Project overview

Period 1 Review meeting, 24/05/2022

Gergely Sipos
Project Technical Coordinator

Dissemination level: Public

Disclosing Party: Project Consortium

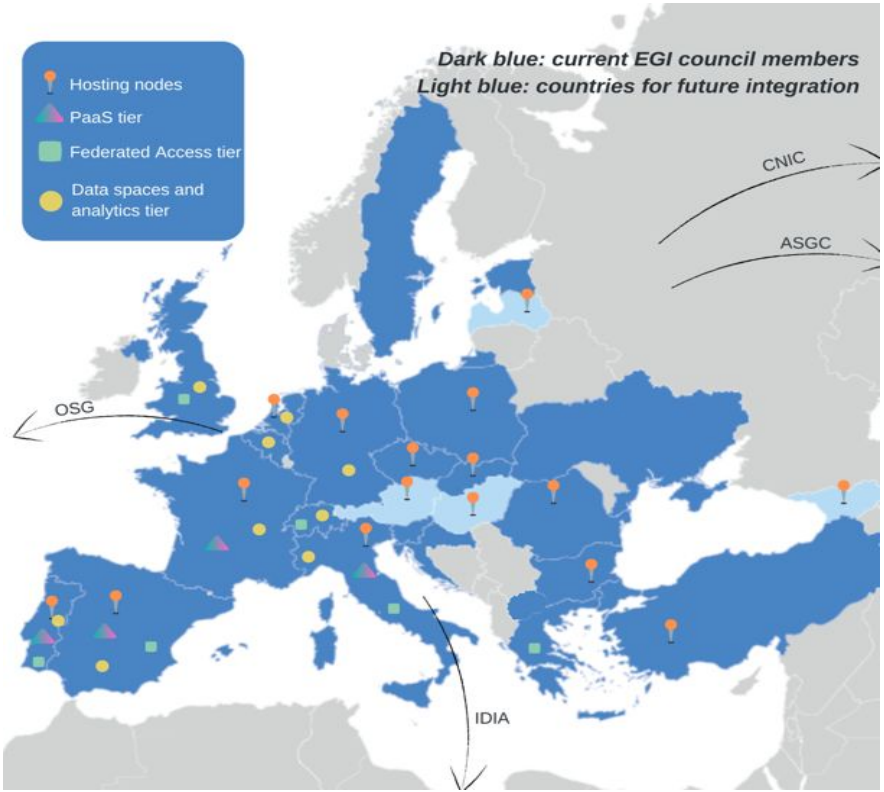
Recipient Party: European Commission

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

Outline

- EGI-ACE mission and structure
- Project objectives, Key Exploitable Results
- Main achievements

Project overview



EGI Advanced Computing for EOSC
Grant agreement ID: 101017567

Budget:

- Total budget: € 12,009,988
- EC budget: € 8,000,000

Consortium:

- Coordinator - Stichting EGI
- 33 Partners, 23 third parties

Effort:

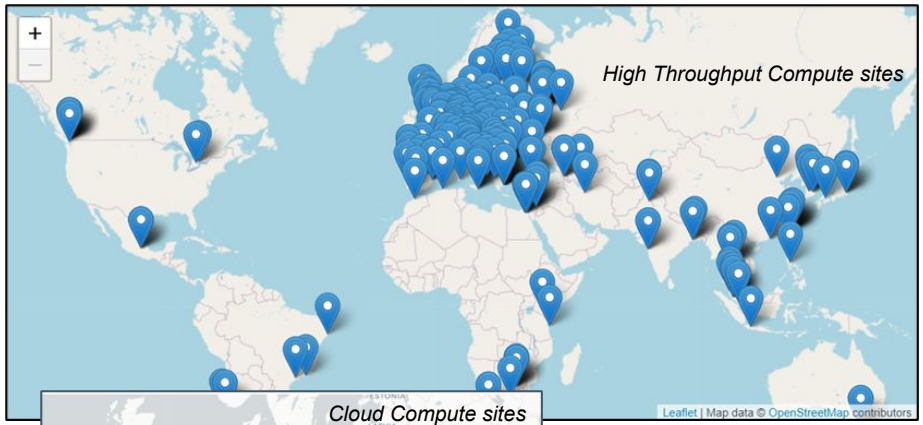
- 1472 PMs, 48 FTEs
- 49% VA (35 services, 38 providers)

