EOSC Beyond 6M Status

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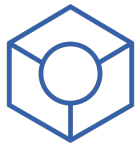
Funded by
the European Union

03 | 10 | 2024, Lecce

What we are expected to deliver

Next Generation Core services to **support the setup and the Federation of EOSC Nodes**

AAI, Resource Catalogues, Monitoring Accounting, Helpdesk, etc.



Improved existing EOSC Core services and framework

Advanced IF registry
Machine composability
AWM/Exec Framework

The EOSC Execution Framework

SW Libraries implementing interface described in the EOSC IF Guidelines

The EOSC Integration Suite

Enhanced EOSC Platform Blueprint

EOSC Core Innovation Sandbox

National/Regional:

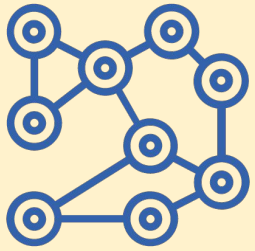
Germany (NFDI)

Czech Republic (e-Infra CZ),

NI4OS Southeast Europe (GRNET, IPB, UKIM)

e-Infrastructures:

EGI Federation



Network of EOSC Pilot Nodes

Thematic:

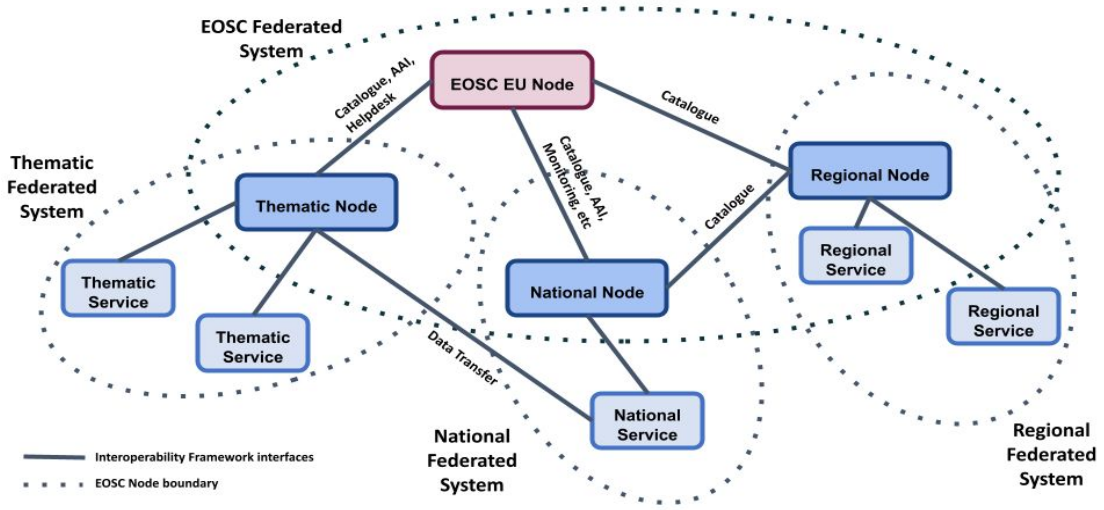
Environmental (LifeWatch)

Health and Food (METROFood-RI)

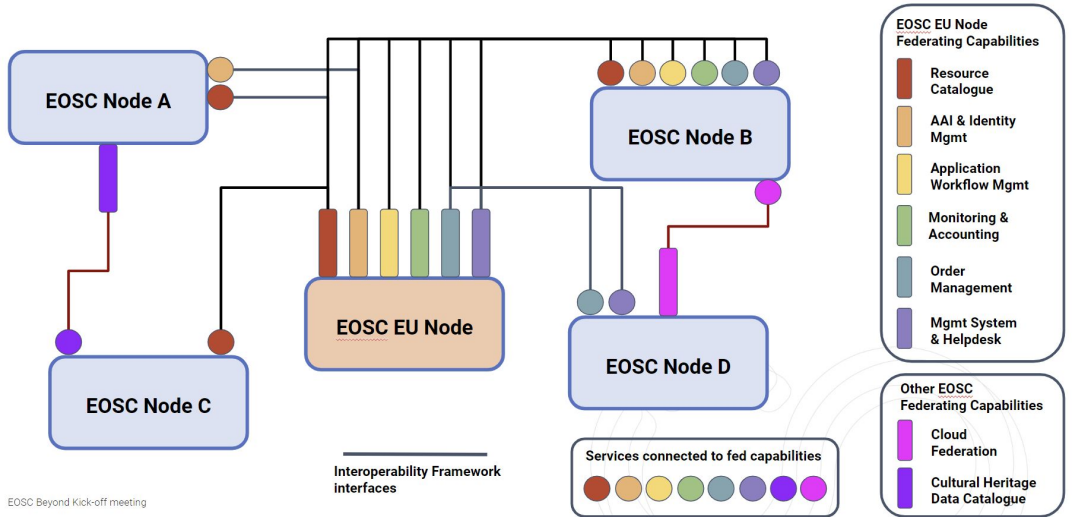
Structural Biology (Instruct-ERIC)

