

EOSC Federation: future steps and engagement

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eosc Federation

EOSC Symposium 2025 / 03-05 November / Brussels

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Focus



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EOSC Symposium 2025
03-05 November

Welcome to E O S C F E D E R A T I O N





“What matters most is to keep the momentum, the ambition and the shared purpose that have brought us this far. So let’s seize this moment, let’s act together to complete [the EOSC Federation] fast and make it the backbone of Europe’s digital research and innovation ecosystem You can count on the full support of the European Commission in this vital and transformative endeavor.”

Marc Lemaître (Director-General, EC,
RTD)@EOSC Symposium 2025

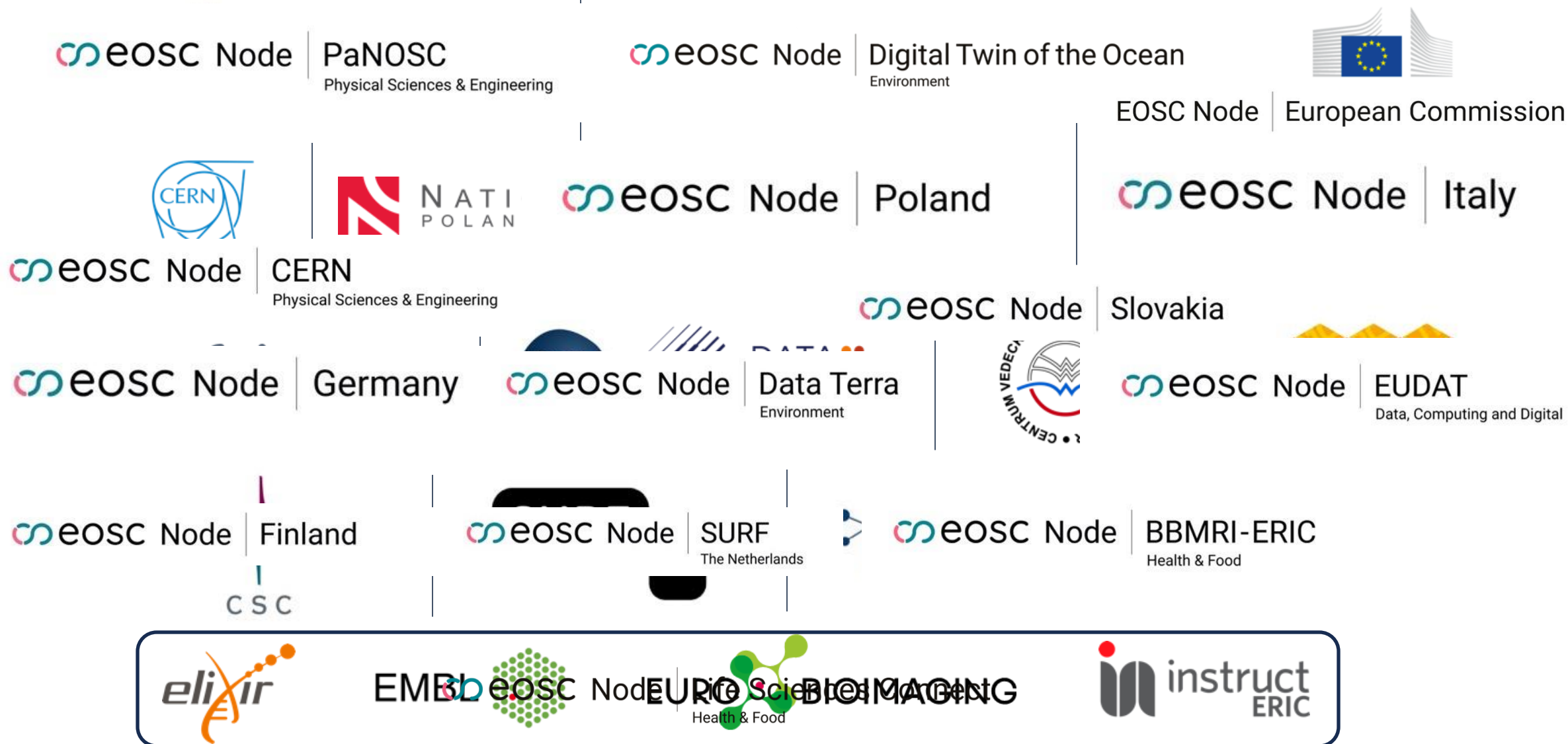




The vision for EOSC is to establish a system that enables researchers in Europe to store, share, process, analyse, and reuse FAIR research outputs—such as research data, publications, and software—across disciplines and borders.

