

# La agenda estratégica de EOSC (Destino 2)

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Fundación Española para la Ciencia y la Tecnología (FECYT)

**Jornada informativa sobre Infraestructuras de Investigación en Horizonte Europa**

19 diciembre 2022





## PERSONAS

**122**

**87 Mujeres**

**35 Hombres**



## PRESUPUESTO 2021

**27,5 M€**



## 4 OBJETIVOS ESTRATÉGICOS

**OE2. Información científica y ciencia abierta**

**OE3. Ciencia internacional**

## LA FUNDACIÓN

### MISIÓN

Catalizamos la relación entre la ciencia y la sociedad, impulsando el crecimiento de la cultura científica española y fomentando la transferencia de conocimiento a través de la divulgación, la educación, la formación, la información y el asesoramiento.

Colaboramos con otros agentes y actores del Sistema de Ciencia, Tecnología e Innovación en la internacionalización de la ciencia española y la generación y análisis de datos, y damos soporte en la gestión de la información científica y de la ciencia en abierto.

# ¿Qué es EOSC?

What

## **EOSC is a web of FAIR data and related services for research**

Research data that is easy to find, access, interoperate and reuse (FAIR)  
Trusted and sustainable research outputs are available within and across scientific disciplines

Why

## **Unlock the full potential of research data to accelerate discoveries and innovation**

How

### **Access and interoperability of research data and results**

- Define ownership, authorship and responsibility of data and research outputs
- Ensure long-term preservation of data throughout its lifecycle
- Enable the creation of standards for all research domains
- Make data machine-actionable
- Enable new scientific discovery methods and science disciplines
- Train researchers on adopting FAIR principles as an integral part in their activity

### **A sustainable coordinated infrastructure**

- Establish and maintain a coordinated federated reference architecture
- Implement an operational infrastructure framework that is long term sustainable
- Ensure high quality of data and services
- Ensure secure access to data and services
- Define clear standards for API and interoperability of data and services
- Apply user friendly practices
- Inspire EOSC ambassadors to assist in on-boarding of researchers

### **Inspired people and robust governance**

- Communicate an inspiring EOSC vision and strategy
- Implement an unambiguous and clearly mandated governance structure
- Establish a framework to engage human capital in institutions, countries and scientific communities
- Enable disciplinary and cross-disciplinary transnational research to find new insights from existing and new research data and outputs

# EOSC Partnership - Colaboración tripartita

## European Commission



Representing the European Union

## EOSC Steering Board



Representing EU Member States and Associated Countries

## EOSC Association



Representing the European research community



# La Asociación EOSC – organización



<https://eosc.eu/>



249 miembros



144 full members



79 observers



26 mandated organizations

- ✓ CSIC, miembro fundador y *mandated organization* para España.
- ✓ Coordinación nacional de las actividades.
- ✓ Nacho Blanquer (UPV), miembro del comité directivo.

Advisory groups	Task Forces	
 <b>AG 1 Implementation of EOSC</b>		TF 1.1 PID policy and implementation
		TF 1.2 Researcher engagement and adoption
		TF 1.3 Rules of Participation (RoP) compliance monitoring
 <b>AG 2 Metadata and Data Quality</b>		TF 2.1 FAIR metrics and data quality
		TF 2.2 Semantic interoperability
 <b>AG 3 Research Careers and Curricula</b>		TF 3. 1 Data stewardship curricula and career paths
		TF 3.2 Research careers, recognition and credit
		TF 3.3 Upskilling countries to engage in EOSC
 <b>AG 4 Technical challenges on EOSC</b>		TF 4.1 AAI Architecture
		TF 4.2 Infrastructures for quality research software
		TF 4.3 Technical interoperability of data and services
 <b>AG 5 Sustaining EOSC</b>		TF 5.1 Financial Sustainability
		TF 5.2 Long-term data preservation

Fuente: Ilaria Nardello, Ari Asmi, René Buch, & Erik-Jan Bos. (2022). Delivering for EOSC - Key Exploitable Results of Horizon 2020 EOSC-related Projects. Zenodo. <https://doi.org/10.5281/zenodo.7401539>

# La SRIA y el MAR



 eosoc

## Towards the EOSC Multi-Annual Roadmap 2023-2024

### Acknowledgement

The EOSC Association Board wishes to thank its Task Forces for their immense contributions under a tight timeframe to ensure the initial draft of the MAR was prepared in time for community consultation. We also wish to thank all those who took time to read the document and respond to the consultation survey. Many constructive comments were received and have enabled us to produce a much more robust roadmap for 2023-2024. Finally, we wish to thank the EOSC Association Secretariat including Ute Gussenheimer (Secretary General), René Buch (CTO), and Erik-Jan Bos (Technical Policy Officer) for assistance in shaping the MAR, and particularly Giulia Lodi (Communications Officer) for ensuring the text was placed into the appropriate template for release to Members and Observers.

