



EOSC as part of the European Union's strategy for Open Science

*Spain National Tripartite Event on the European Open Science Cloud
Madrid, 19 September 2023*

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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’**

Strategic objectives for Open Science in Europe

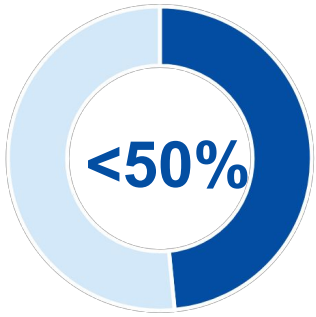
Immediate and **unrestricted**
open access to research
outputs

Responsible research
output management, in line
with **FAIR** principles

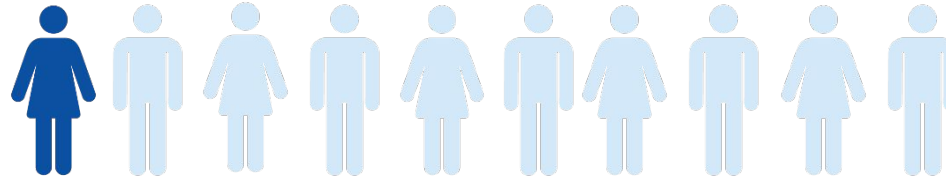
Early and **open** sharing of
research: methods, data,
preprints

European ecosystem of
research infrastructures that
is more **effective** and
efficient, open and
accessible, and sustainable

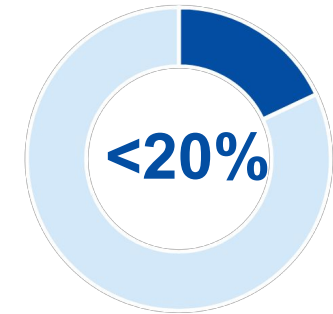
Open collaboration, within
science and with broader
public and private sector