- **System of systems approach:** Build on existing and planned infrastructures to create an interconnected ecosystem.
- **Inclusivity and accessibility:** Ensure low barriers to entry, ease of use, and broad participation.
- **Community-driven and participatory:** Engage the research community in co-creating and shaping the Federation.
- **Trust, security, and governance:** Establish clear rules, monitoring, and enforcement mechanisms to ensure a safe and reliable environment.
- **Flexibility and adaptability:** Allow for an evolutionary approach, adapting based on findings and lessons learned.
- **Autonomy and control:** Respect institutional autonomy while ensuring that data and service owners retain full control over shared resources and openness levels.
- **Broad engagement and transparency:** Keep all interested stakeholders informed and involved in key developments.

Nodes engaged in 2025



Federating more than 30 service and research product catalogues - and growing!
eosc.eu/building-the-eosc-federation/

Consensus on Technical Requirements

Mandatory Technical requirements

- **Federated AAI**

Adhere to the EOSC Node Federated AAI requirements as defined in EOSC AAI Architecture 2025 (March 2025) <https://doi.org/10.5281/zenodo.15388270>

- **Federated catalogues**

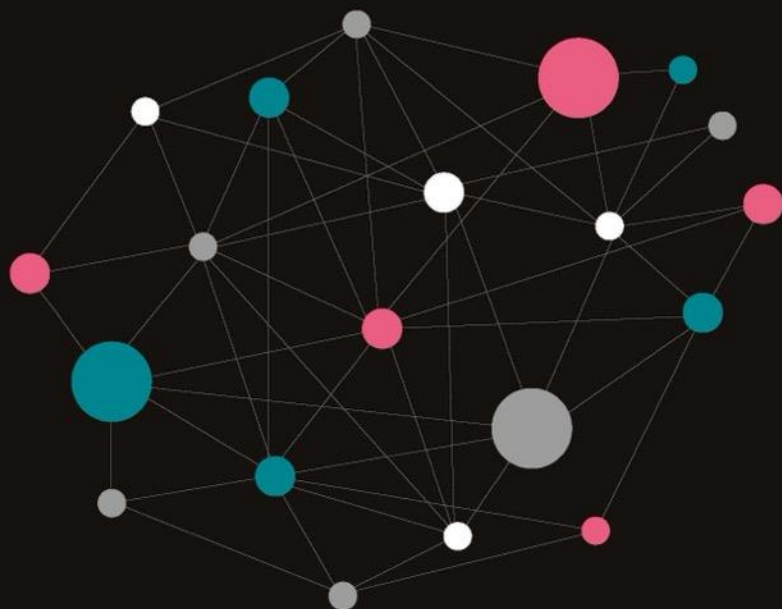
Register their Service catalogues and Research Product catalogues in the EOSC EU Node Resource Catalogue (September 2025) <https://doi.org/10.5281/zenodo.15516020>

Recommended

- Application Workflow Management
- Service Monitoring
- Service and Research Product Accounting
- Order Management
- Helpdesk
- Management System



EOSC Federation Handbook



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The EOSC Federation Handbook has been written by a group of **volunteers**, who have been working together since March 2024 with the support of the EOSC Focus project.

The Handbook provides an overview of the organisational and operational structure, and technical characteristics, of the EOSC Federation

