

EGI-ACE: The Way Forward

Sergio Andreozzi

Strategy Manager and WP2 Leader @ EGI-ACE Project

Head of Strategy, Innovation and Communications @ EGI Foundation

Dissemination level: Public

Disclosing Party: Project Consortium

Recipient Party: European Commission



Outline



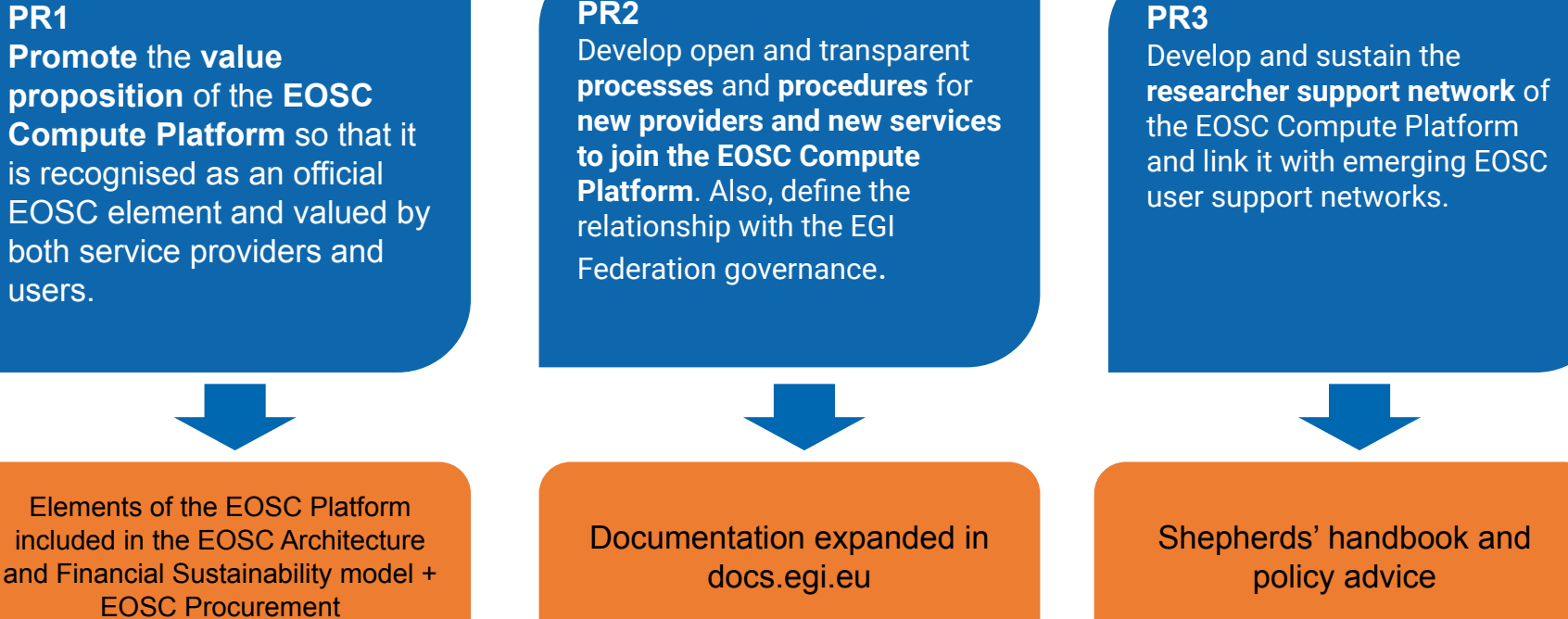
- Brief Report on Strategic Priorities
- Final Recommendations to Stakeholders
- Continuation of the EGI-ACE Legacy

Part 1

Report on Strategic Priorities

EGI-ACE Strategic Priorities for the Second Period

Highlights



EGI-ACE Strategic Priorities for the Second Period



Highlights

PR4

Seek **support** for **sustaining and scale out** the delivery of the **EOSC Compute Platform** after the end of EGI-ACE.