Brussels, 24 October 2022

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# EOSC Multi Annual Roadmap 2023-2024

## **Stage 1 (2021–2022): Development towards added value from a functional federation of infrastructures**

Enabling the **European Open Science Cloud operations (the EOSC-Core)** to provide necessary core functions of the Minimum Viable EOSC (MVE) that allow federation of existing and future infrastructures, according to associated Rules of Participation and governance that provision growth and expansion in the following stages.

## **Stage 2 (2023–2024): Expansion to production that generates added value**

Expanding and building the core data infrastructure to support the full cycle of workflows for scientific research in key thematic areas. During this period, activities will build on pilots/demonstrators and work towards linking EOSC beyond the research communities to the wider public sector and the private sector will begin.

## **Stage 3 (2025–2027 and beyond): Expansion to develop impact from Open Science**

Deployment of federated research infrastructures for European researchers with functionality that provisions actors from multiple communities to deliver impactful Open Science. In addition to European infrastructures, the national research infrastructures delivered from the Member States and Associated Countries in particular will help in this expansion phase.

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Conditions for the Call ..... 38

HORIZON-INFRA-2023-EOSC-01-01: Build on the science cluster approach to ensure the uptake of EOSC by research infrastructures and research communities..... 39

HORIZON-INFRA-2023-EOSC-01-02: Development of community-based approaches for ensuring and improving the quality of scientific software and code..... 42

HORIZON-INFRA-2023-EOSC-01-03: Planning, tracking, and assessing scientific knowledge production ..... 46

HORIZON-INFRA-2023-EOSC-01-04: Next generation services for operational and sustainable EOSC Core Infrastructure ..... 49

HORIZON-INFRA-2023-EOSC-01-05: EOSC Architecture and Interoperability Framework ..... 53

HORIZON-INFRA-2023-EOSC-01-06: Trusted environments for sensitive data management in EOSC ..... 56

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HORIZON-INFRA-2024-EOSC-01-01: FAIR and open data sharing in support of the mission adaptation to climate change..... 60

HORIZON-INFRA-2024-EOSC-01-02: Supporting the EOSC Partnership in further consolidating the coordination and sustainability of the EOSC ecosystem..... 63

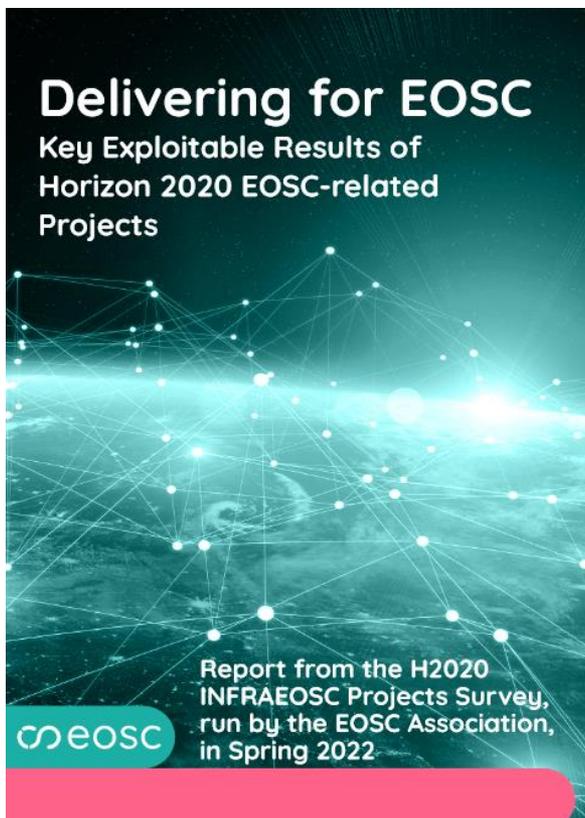
HORIZON-INFRA-2024-EOSC-01-03: Enabling a network of EOSC federated and trustworthy repositories and enhancing the framework of generic and discipline specific services for data and other research digital objects..... 67