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EOSC Federation Handbook

March 27, 2025

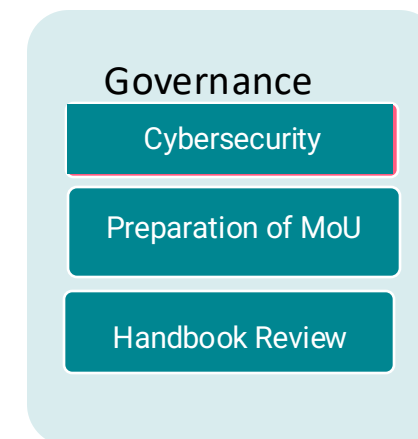
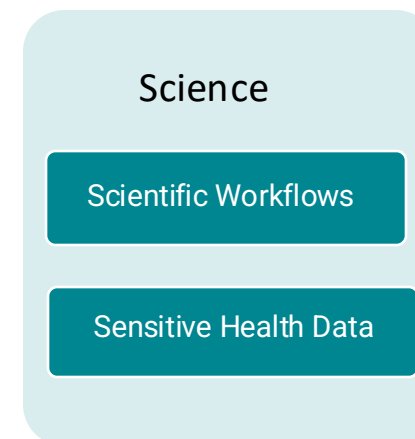
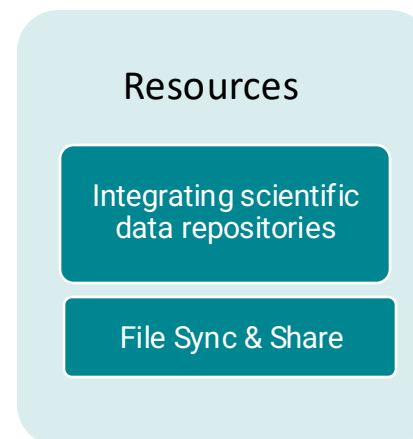
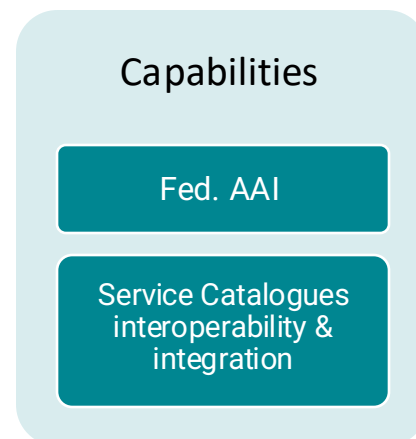
Interviews performed with all first wave Nodes & **Survey distributed** to gather additional feedback

Outputs of the build-up group: multi-node scientific use cases

Marine microbiomes	Exploring the impact of marine microbiomes on carbon sequestration	Dick Schaap, MARIS
REANA	Cross-node workflow for the analysis of CERN's ATLAS/CMS experiment's open data on the REANA reusable data platform	Tibor Simko, CERN
Galaxy	Cross-node workflow for the processing of imaging data from the environmental and life sciences using the Galaxy platform	Björn Grüning, NFDI
Pan-Finder	The photon and neutron federated knowledge finder, PaN-Finder, an AI-enabled data search tool for navigating the large data sets of European Research Infrastructures	Andy Götz, PaNOSC
MCVAL	A prostate cancer screening tool, MCVAL, that employs multi-centric validation of AI models	Andreas Türk, BBMRI-ERIC
AMR	The use of genomic sequencing analysis to facilitate cross-border surveillance of anti-microbial resistance	Jaroslav Budiš, CVTI SR

	BBMRI	DTO	CERN	CSC	CVTI SR	Data Terra	EOSC_PL	EU Node	EUDAT	ICSC	LSRN	NFDI	PANoSC	SURF
Marine microbiomes		X				X	X				X			
REANA			X				X	X		X		X		
Galaxy		X		X		X		X	X		X	X		X
PaN Finder												X	X	
MCVAL	X			X	X		X		X	X				X
AMR					X		X							

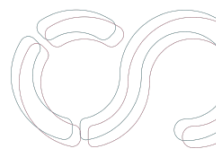
Outputs of the Build-up Group: Coordination of the EOSC Federation



- ~150 people from the nodes have participated in the EOSC Federation Build-up Group and subgroups

Memorandum of Understanding on Preparing Operational Integration within the Envisaged EOSC Federation

This MoU is a statement of mutual understanding and intent.
It is not legally binding and does not create enforceable rights or obligations.



Signatories: EOSC Association & EOSC Nodes

Scope

- It sets out the **mutual understanding of roles and principles** for interim collaboration among the Participants, with the sole **purpose of testing and preparing practical approaches** for future participation in the EOSC Federation.
- During this phase, the Participants aim to establish approaches and frameworks for future service integration, interoperability, and quality assurance, including consideration of FAIR principles, technical standards, and ethical, legal, and social implications (ELSI) expectations. These preparatory steps are intended to **lay the foundation for an operational model** under a future binding agreement governing the EOSC Federation.

https://eosc.eu/wp-content/uploads/2025/10/20251103_MoU_Operational-Preparation_EOSC-Federation.pdf

By Q4 2025 **the EOSC Federation** will ...