Scientific publications
available in open access



Authors who retain copyright in contracts
with largest subscription journals

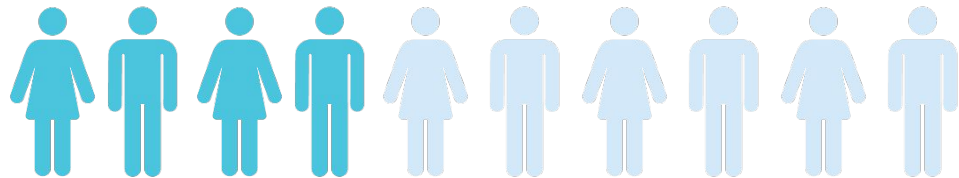


Researchers who put FAIR
principles into practice

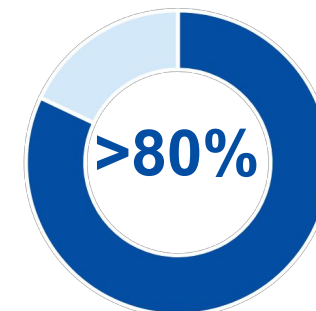


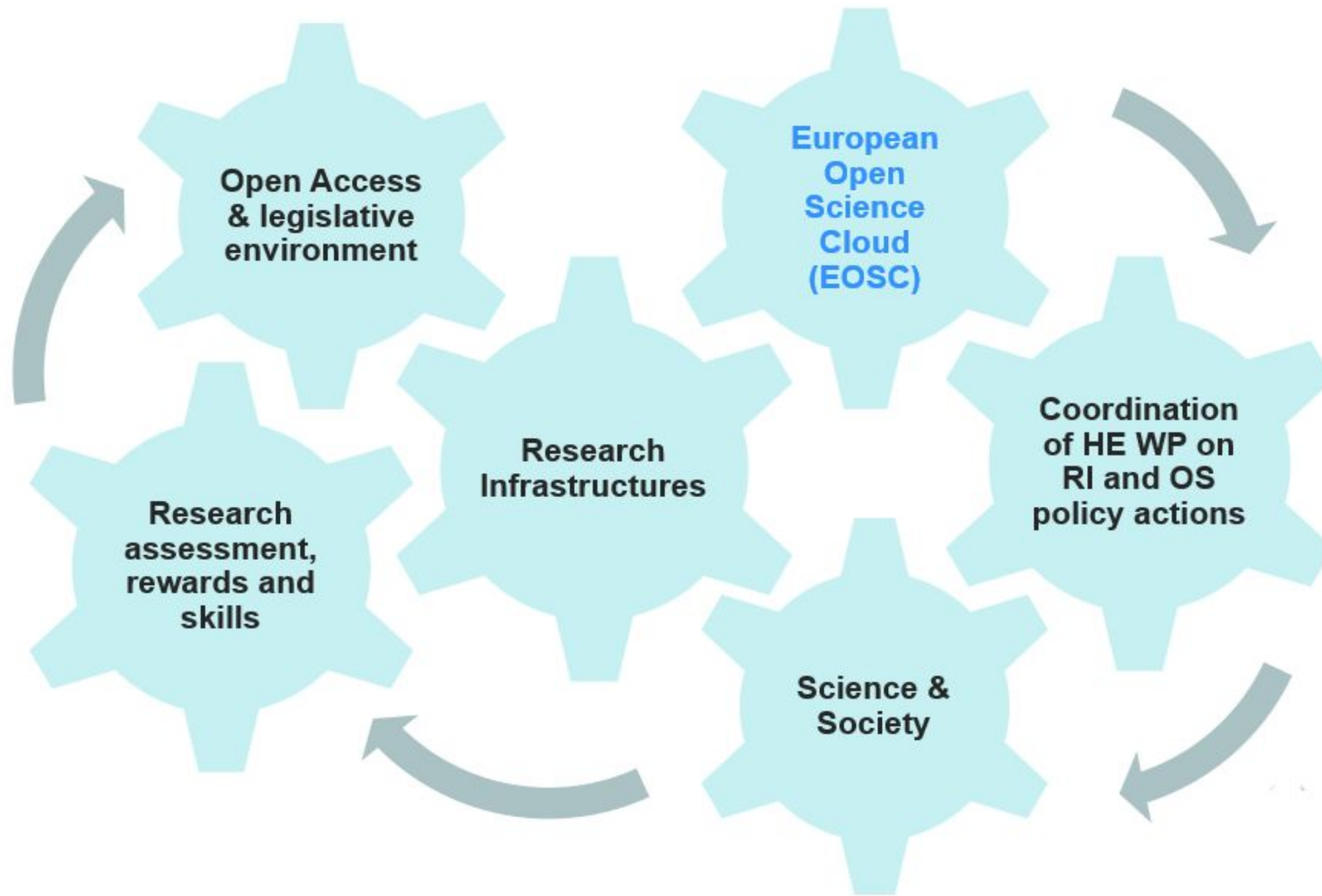
3€ billion per year
National public funding for
pan-European Research Infrastructures

Researchers who occasionally store research
data in shared/non-local repositories



Importance of publishing and attracting
external funding in a researcher's career





EOSC in the ERA policy Agenda (2021-2024)

ERA Policy Action 1: *“Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the EOSC”*



- **Deploy Open Science principles and identify Open Science best practices**
 - Mainstreaming OS across national programmes, catalogue of OS practices, tools and services, data scientists and data stewards, national EOSC tripartite events ...

- **Deploy the core components and services of EOSC and federate existing data infrastructures in Europe, working towards the interoperability of research data**
 - Horizon Europe support to EOSC Partnership, connection of national/regional research infrastructures to EOSC federation, community frameworks for interoperability & quality control ...

- **Establish a monitoring mechanism to collect data on investments, policies, digital research outputs, open science skills and infrastructure capacities related to EOSC**
 - Co-development of EOSC national surveys, roll-out of key layers of monitoring mechanism ...