Duration:

- Jan 2021 - June 2023 (30 months)

Empowered by EGI

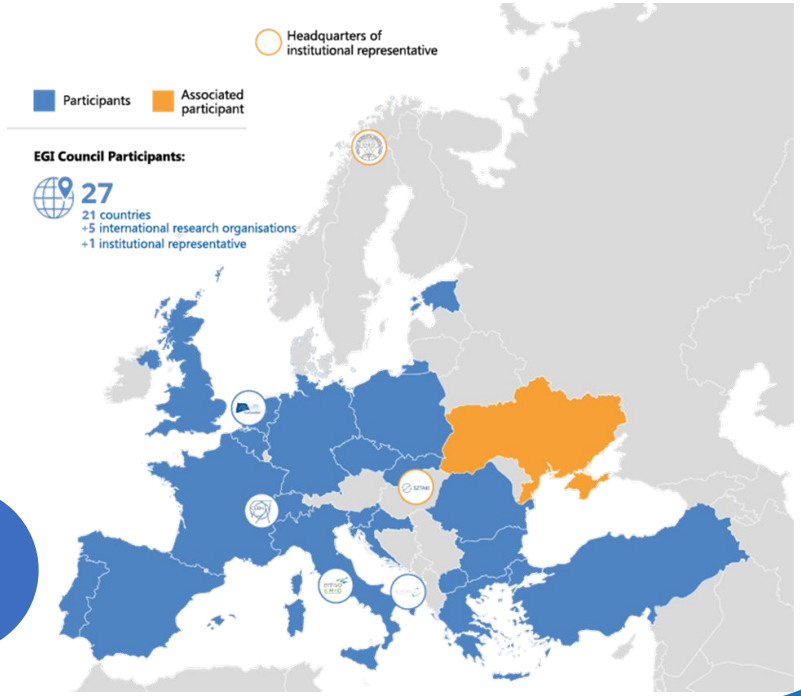
European e-infrastructure for scientific computing since 2010