- ... consist of **several enrolled EOSC Nodes**
- ... have established a first operational **governance and organisational structure**, including clear description of the roles and responsibilities of its constituent bodies
- ... have detailed the **application process** to become an EOSC Node, including assessment of organisational, legal and technical requirements
- ... have established a first edition of **Federation-wide policies**, such as Rules of Participation, Access and Acceptable Use policies, cybersecurity, privacy and data protection
- ... have established a first edition of the **EOSC Interoperability Framework**
- ... have demonstrated cross-Node utilisation of some of the **federating capabilities**



Results achieved with the voluntary effort of the first wave nodes and support of the EU Node

Transition to production

- What must be in place to be able to move the EOSC Federation from prototype to production?

Adapt Build-up group to
MoU / Technical
implementation roadmap /
new federating capabilities

Expansion of the EOSC Federation

- 2nd and other waves of enrollment
- Onboarding of resources

New nodes & onboarding of
resources

- **Call deadline:** 18th February 2026, 17:00 CET
- **Results will be available in April 2026** (eligibility check; review by independent experts; tripartite approval)
- **Call budget:** 0€
- **Expected duration of projects:** 24 months with possible extensions
- **Weblink for further information:** <https://eosc.eu/eosc-about/calls-grants/>
- **Contact:** eosc-nodes-helpdesk@esf.org

Challenges to address

- clearly articulate the **primary purpose of the proposed Node's participation** in the EOSC Federation.
- present a **strong value proposition that highlights how the project contributes to the EOSC Federation**
- **enrich the EOSC Federation with state-of-the-art federated resources** (services and data).
- identify **key deliverables and milestones**, including potential **risks and limitations** that may impact the project execution

Documents to submit

- Project Charter
- Endorsement letter/acknowledgement of the corresponding authority/ies

Enrolment call of the EOSC Tripartite Governance

This call invites organisations to join the **second wave of the EOSC Federation's build-up phase**, requiring them to enrol as an EOSC Node, submit a Project Charter, develop use cases, and demonstrate their capacity to function as a community gateway.



Total funding: No funding is provided through this call

Maximum grant amount: Not applicable

[Download full call text and annexes | Enrolment call of EOSC Tripartite Governance](#)