EOSC Procurement Lot 2 recognises the importance of a federated computing infrastructure

PR5

Contribute to the development of a **data space reference model** and support the definition of related financial and sustainability models. Build **partnership** with **relevant data space initiatives**.



Engaged key initiatives for further collaborations, some led to new project proposals

PR6

Contribute to the development of the **EOSC Interoperability Framework**, to the **“Data Spaces Technical Framework”** and to other relevant initiatives that work towards a **single European Data space**.



EOSC Compute Continuum Task Force + contribution of EOSC Data Transfer service

Part 2

EGI-ACE Final Recommendations

5 EGI-ACE Final Recommendations



Compute Capabilities

R1

Thematic Services

R2

Research Support

R3

Resource
Composability

R4

Funding Models

R5

REC1: Facilitate Seamless Access to Computing and Analytics Capabilities

Context and Issue

The EOSC Portal does not offer an harmonised approach to compute resources; also, the draft EOSC Multi-Annual Roadmap for 2025-2027 neglects the critical need to ensure straightforward access to essential services and platforms for data utilisation and analytics.

Recommendation

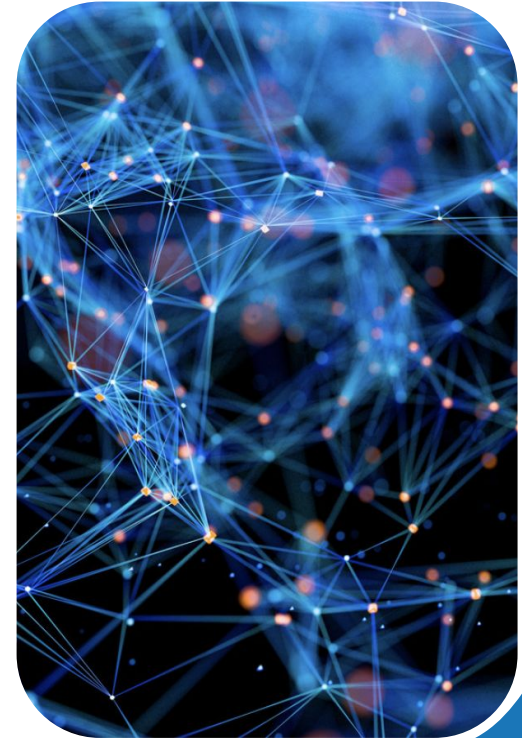
The EOSC should develop and provide a streamlined channel to access computing and analytics capabilities; this channel should support different modes of use (e.g. single vs federated, national vs transnational).

Stakeholders

EC, MSs,
EOSC Governance

Desired Outcome

Easy-to-use access to computing and analytics capabilities provided by existing infrastructures. Ability to utilise and reuse research data effectively.



REC2: Reinforce and Expand the Thematic Service Integration and Delivery Programme for EOSC Exchange

Context and Issue

EGI-ACE integrated various thematic services addressing key scientific areas. However, the lack of funding continuity in future EC calls poses a threat to the progression and expansion of this category of services.

Recommendation

Reinforce and expand the existing Thematic Service Integration and Delivery Programme, focusing on the selection, integration, and sustained support of thematic services in the EOSC Exchange, with scientific excellence serving as the primary criteria.

Stakeholders

EC, MSs

Desired Outcome

Increase both the number and diversity of thematic services within the EOSC Exchange, reinforcing EOSC's role in supporting science and innovation.



REC3: Establish and Coordinate Research Support Networks

Context and Issue

There is no agreed strategy to attract and support user communities that require access to or utilisation of multiple EOSC resources. EGI-ACE has provided a successful model with a support programme (gathered 40 communities, integrated 30+ services in EOSC).

