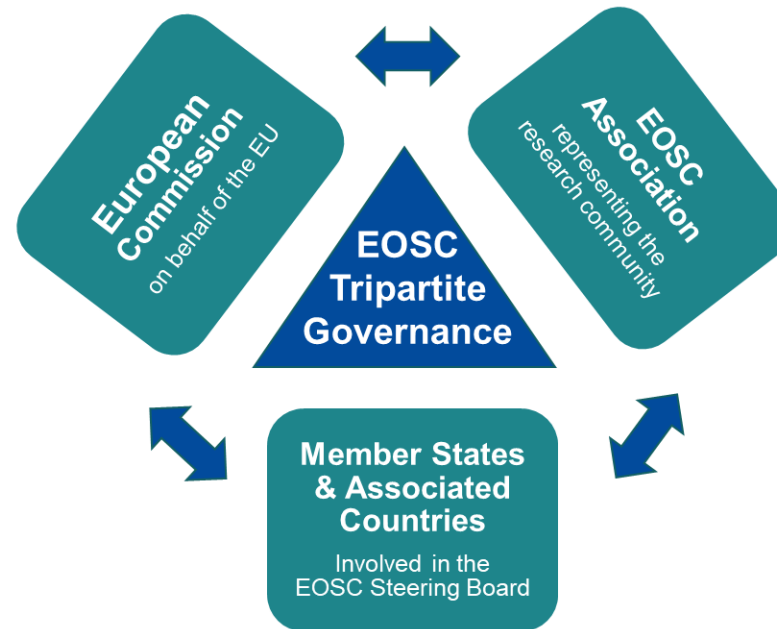
- Deploying, operating and evolving the 'EOSC EU Node' and expanding the EOSC federation
- EOSC thematic demonstrators: e.g. European Covid-19 data platform, Blue Cloud Initiative
- Community frameworks for quality control and interoperability of Research Digital Objects

**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

EOSC Tripartite governance

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



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

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

INFRAEOSC Destination

Co-programmed European Partnership



Strategic Research & Innovation Agenda



EN
Annex 5

Memorandum of Understanding for the Co-programmed European Partnership for the European Open Science Cloud (EOSC)

The European Open Science Cloud Association, representing the partners other than the Union (its constituent entities¹), the registered offices of which are in Rue du Trône 62, 1050 Bruxelles, hereafter referred to as the "Partners other than the Union", and the European Union, represented by the European Commission, (jointly hereinafter referred to as "the Partners").

Considering that:

- Parts of Horizon Europe – the Framework Programme for Research and Innovation ("Horizon Europe")² – may be implemented through Co-Programmed European Partnerships, on the basis of a Memorandum of Understanding between Partners determined to support the development and implementation of research and innovation activities of strategic importance to enable the Union to address global challenges and maintain its competitiveness in line with EU priorities, including the Sustainable Development Goals;
- The Strategic Plan for Horizon Europe³ has identified a candidate for a Co-Programmed European Partnership for the European Open Science Cloud (EOSC) considered instrumental to deliver scientific, economic and societal impact in line with the Horizon Europe objectives;
- The proposal received from the Partners other than the Union has been positively assessed by the European Commission in that it fulfils the new ambition and the selection criteria referred to in Article 10 and Annex III of Regulation (EU) 2021/695 of the European Parliament and of the Council⁴ ("Horizon Europe");
- The implementation, monitoring and evaluation of the European Partnerships will comply with the criteria referred to in Annex III of Horizon Europe, including an alignment with Horizon Europe monitoring and evaluation provisions, set out in Article 50 and Article 52, as well as Annex V on Key Impact Pathways;
- The multi-annual Strategic Research and Innovation Agenda (SRIA) agreed by the Partners will provide the basis for the development of the co-operation under this

¹ Constituent entities are the members of the Association.
² Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination (OJ L 170, 12.5.2021, p. 1–68).
³ <https://op.europa.eu/en/web/op/en-iss-and-publications/publication-detail/-/publication/3e6ff074-8ac3-11eb-b85c-01aa75c071a1>
⁴ OJ L 170, 12.5.2021, p. 1–68.

RTD	DATE: 2020/08/21
ARES	REF: S05A504
ARRIVES	CODE DOSSIER:

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

EN
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³ <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/3c6f0d74-8ac3-11eb-b85c-01aa75ed71a1>

⁴ OJ L 170, 12.5.2021, p. 1–68.