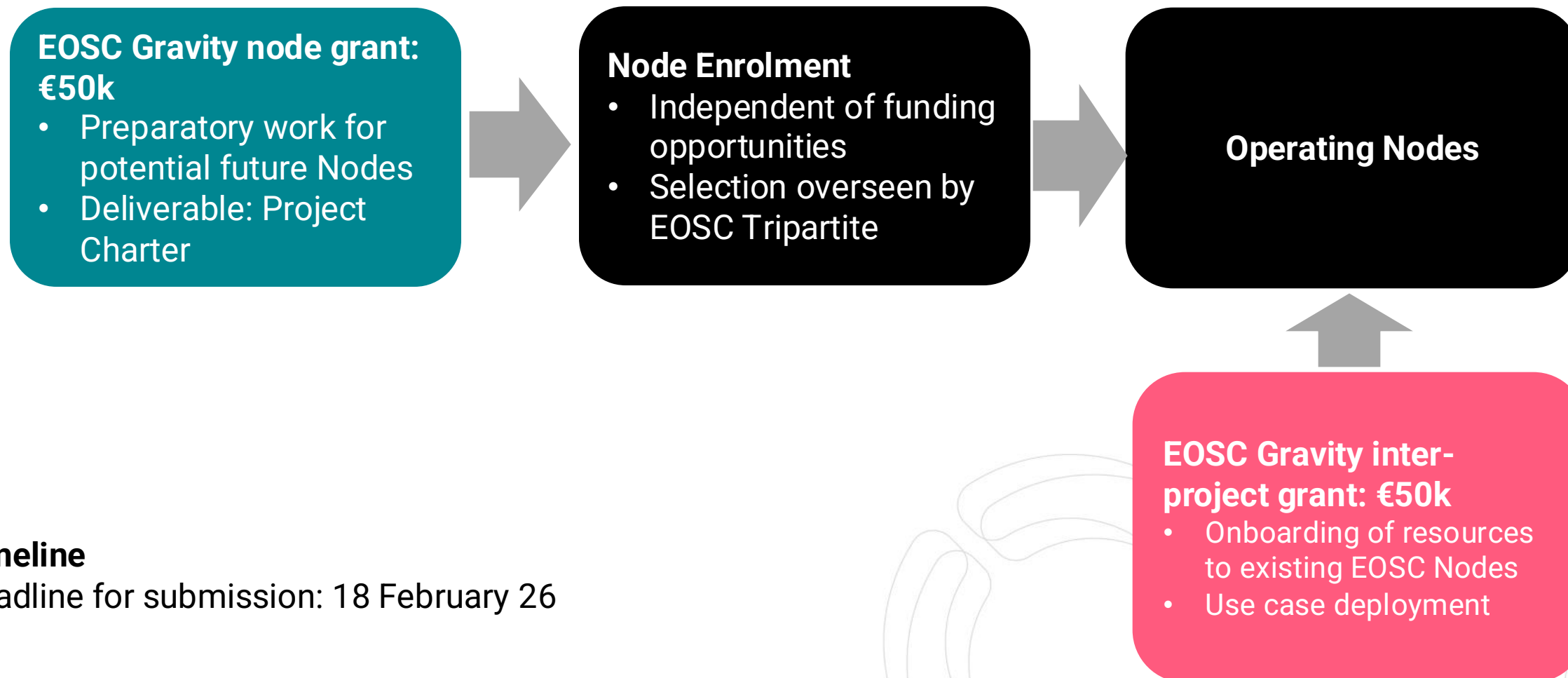
Create an account
on the ESF Platform

Apply for the Enrolment call
of the EOSC Tripartite Governance

eosc.eu/eosc-about/calls-grants/

- #1 Applicants must be interested in **enrolling as a separate Node**.
- #2 Applicants **must have the capacity or have a clear plan to develop the capacity** to implement activities that enable the broader represented community to engage and participate in the EOSC Federation (e.g. to onboard 3rd party resources)
- #3 Applicants must agree to **comply with the mandatory technical specifications** regarding integration in the EOSC Federation, in particular regarding integration in the **EOSC Federated AAI** and exposure of their resources through (a) **common EOSC catalogue(s)**.
- #4 The resources that applicants aim to make available to EOSC users via an EOSC Node **must operate at minimum at Technical Readiness Level (TRL) 7**
- #5 Applicants must commit at least **five individuals** involved for the duration of the build-up phase, including the roles of coordinator, operations officer, a legal officer, a cybersecurity officer and a communications officer. Applicants must specify the names assigned to the aforementioned roles in their application.
- #6 Applicants **must agree with existing Node(s) or other applicants to align on and propose the development of at least one scientific multi-Node use case or one use case realising a concrete contribution to federating capabilities**
- #7 Applicants are **willing to sign a Memorandum of Understanding (MoU)** on preparing operational integration within the envisaged EOSC Federation

Funding opportunities available via EOSC Gravity project to support the Growing the EOSC Federation