HORIZON-INFRA-2024-EOSC-01-04: Long-term access and preservation infrastructure development for EOSC, including data quality aspects..... 70

HORIZON-INFRA-2024-EOSC-01-05: Innovative and customizable services for EOSC Exchange ..... 73

- Dominio del esquema de clusters científicos.
- Relevancia del desarrollo de código y de software.
- Research assessment.
- Servicios de nueva generación.
- Arquitectura y marco de interoperabilidad.
- Tratamiento de datos sensibles.
- Cambio climático.
- Apoyo al partenariado.
- Trustworthy repositories.
- Infra de acceso y preservación.
- Servicios innovadores y personalizables.

# KERs proyectos previos INFRAEOSC



Call name	Topic	Project Name	2018	2019	2020	2021	2022	2023
H2020- INFRAEOSC-2018-2	INFRAEOSC-04-2018 - Connecting ESFRI infrastructures through Cluster projects	ENVRI-FAIR		×	×	×	×	×
		EOSC-Life		×	×	×	×	
		ESCAPE		×	×	×	×	
		PaNOSC	×	×	×	×	×	
		SSHOC		×	×	×	×	×
H2020- INFRAEOSC-2018-3	INFRAEOSC-05-2018-2019 - Support to the EOSC Governance	EOSC-Nordic		×	×	×	×	
		EOSC-Pillar		×	×	×	×	
		EOSC-synergy		×	×	×	×	
		ExpPaNDS		×	×	×	×	×
		NI4OS-Europe		×	×	×	×	×
H2020- INFRAEOSC-2018-4	INFRAEOSC-05-2018-2019 - Support to the EOSC Governance	FAIRsFAIR		×	×	×	×	
H2020- INFRAEOSC-2019-1	INFRAEOSC-02-2019 - Prototyping new innovative services	COS4CLOUD		×	×	×	×	×
		CS3MESH4EOSC			×	×	×	×
		INODE		×	×	×	×	×
		NEANIAS		×	×	×	×	×
		TRIPLE		×	×	×	×	×
H2020- INFRAEOSC-2020-2	INFRAEOSC-07-2020 - Increasing the service over of the EOSC Portal	C-SCALE				×	×	×
H2020- INFRAEOSC-2020-2	INFRAEOSC-07-2020 - Increasing the service over of the EOSC Portal	RELIANCE				×	×	×
BG-07-2019-2020	BG-07-2019-2020 - The Future of Seas and Oceans Flagship Initiative	Blue Cloud		×	×	×	×	×
H2020- INFRAEOSC-2020-2	INFRAEOSC-03-2020 - Integration and consolidation of the existing pan-European access mechanism to public research infrastructures and commercial services through the EOSC Portal	EOSC Future				×	×	×
H2020-ICT-2018-2	ICT-34-2018-2019 - Pre-Commercial Procurement open	Archiver		×	×	×	×	
H2020-ICT-2014-1	ICT-09-2014 - Tools and Methods for Software Development	DICE				×	×	×

Tabla 2 – List of respondent in the H2020 EOSC-related Projects Survey

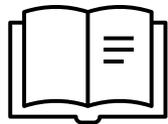
<https://zenodo.org/record/7401539>

# Aportaciones del Steering Board

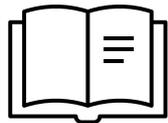
## EOSC Steering Board



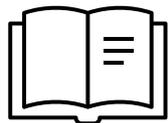
Representing EU Member States and Associated Countries



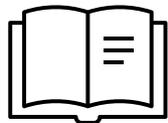
EOSC Data Literacy.



EOSC and the Private Sector.



EOSC Sovereignty on FAIR Data.



Monitoring Open Science.

# Gracias

***@PilaRicoCastro***

**Responsable Unidad Acceso Abierto, Repositorios y Revistas  
Experta Nacional Comité de Programa *Research Infrastructure* en HE  
Representante nacional en el EOSC SB**

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