Climate Science (ENES)

EOSC Federation Technical Architecture

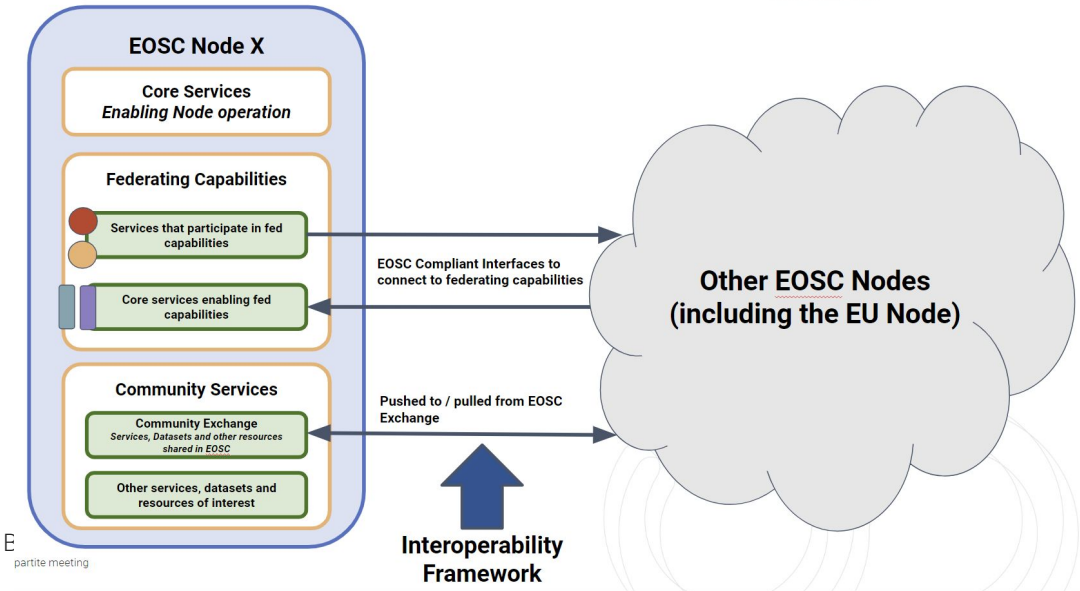


EOSC as a Federation of Nodes



Federating Capabilities

EOSC Node Service Structure



Ongoing Activities

- Modelling the Technical Architecture according to the requirements of the pilot nodes & other users
- Identifying Federating Capabilities and piloting related use cases
- Participation in the EOSC Federation Handbook writing (EOSC Tripartite initiative)
- Live paper on the EOSC Federation Technical Architecture (first version at EGI Conference) → D5.3 (Sept 2025)

EOSC Beyond KERs

Current status and next steps

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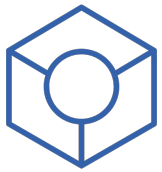
KER 1: Enhanced EOSC CORE Services



- AAI
- Monitoring
- Accounting
- Order Management
- Helpdesk
- PID Service
- Catalogue and Marketplace
- Messaging
- CMDB

Activities

- Gap Analysis and Requirements Gathering — In progress
- Definition of the Technical Roadmap — In progress
- JIRA project for Requirements and Roadmap — In progress