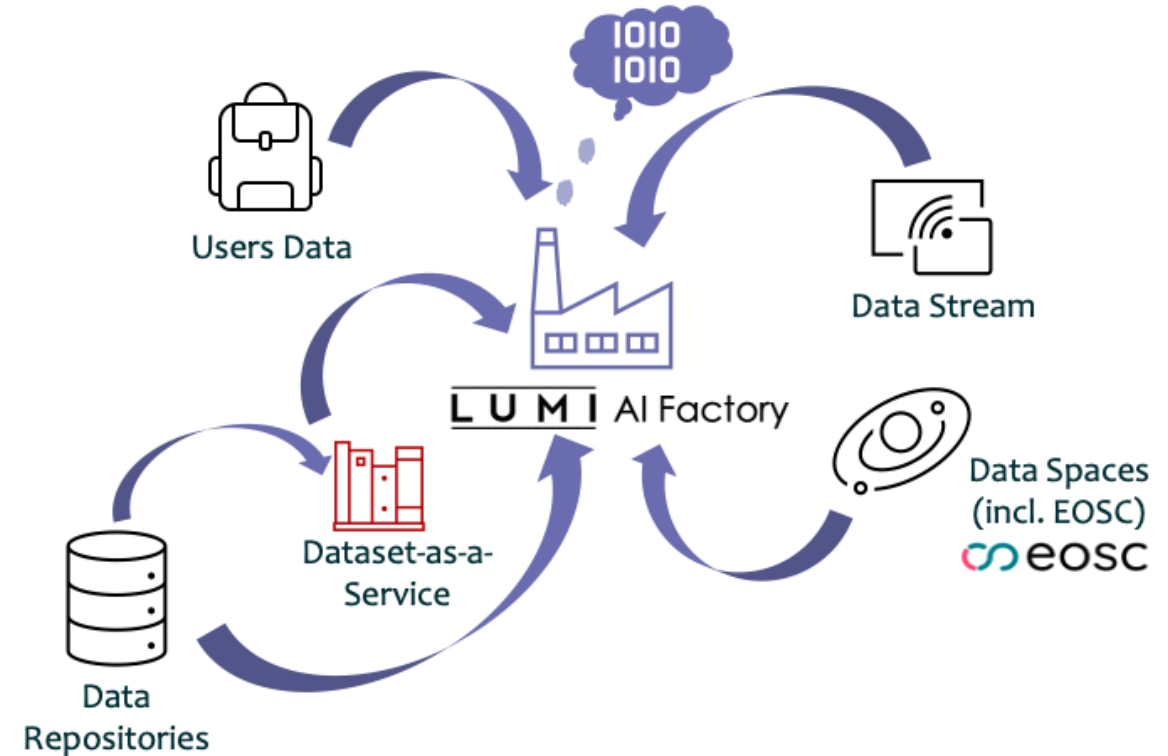


Timeline

Deadline for submission: 18 February 26

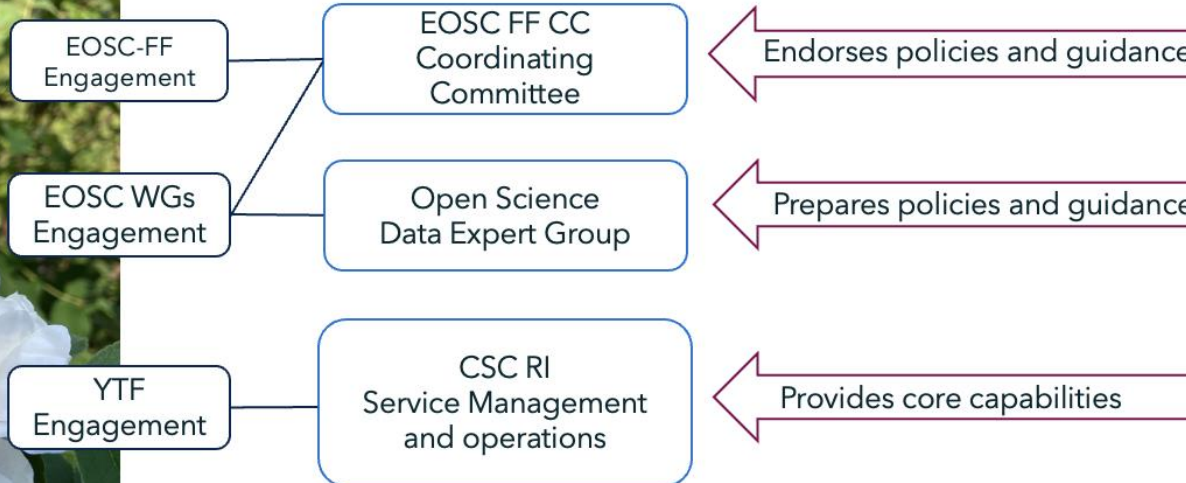
- Understand your node priorities and focus

Smooth Access, Shared Standards, Stronger Research



- Set up an inclusive governance for your node / community

Policy governance of the EOSC Finland Candidate Node



National governance: strategic level

National governance: technical level

Institutional governance

- Do not re-invent the wheel, leverage on previous investments on *ALL* fronts, fill the gaps

Welcome to the EOSC Finland Candidate Node

Home > Welcome to the EOSC Finland Candidate Node

Welcome to the EOSC Finland Candidate Node

Dataset-as-a-Service

EOSC Finland - Tools for service providers and data managers

EOSC Finland for researchers

More about the EOSC federation and the Finnish candidate node

MyAccessID - a new way to access CSC services

Discover services

Browse services in the EOSC federation available for researchers with a Finnish affiliation or project.

Service catalogue →

Start using services

Read about the first steps to becoming a CSC user.

How to start →

User guides and tutorials

Browse CSC's user guides and tutorials.

User guides ↗

Research outputs

Discover Finnish research in Research.fi.

Research.fi ↗

Data

Find Finnish research datasets in the Fairdata Etsin service.