Recommendation

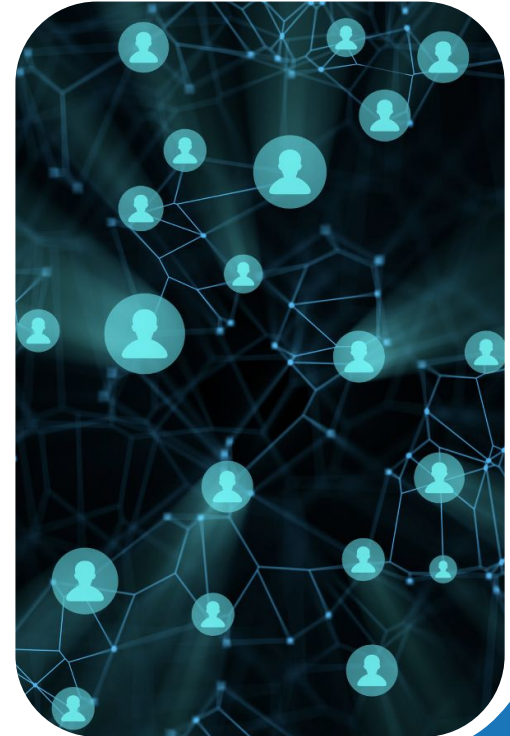
Establish and coordinate research support networks, bringing together experts from various research communities. These networks should leverage the proven expertise and experience of EGI-ACE in providing successful support structures.

Stakeholders

EC, MSs, Research Communities

Desired Outcome

Research support networks enable to fully exploit/enriching EOSC resources and bolster their utilisation enhancing EOSC value as a scientific resource exchange.



REC4: Improve the Composability of EOSC Resources

Context and Issue

In EOSC Portal, current resource descriptions and supporting tools are inadequate to facilitate composition; it is challenging to combine EOSC resources from disparate providers through the different layers (infrastructure, platform, data, applications).

Recommendation

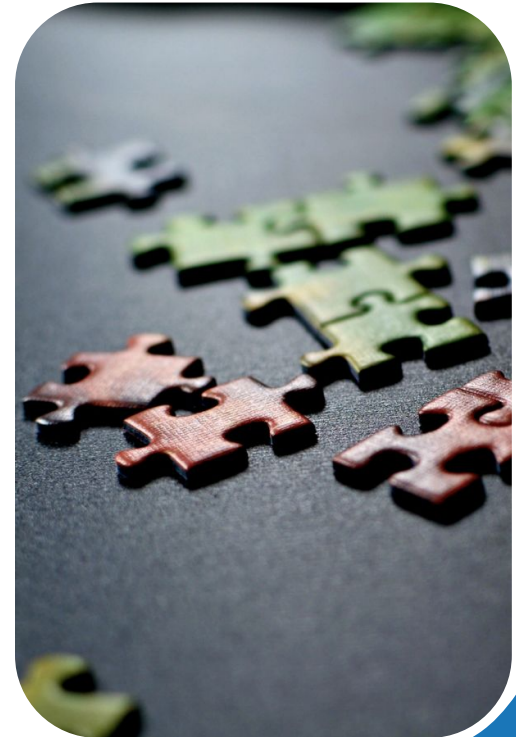
Improve resource composability through the different layers (infrastructure, platform, data, applications) as well as across multiple Thematic Services (pipelining), e.g. by enriching resource descriptions, streamline APIs and provide supporting tools.

Stakeholders

EOSC Core and Exchange Providers

Desired Outcome

Easily create and manage on-demand workflows for combining resources from various independent providers, customised to suit different use cases.



REC5: Harmonise Funding Instruments for EOOSC Core/Exchange with Publicly-Funded Providers

Context and Issue

The application of public procurement to develop and deliver the EOOSC Core and parts of the EOOSC Exchange poses significant challenges for many EOOSC stakeholders who are beneficiaries of public funding, thus limiting their participation.