Results

- MS20 Requirements Gathering Process defined — DONE
- D7.1 Initial EOSC Core Gap Analysis and Requirements Report (Sept 24 → Oct 24) — In progress

WP7

WP5

KER2: EOSC CORE Innovation Sandbox

EOSC Core Innovation Sandbox

A testing and staging environment - equipped with advanced automation tools - for EOSC Core service providers, EOSC Exchange service providers and EOSC Nodes in the integration process with EOSC

Activities

- **Deployment of the current EOSC Core services** — DONE
- **Core Services Integration & Customization** — In progress
- **Preparation of the offer for internal Pilot nodes and external customers** — In progress
- **Setup of the technical support (tools, processes and teams)** — In progress

Results

- **MS9 EOSC Core Innovation Sandbox ready for core providers** — DONE
- **MS13 EOSC Core Sandbox ready for external providers (Mar 25)** — In progress

WP5

Draft

Welcome to the EOSC Core Innovation Sandbox

The EOSC Core Innovation Sandbox by EOSC Beyond is your pre-production environment for testing and staging within the EOSC Platform. It's designed for EOSC Core service providers, EOSC Exchange service providers, and EOSC Nodes to integrate seamlessly with EOSC.

Join us!

Federation Capabilities

Test and integrate with the same federating capabilities as the EOSC EU Node. This includes the AAI Federation, Federated Resource Catalogue, Helpdesk, Application Workflow Management, and more, all with compatible interfaces.

Technical Deployment

Use the Sandbox for the technical deployment of your use cases. Perfect for EOSC Nodes and other providers.

Dedicated Technical Support

Get dedicated technical support to help with integration. We offer tools to automate the process, including easy-to-use connectors in the form of software libraries.

Pilot Node Deployment

Deploy and validate the Network of the EOSC pilot Nodes. Showcase and demonstrate new capabilities, like deploying data analysis services on the fly in EOSC Cloud resources via the EOSC Execution Framework.

KER 3 & 4: INTEGRATION SUITE AND EXECUTION FRAMEWORK

New Core Services

Integration Suite a portfolio of software adapters to the EOSC Core and horizontal services of the EOSC Exchange

Execution Framework for composability and deployment of multi-supply resources

Activities

- **Requirements Gathering** — In progress
- **Design** — In progress
- **Software Adapters List** — In progress

Results

- **D10.1 Report on EOSC IS and EF Requirements and Gap Analysis v.1 (Sept 24 → Oct 24)** — In progress
- **MS23 EOSC Integration Suite and Execution Framework design (Dec 24)** — In progress

WP10

KER 5: EOSC - SIMPL

EOSC-SIMPL

Roadmap to make interoperable EOSC and SIMPL-based Data Spaces.

Pilots:

- EOSC-SIMPL AAI Interoperability
- Access and share data between EOSC and data spaces

Activities

- Established contacts with EC and SIMPL Consortium — DONE
- Invited to SIMPL Key Stakeholder Workshop (July 4) — DONE
- SIMPL representatives invited to the EGI conference — DONE
- Definition of the collaboration framework — In progress

Results

- MS10 Liaisons with the Implementing Entity of the EOSC EU Node and Smart Middleware Platforms Operators are established — DONE
- MS14 Technical roadmap to achieve EOSC/SIMPL interoperability is available (Mar 25) — In progress

WP5

KER 6: EOSC Thematic, Regional and National Nodes

Pilot Network of national, regional and thematic nodes connected to EOSC

Actively working to identify more pilot nodes:

- OSCARs, RIs, other e-Infras
- 4 additional pilots already involved: SSHOC, ENVRI, DARIAH , CLARIN

Activities

- Interview with Pilot Nodes to gather requirements — DONE
- Workshop to define the roadmap of the pilot nodes (Krakow June 24) — DONE
- Integration Matrix — DONE
- Involve additional pilots — In progress