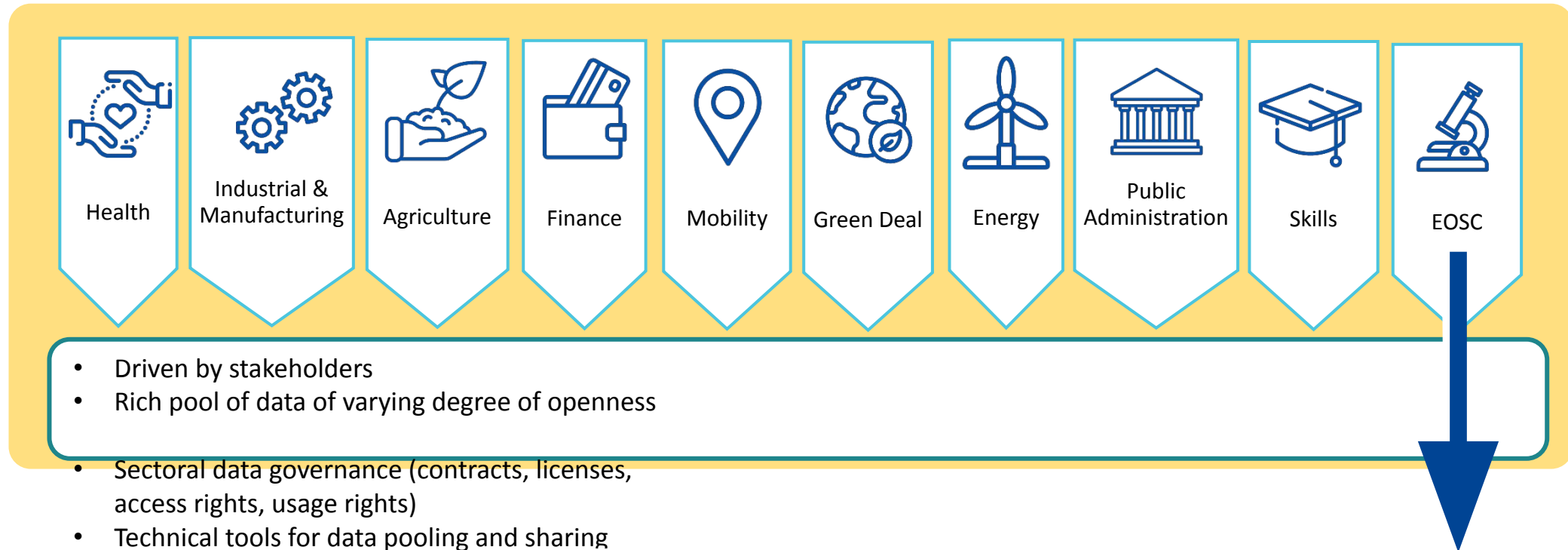
2. Deploy the core components and services of EOSC, federate existing research data infrastructures in Europe, develop community frameworks for quality control and interoperability of research data

Motivation: Provide all European researchers with seamless access to a rich portfolio of FAIR data and services in all relevant domains

Deliverables:

- Deploying, operating and evolving the ‘EOSC EU Node’ and expanding the EOSC federation:
 - EC call for tender on “Managed Services for the European Open Science Cloud platform” (31 Mio €). Will lead to the production of a fully operational ‘EOSC EU node’ providing access to FAIR data and quality services in all relevant domains in the period 2024-2026.
- EOSC thematic demonstrators: examples: European Covid-19 data platform, Blue Cloud Initiative, ESCAPE EOSC cell.
- Community frameworks for quality control and interoperability of research digital objects
- EOSC governance & sustainability after 2027: analysis of options within EOSC tripartite governance