RTD	DATE:	20/08/21
ARES	N°	505/1504
ARRIVES	CODE DOSSIER:	

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

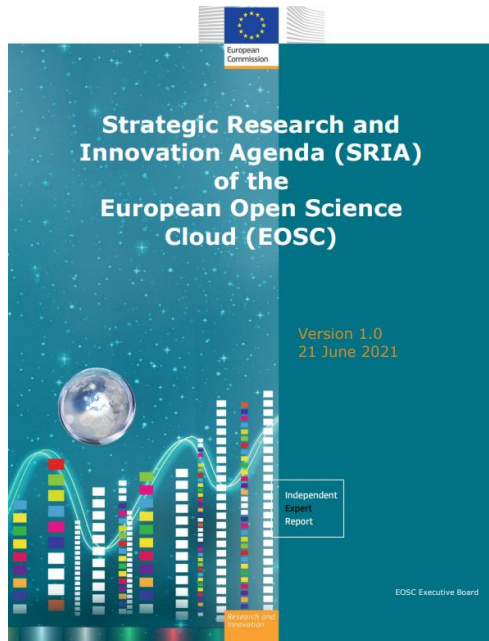
EOSC Association: input and advice to the EC for identification of R&I priorities and definition of HE call topics

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

→ Call topics subject to Horizon Europe comitology procedures

EOSC 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.

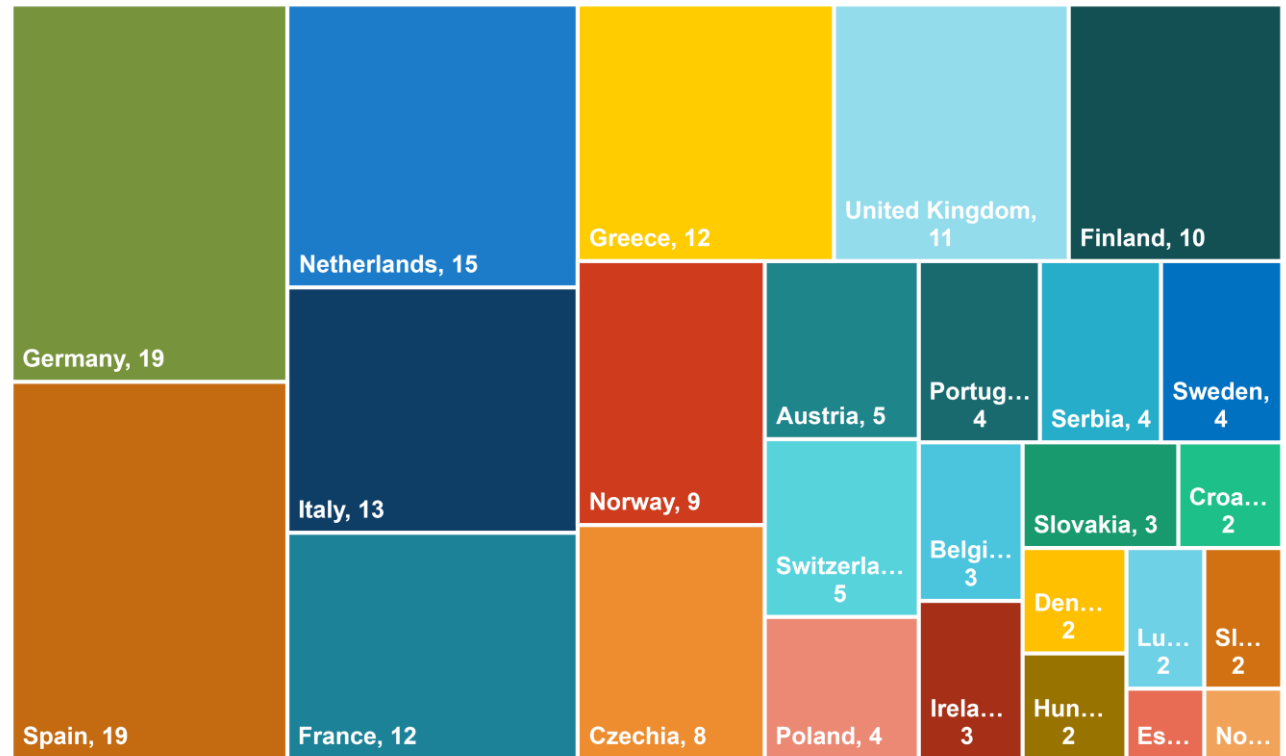
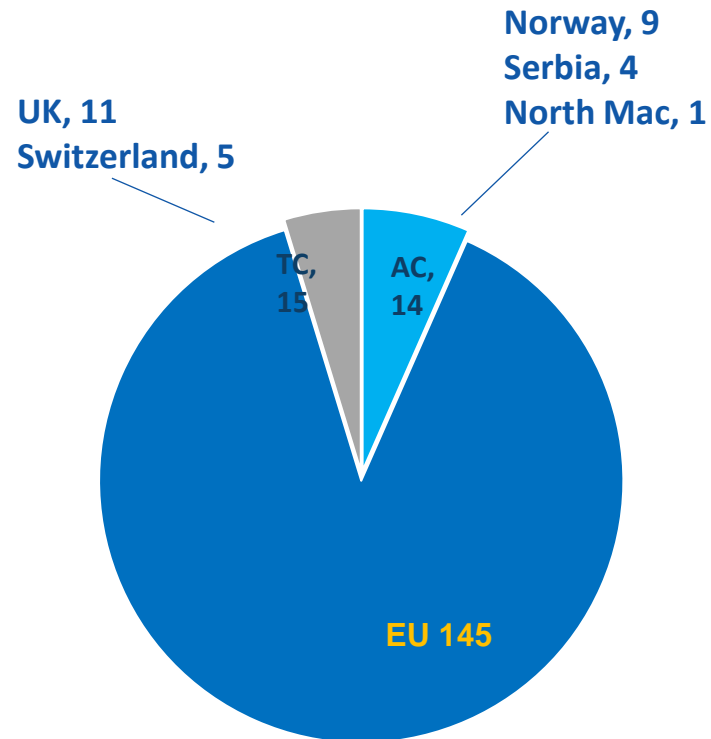
INFRAEOSC 2023 call