Results

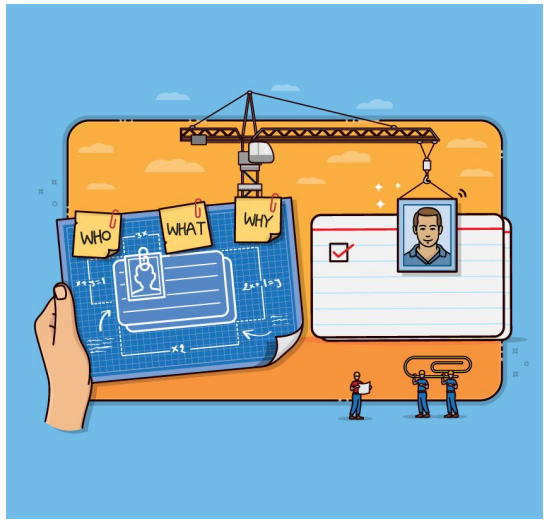
- D15.1 Service integration plans of the Data Spaces and EOSC Nodes — DONE
- MS29 Technical integration plans for the Data Spaces and EOSC Nodes — DONE

WP15

Use cases involving multiple EOSC Nodes

Bottom-up approach to identify connections between Nodes (including the EU Node)

Pilot nodes define

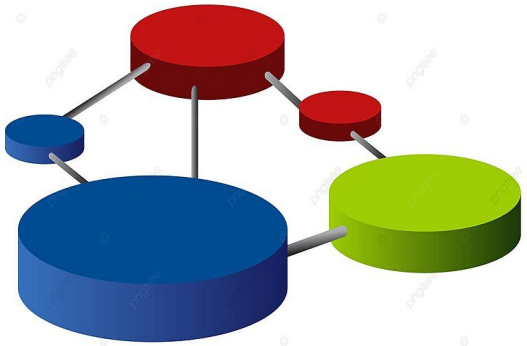


User stories

Real life usage scenarios driven by existing data life cycles in RIs/e-Infras

User stories translated into service requirements

- What the Node needs from the Federation (from other Nodes)
- What the Node can offer to the EOSC Federation



Use cases

Highlight the interactions between Node services to implement the user stories

Beyond Pilots: Potential connections to the EOSC EU Node Core Capabilities

Initial analysis

Core services VS Pilot Nodes	NFDI	e-Infra CZ	EGI	INSTRUCT	LifeWatch	METROFOOD	ENES	ENVRI	CLARIN
AAI	X	X	X	X	X	X	X	X	X
Service Accounting	X	X	X				X	X	
Service Monitoring	X	X	X	X	X	X	X	X	
Research Product Accounting			X					X	
Resource Catalogue	X	X	X	X	X	X	X	X	X
Order Management			X						
Helpdesk	X	X	X	X	X	X	X	X	
PID Service			X	X				X	X
Tool Market	X				X			X	

KER 7: EOSC Core Sustainability

Plans for sustainability and exploitation of the EOSC Core and horizontal services

Activities

Analysis of options and opportunities for funding Core and Horizontal services — In progress

Address legal and regulatory barriers, and develop recommendations to minimise or avoid them — In progress

Results

D3.3 Sustainability Report (Sept 25)

WP3

Overall status of the Technical WPs

WP5	• D.5.1 Collaboration with the implementing entities of the EOSC EU Node and Technical Roadmap (July 24) • D.5.2 SMS Status, Plan and SQA activities (July 24) • MS9 EOSC Core Innovation Sandbox ready for core providers (July 24) • MS10 Liaisons with the Implementing Entity of the EOSC EU Node and Smart Middleware Platforms Operators are established (Sept 24) • MS11 EOSC SMS innovation plan is ready (Sept 24)
WP7	• D.7.1 Initial EOSC Core Gap Analysis and Requirements Report (Sept 24 → Oct 24) • MS20 Requirements Gathering Process defined (June 24)
WP8	• Start soon: October 2024
WP10	• D10.1 Report on EOSC IS and EF Requirements and Gap Analysis v.1 (Sept 24 → Oct 24) • MS23 EOSC Integration Suite and Execution Framework design (Dec 24)
WP11	• Start soon: October 2024
WP13	• Start soon: October 2024
WP15	• D15.1 Service integration plans of the Data Spaces and EOSC Nodes (July 24) • MS29 Technical integration plans for the Data Spaces and EOSC Nodes (July 24)

Thank you!

Get in touch with us

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