HTC: 5.2 billion CPU h/year

CLOUD: 43 million CPU h/year

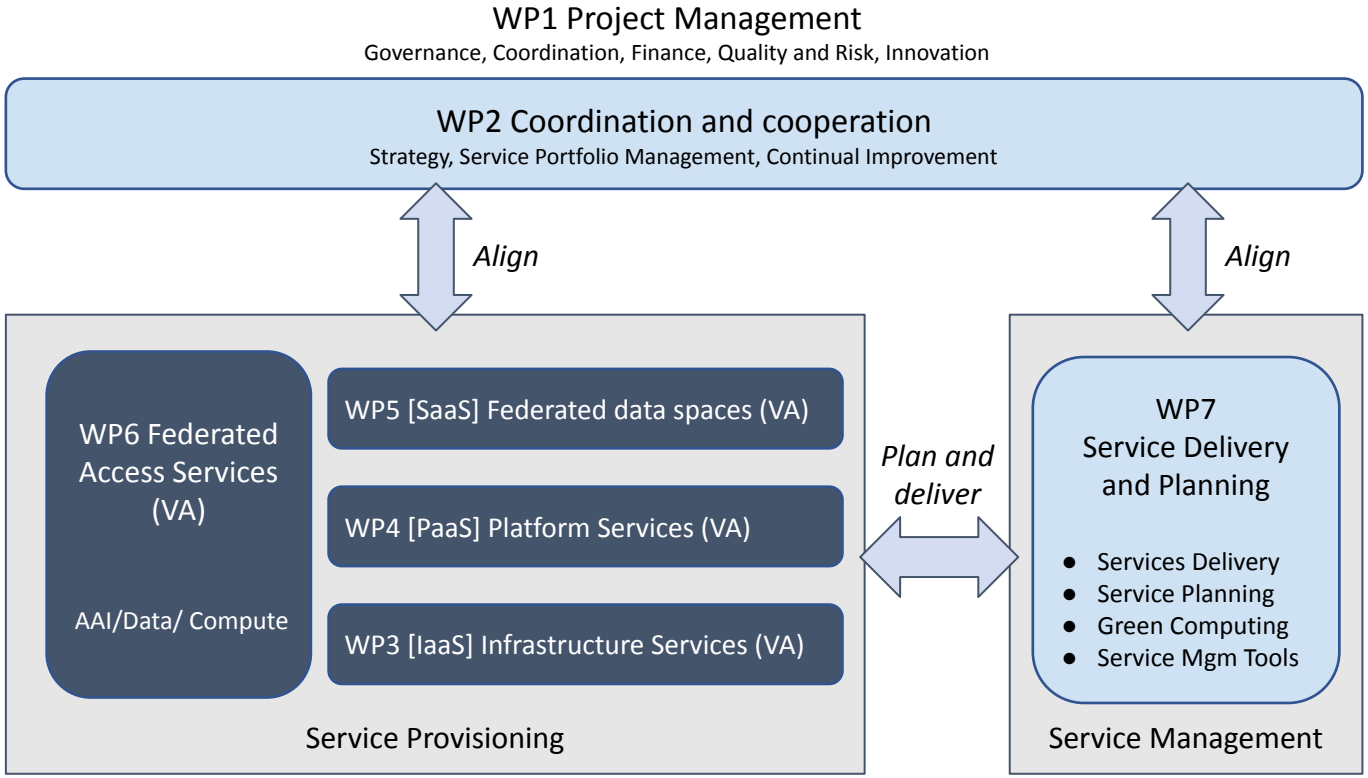
OVER 75.000 users



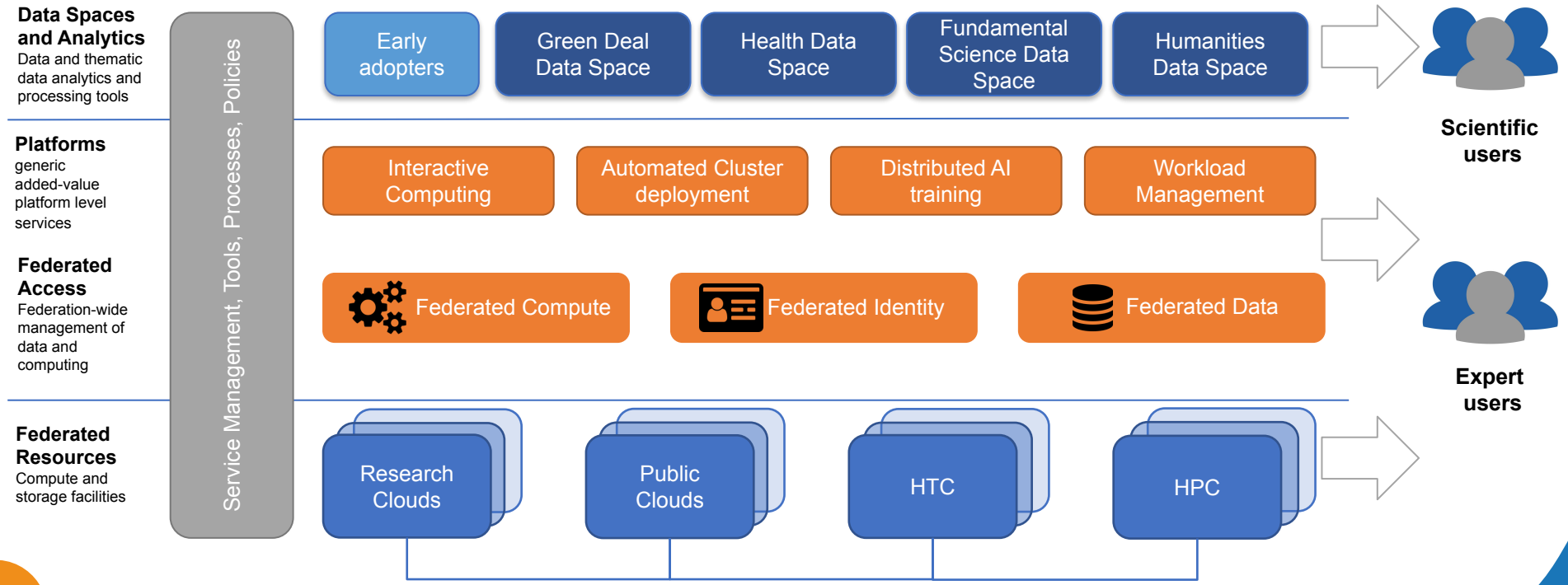
EGI-ACE mission

Implement the **Compute Platform of the EOSC** and contribute to the **EOSC Data Commons** by delivering integrated computing, platforms, data spaces and tools as an integrated solution that is **aligned with** major European cloud federation projects and HPC initiatives.