Recommendation

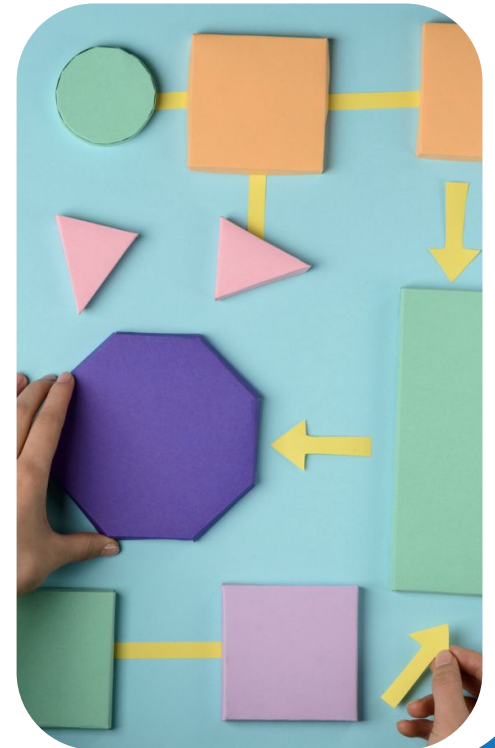
Ensure that funding mechanisms employed to deliver services crucial to the Research and Education sector are compatible with the modus operandi of most publicly-funded organisations and are managed in the best interests of the community.

Stakeholders

EC, MSs

Desired Outcome

As a public good, the EOOSC Core should be under the ownership/governance of the R&E community to safeguard public values, promote equitable participation, and enhance engagement.



Part 3

Continuation of the EGI-ACE Legacy

Enhanced services/products

Service Delivery Agreements

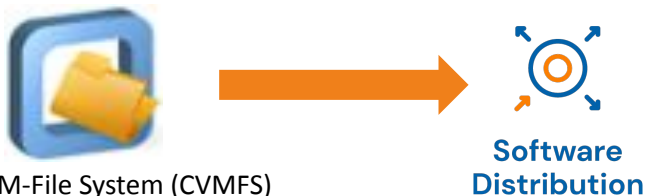
EOSC Compute Platform

Enhanced services/products

EGI Catalogue of Services for Research



CernVM-File System (CVMFS)



EGI Catalogue of Services from the Community

- New service catalogue layer being created
- Goal: formalise long-term engagement of services that build on top of the EGI infrastructure
- Scope: include services for research and innovation that are managed by members of the EGI Community that are promoted via EGI