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**

WP23 INFRAEOSC projects

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



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

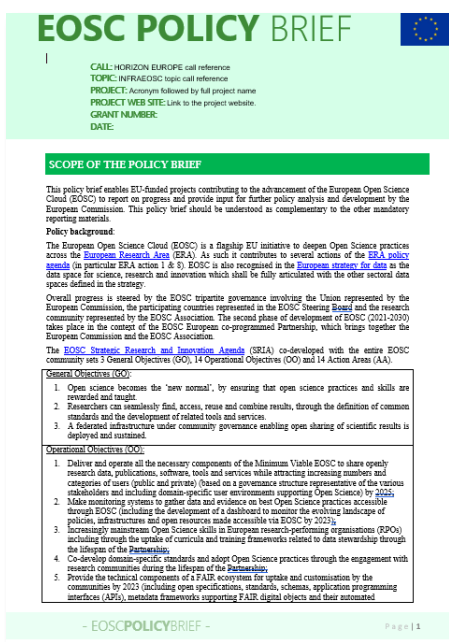
Indicative mapping of SRIA AAs to INFRAEOSC 2023-'24

	AA1 'IDs'	AA2 'metadata'	AA3 'metrics'	AA4 'AAI'	AA5 'users'	AA6 'providers'	AA7 'EIF'	AA8 'RoP'	AA9 'monitor'	AA10 'funding'	AA11 'training'	AA12 'rewards'	AA13 'communic'	AA14 'widen'	use cases
2023-EOSC-01-01				main link	main link				link	link					main link
2023-EOSC-01-02		main link		main link						link					
2023-EOSC-01-03	main link		main link			link									link
2023-EOSC-01-04	main link	main link		main link		main link	main link								
2023-EOSC-01-05				main link		main link				link					
2023-EOSC-01-06				main link										main link	
GIB HE repository								main link							
GIB EOSC monitor				main link											
2024-EOSC-01-01	link	link		link			link								main link
2024-EOSC-01-02									main link			main link	main link		
2024-EOSC-01-03		link	main link			main link				link					
2024-EOSC-01-04		main link	main link			main link									
2024-EOSC-01-05				main link										main link	main link
2023-ERA-01-07											main link	main link			
2024-ERA-01-08											main link			main link	

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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
- ...



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

Thank you



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