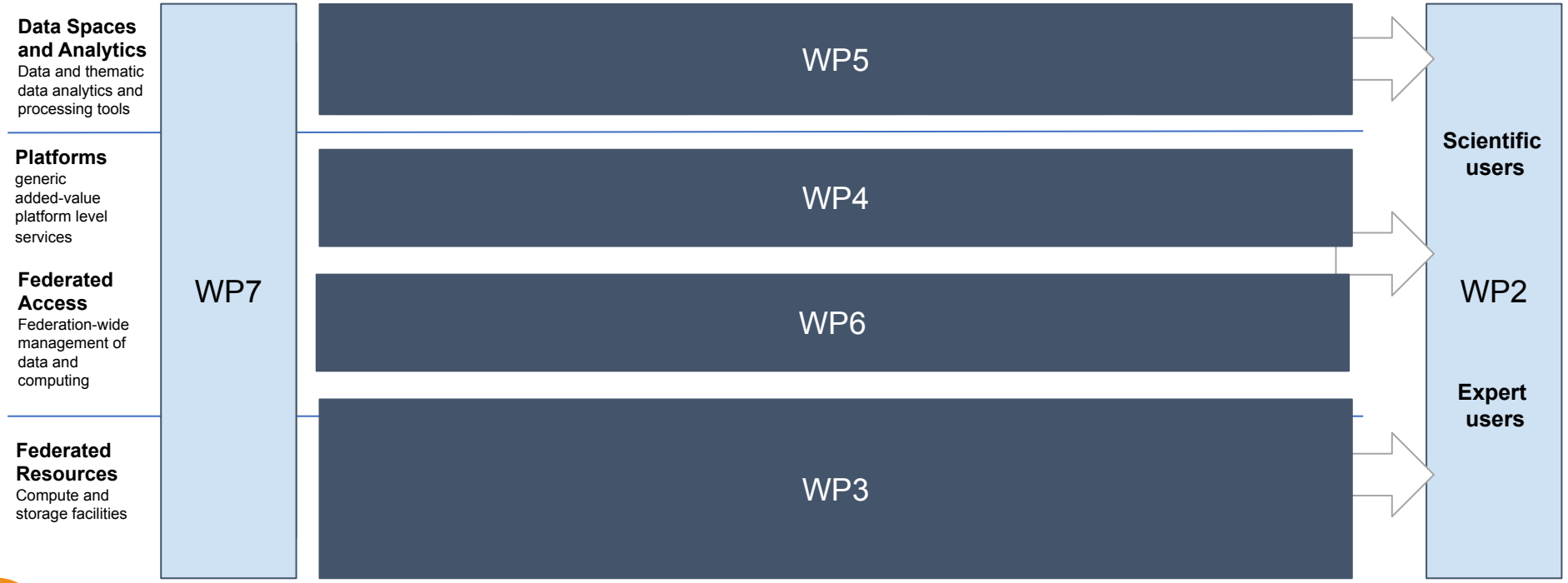
Work package structure



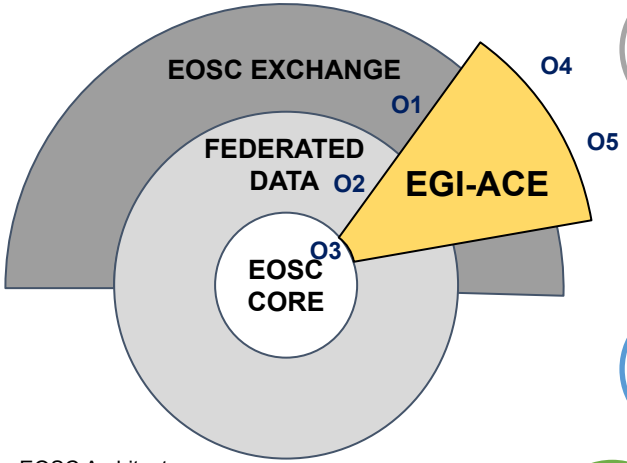
EGI-ACE tiered service architecture



EGI-ACE tiered service architecture



Project objectives - response to INFRAEOSC-07-2020



EOSC Architecture:
Solutions for a sustainable EOSC
(report from the EOSC Sustainability WG)