Common European Data Spaces

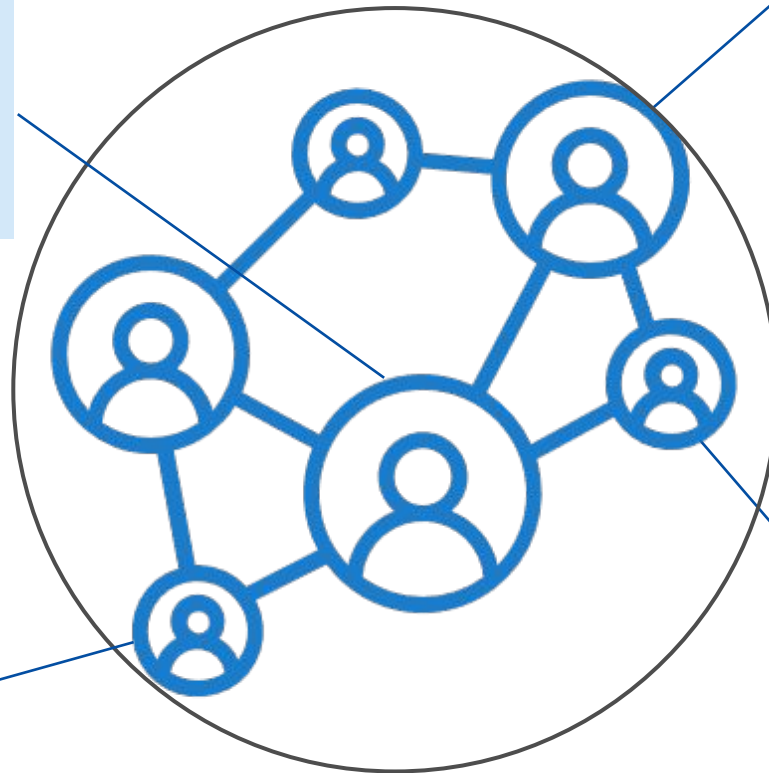


The **European Open Science Cloud (EOSC)** is the basis for a **science, research and innovation data space** that will be connected and **fully articulated with the sectoral data spaces**

EOSC federation as a system of systems

European node

e.g. central EOSC EU node enabling the federation with common AAI, APIs, common data search and access engine, monitoring & accounting, etc.



National nodes

e.g. national repository platform of national research information system

Thematic community nodes

e.g. ESFRI thematic research infrastructure or ERIC

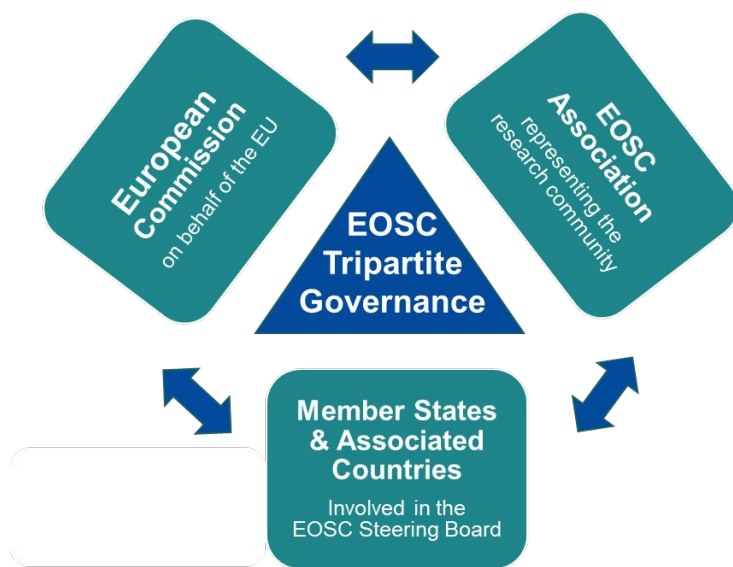
European e-Infrastructure nodes
providing generic data services