Service Delivery Agreements

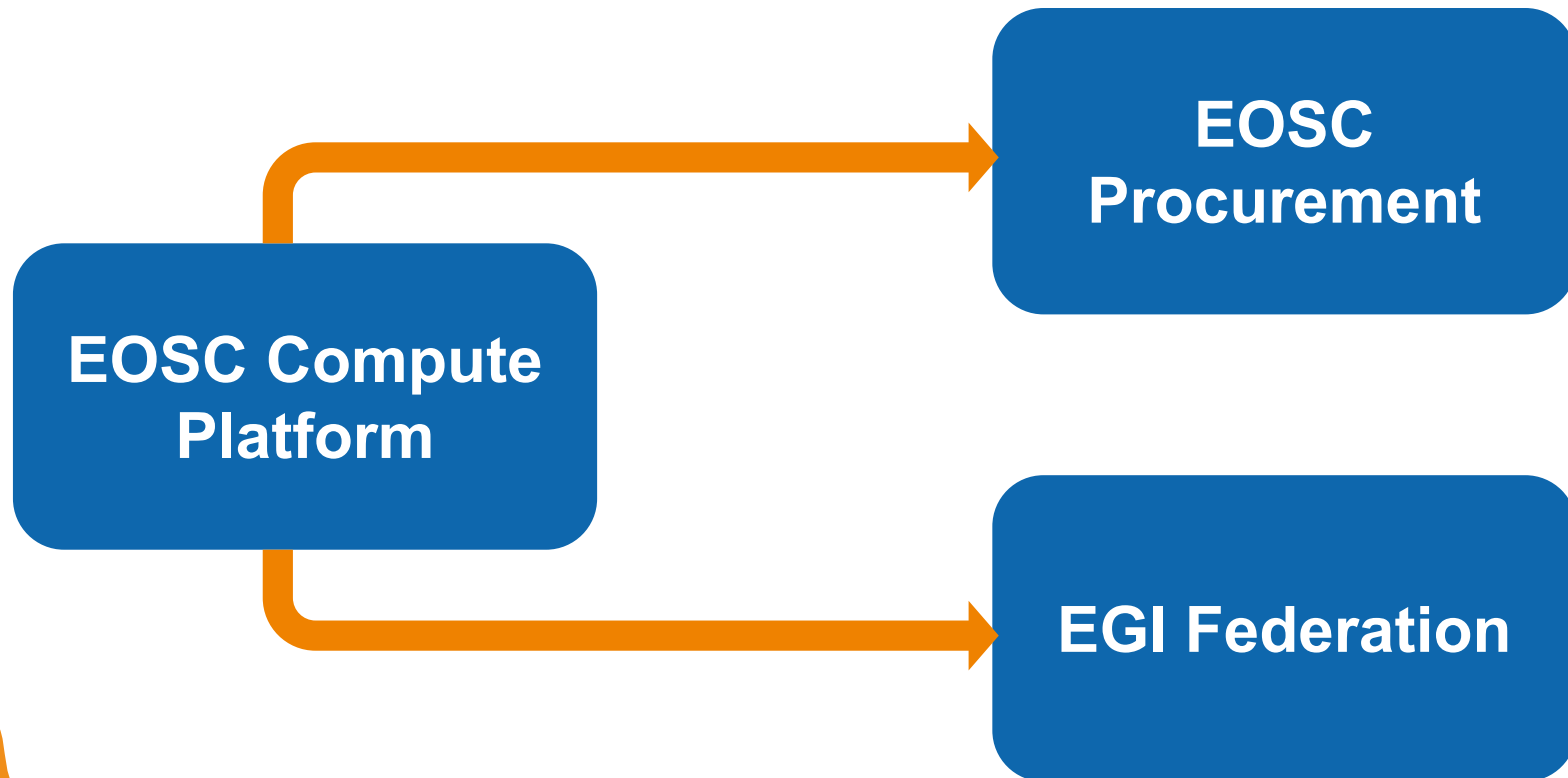


- Among the 42 selected use cases, 22 are still being supported
 - 14 use cases completed piloting activities
- EGI facilitated the negotiation with providers for continued support
- In some cases, it was necessary to switch providers as some would not continue unless with direct funding; others would continue only as best effort
- Mixed funding model and integrated access channel was beneficial for the continuation

22

**Use cases still
supported after
project end**

Continuation of EOSC Compute Platform and federation-enabling Services



Summary



- EGI-ACE
 - Developed the **concept of the federated computing layer of EOSC**
 - **Demonstrated its operational use**, also with **big data** use cases
 - **Validated the foundational computing capabilities** needed by EOSC
 - **Stimulated the creation/improvement of services** that are now part of the EOSC ecosystem
- Key recommendations moving forward
 - Seamless **Access to Computing and Analytics** Capabilities
 - **Thematic Service Integration and Delivery Programme** for EOSC Exchange
 - Coordinated **Research Support Networks**
 - **Composability** of EOSC Resources
 - **Funding Instruments** for EOSC Core/Exchange **suitable for Publicly-Funded Providers**



Thank you!

Contact: egi-ace-po@mailman.egi.eu
Website: www.egi.eu/projects/egi-ace



[EGI Foundation](#)



[@EGI_eInfra](#)



EGI-ACE receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 101017567.