O1 Deliver the European Open Science Cloud Compute Platform and expand the supply-side

O2 Contribute to the implementation of the EU Data Strategy and the EOSC Data Commons to support the Green Deal, Health and Fundamental Research

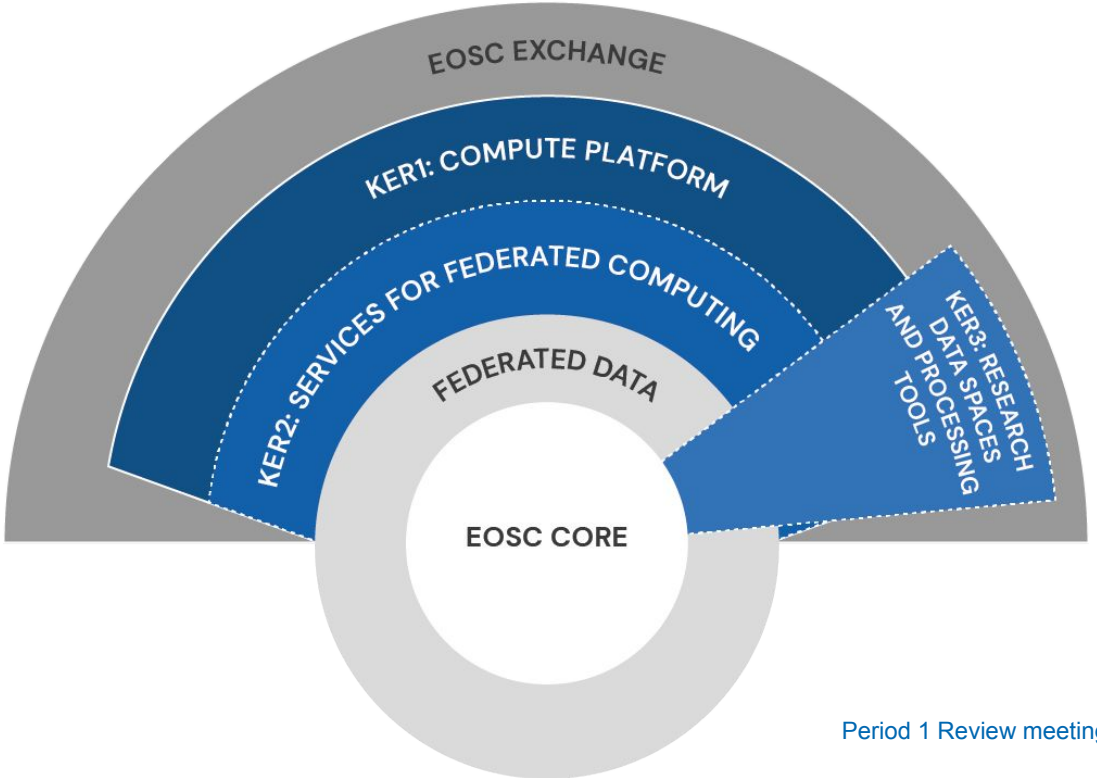
O3 Integrate the EOSC Compute Platform with the EOSC Portal and the EOSC Core