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

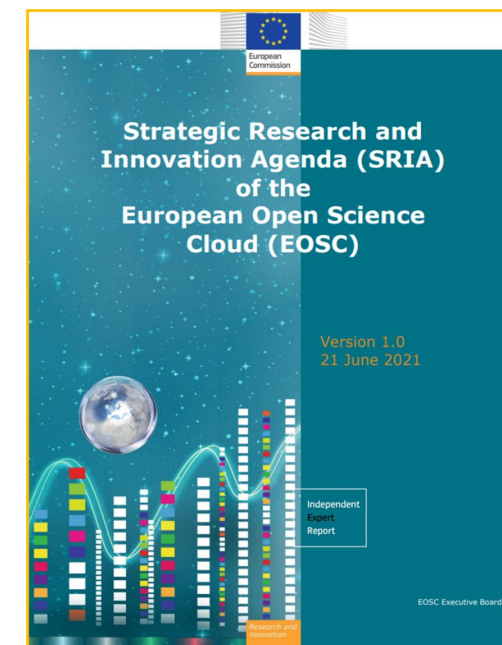


Courtesy of the EOSC Association



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

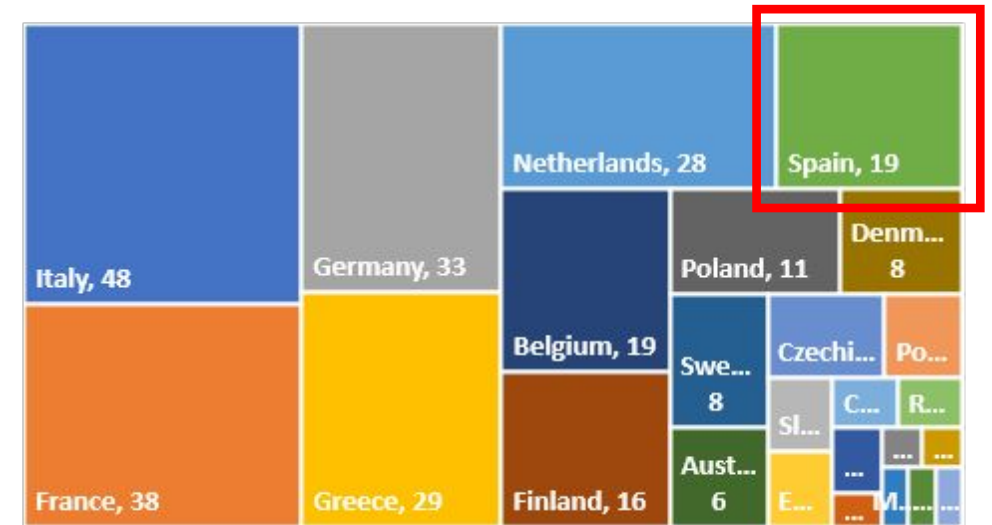


Horizon Europe INFRAEOSC projects

Total EC contribution for Horizon Europe (2021-2027) of **490 M€**

- **WP 21-22: 15 projects / 87 M€** Net EU contribution to **Spanish** beneficiaries **6.24 M€ (7,2%)**

- Unique participations 222 (**Spain 16: 7,2%**)
- Total participations 330 (**Spain 19: 5,8%**)
- **Coordination roles 2 out of 15: 13%**
AI4EOSC and EOSC4Cancer projects



- **WP 23: 7 projects / ~ 65 M€**
- **WP 24: 5 topics / ~ 61 M€**

*Evaluation concluded. Grant agreements to be finalized soon.
Opening 6 December 2023 / deadline 12 March 2024*

EOSC Post 2027: 'helicopter view'

Five main EOSC tasks for the future	Today (EOSC co-programmed partnership)
Task 1: Deploying and operating the EOSC EU node (Core, Exchange, FAIR Data Federation)	- EC procurement « EOSC managed services »
Task 2: Maintaining and updating the EOSC EU node and expanding the EOSC federation (with elements that are close to the 'market')	N/A
Task 3: Enabling a 'web of FAIR data and service' for science	- EU grants across HE - National & institutional additional activities
Task 4: Develop, prototype and test new elements supporting the evolution of the EOSC Core and Exchange and the tools enabling the federation (focus on elements that can be made ready for the 'market')	- EC grants resulting from Calls defined in the RI Work Programme
Task 5: Enabling Open Science policies and the uptake of Open	- Tripartite Governance activities (including with support of EU grants)

EOSC post 2027: Key questions

Tasks 1 & 2: Operation of the EOSC EU node and expansion of the EOSC federation

Do we need a joint governance of the operation of the EU node and the policies applicable to the EOSC federation?

Tasks 3 to 5: Continued EOSC Strategic R&I Agenda (EOSC SRIA)

Do we aim at higher levels of integration (management, financial, scientific) for the implementation of the EOSC SRIA post 2027 at European, national, institutional scale?

Gracias



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