Etsin ↗

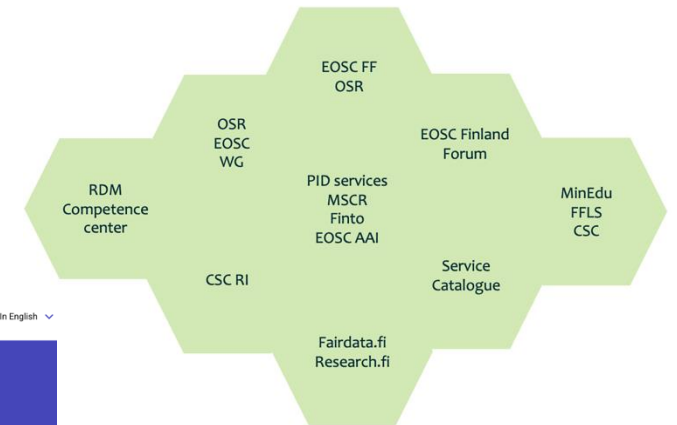
Tools

Browse our extensive applications catalogue.

Applications catalogue ↗

National data resources

- Fairdata.fi** – national FAIR repository of research data
- Research.fi** - **information on research** conducted in Finland: publications, research data, infrastructures, funding, organisations and people
- Research Data Management Competence Center** for training, skills development and support



RDA GORC model

Research.fi

Home Search Science and Innovation Policy Science and research news My profile In English

Search for information on research in Finland

Search target For example, publication, field of science, keyword SEARCH Search help

Publications	909 903	Funding calls	980	Granted funding	20 701	People	1 367
Research data	7 581	Infrastructures	224	Organizations	87	Projects - BETA	11 251

Science and research in Finland Latest science and research news Open funding calls

My CSC

Dashboard

Projects

Profile

Contracts

Role Management

Billing Unit Calculator

Organization Report

Resource Application Management

Reppu API Token Management

Service Catalog

LUMI

LUMI is a leading platform for AI and one of the EuroHPC world-class supercomputers

Mahti

Mahti is a supercomputer geared towards medium to large scale computations and simulations

Noppe

Easy-to-use applications for working with data and programming

Puhti

A supercomputer for a wide range of use cases from data analysis to medium scale computation

Paituli

An open service for downloading and sharing spatial data

Pukki

With Pukki you can easily and effortlessly set up your own databases



eosc.fi

- Start small

[Welcome to the EOSC Finland Candidate Node](#)

[Dataset-as-a-Service](#)

[EOSC Finland - Tools for service providers and data managers](#)

[EOSC Finland for researchers](#)

[More about the EOSC federation and the Finnish candidate node](#)

[MyAccessID - a new way to access CSC services](#)

MyAccessID – a new way to access CSC services

MyAccessID is a new way to register a CSC account, easier and safer to invite researchers from abroad to your project. It will be implemented soon.

Services available with MyAccessID

A table that shows what you can do in the different services currently without a CSC Project or Haka affiliation, i.e. with "only MyAccessID".

Service	Access to users originating through MyAccessID gateway
Allas	Possibility to use service after invitation by PI with Finnish affiliation.
Chipster	Possibility to use service after invitation by PI with Finnish affiliation.
cPouta	Possibility to use service after invitation by PI with Finnish affiliation.
Fairdata	Download of data that requires login, possibility to create and publish metadata for remote resource (URN), possibility to store and publish data with DOI after invitation by PI with Finnish affiliation (HEI, RI or Kotus).
Mahti	Possibility to use service after invitation by PI with Finnish affiliation.
Noppe	Possibility to use service after invitation by PI with Finnish affiliation.
Puhti	Possibility to use service after invitation by PI with Finnish affiliation.
Pukki	Possibility to use service after invitation by PI with Finnish affiliation.
Rahti	Possibility to use service after invitation by PI with Finnish affiliation.

- Start working towards compliance with the mandatory technical specifications (AAI / Federated catalogues)
- Get in touch with the nodes of wave 1 to get advice and to discuss use cases

	BBMRI	DTO	CERN	CSC	CVTISR	Data Terra	EOSC_PL	EU Node	EUDAT	ICSC	LSRN	NFDI	PANoSC	SURF
Marine microbiomes		X				X	X				X			
REANA			X				X	X		X		X		
Galaxy		X		X		X		X	X		X	X		X
PaN Finder												X	X	
MCVAL	X			X	X		X		X	X				X
AMR					X		X							

- Share the MoU with your legal department
- Take advantage of EOSC related funding opportunities (e.g. Gravity grants)

Thank you