O4 Contribute to the realization of a global Open Science Cloud

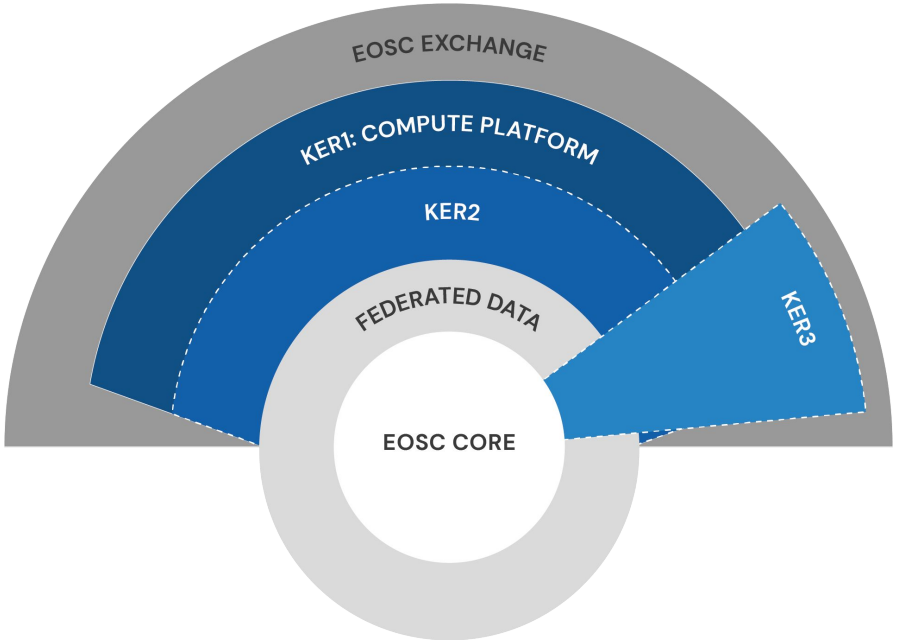
O5 Expand the demand-side of EOSC across sectors and disciplines

Key Exploitable Results

Can be taken up, exploited and reused to support Open Science



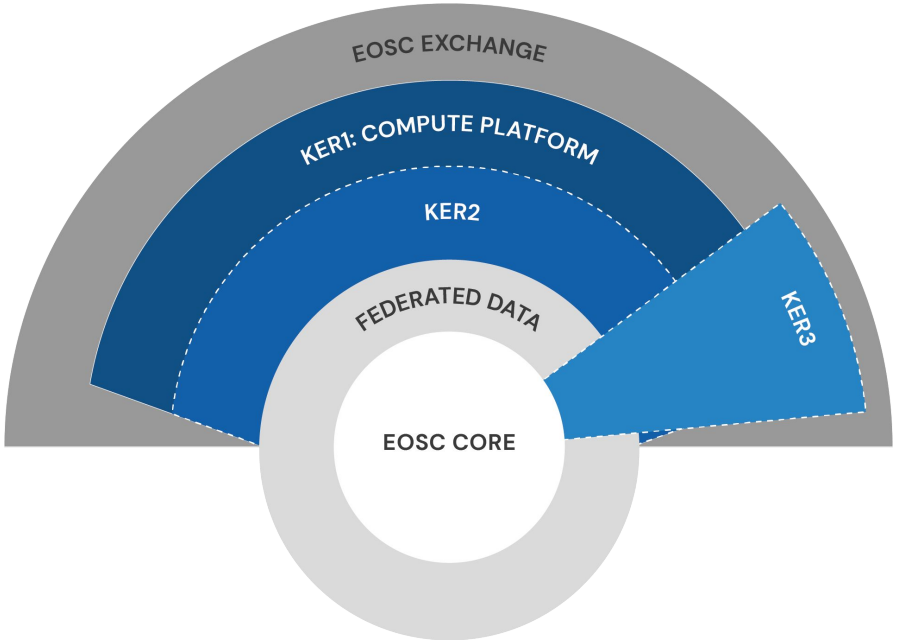
KER1: Compute Platform



- **What:** A distributed computing environment built on a hybrid infrastructure
- **Target audience:** Research communities, projects and individual researchers
- **Key value propositions:**
  - Supports for diverse compute scenarios
  - Reuse data and applications across providers
  - Support and consultancy
  - Free at point of use
- **Provided by:** WP3, WP4, WP6, T7.3

KER 1 presentation: 10:45-11:15

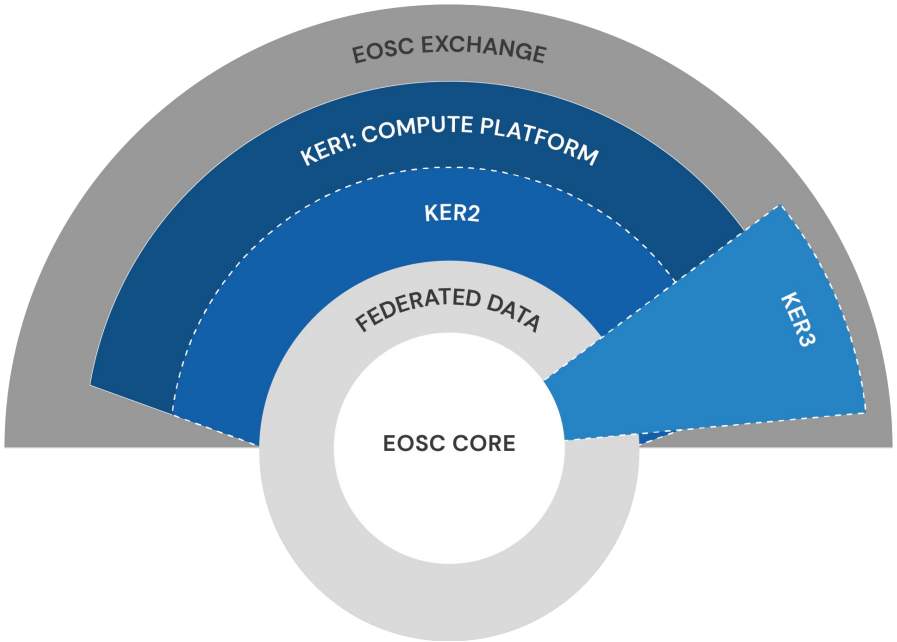
KER2: Services for federated computing



- **What:** Services and support to deliver compute services in the ‘EOSC Compute Platform’
- **Target audience:** Service providers (infrastructure and platform)
- **Key value propositions:**
  - Simplified integration into EOSC
  - Increased service quality; Increased user focus
  - European interoperability
  - Additional capabilities to users
- **Provided by:** WP7, T2.2

KER 2 presentation: 11:15-11:45

KER3: Research data spaces and processing tools



- **What:** Thematic Services for scalable data analytics
- **Target audience:** Researchers
- **Key value propositions:**
  - Faster scientific discoveries
  - Co-hosted scientific data and compute resources
  - Cross-domain resource sharing and exploitation
  - Free at point of use
- **Provided by:** WP5, T2.3

KER 3 presentation: 11:45-12:15

Single users, small groups (Long tail) Experimental users

International projects
Multi-national communities
Research Infrastructures

EOSC USERS

Business-to-User

Business-to-Business

EOSC Portal

- Ready-to-use resources/services
- Self-service configuration
- Short term engagement

https://marketplace.eosc-portal.eu/

EGI-ACE Open Call

- High capacity demand
- Custom configurations
- Long term engagement

https://www.egi.eu/egi-ace-open-call/

Continuously open, Cut-off dates every 2 months

Serving with the use of...

80million CPUh
250,000 GPUh
20 PB storage

EGI-ACE VA funds

Local funds
(institutional/national investments)

External project funds

Main achievements after 15 months


EGI-ACE
Advanced Computing for EOSC
egi.eu.project/egi-ace/
0:00:01
0:00:54

Progress towards the objectives

- **O1** Deliver the European Open Science Cloud Compute Platform and expand the supply-side
- **O2** Contribute to the implementation of the EU Data Strategy and the EOSC Data Commons to support the Green Deal, Health and Fundamental Research
- **O3** Integrate the EOSC Compute Platform with the EOSC Portal and the EOSC Core
- **O4** Contribute to the realization of a global Open Science Cloud
- **O5** Expand the demand-side of EOSC across sectors and disciplines

KPIs

 # providers participating in the EOSC Compute platform

- 5 new cloud providers (Target = 6)
- 1 new HTC provider (Target = 1)
- 5 new GPU providers (Target = 4)
- 0 new HPC providers (Target = 4)

 # CPU hours, GPU hours, Storage delivered

- 42 million CPU hours (20m national funds; 20m VA funds, 2 pay-for-use) (Target VA = 80 million)
- 20,000 GPU hours (Target VA = 250,000)
- 1,395 TB/month (Target VA = 45,500)

Progress towards the objectives

- **O1** Deliver the European Open Science Cloud Compute Platform and expand the supply-side
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KPIs

 # scientific communities supported

- 67 (Target = 58)

 # FAIR Data Spaces from WP5

- 15 from WP5 (Target = 13)

Progress towards the objectives

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KPIs

 # EGI-ACE services part of the EOSC Portal

43 (Target = 42)

- Consortium services: 35
- Third party thematic services: 8

Progress towards the objectives

- **O1** Deliver the European Open Science Cloud Compute Platform and expand the supply-side
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KPIs

 # non-EU-providers integrated in the EOSC Compute Platform

2 (CNIC from China, IDIA from South Africa)

- Target 7 (Georgia (GRENA), Moldova (RENAM), Latvia (IMCS-UL), Armenia (ASNET))

Progress towards the objectives

- **O1** Deliver the European Open Science Cloud Compute Platform and expand the supply-side
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- **O3** Integrate the EOSC Compute Platform with the EOSC Portal and the EOSC Core
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- **O5** Expand the demand-side of EOSC across sectors and disciplines

KPIs

 # users of EGI-ACE services

76,737 (Target = 85,000)

- 76,000 on Thematic Services
- 1,000 expert users on the Platform and Infrastructure services

Agenda

Timeslot	Presentation title	Outline	WPs	Speaker
08:30 - 09:15	Pre-Review meeting between the PO and Experts			
09:15 - 09:30	Welcome and introduction			Hien (Project Manager)
09:30 - 10:00	Project overview Introduction of the agenda	WPs and KERs, EOSC landscape	All	Gergely (Technical Coordinator)
10:00-10:30	Project management and finance		WP1	Hien (Project Manager)
Coffee break 15'				
10:45-11:15	Key Exploitable Result 1: The EOSC Compute Platform	Infrastructure + Platforms ->Uptake and Impact	WP3, WP4, WP6 T7.3	Enol (WP3-4 leader)
11:15-11:45	Key Exploitable Result 2: Services enabling federated computing in EOSC	Usage of federation tools, Infrastructure expansion, Green computing -> Uptake and Impact	WP7 T2.2	Alessandro (WP7 leader)
11:45-12:15	Key Exploitable Result 3: Research data spaces and processing tools for EOSC	WP5, New services from T2.3 -> Uptake and Impact	WP5 T2.3	Giuseppe (WP5, T2.3 leader)
Lunch break 75'				
13:30-14:00	Open calls, User support, training, Early Adopter Program	EGI-ACE Call for use cases, users support & training	WP2	Giuseppe (WP5, T2.3 leader)
14:00-14:30	Demo	Demo 1: The ENES Data Space (KER1, KER3)		Fabrizio Antonio (CMCC)
		Demo 2: CNAF cloud (KER 2)		Cristina Duma (INFN-CNAF)
14:30-15:00	EOSC liaison and long term strategy	Collaboration incl 07s, joint events, EGI-ACE D2.2	WP2	Sergio (Strategy Manager)
15:00-15:15	Conclusion and next steps		All	Gergely (Technical Coordinator)

Thank you!

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

EGI Foundation

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