



# EOSC-Hub

## From EOSC vision to implementation

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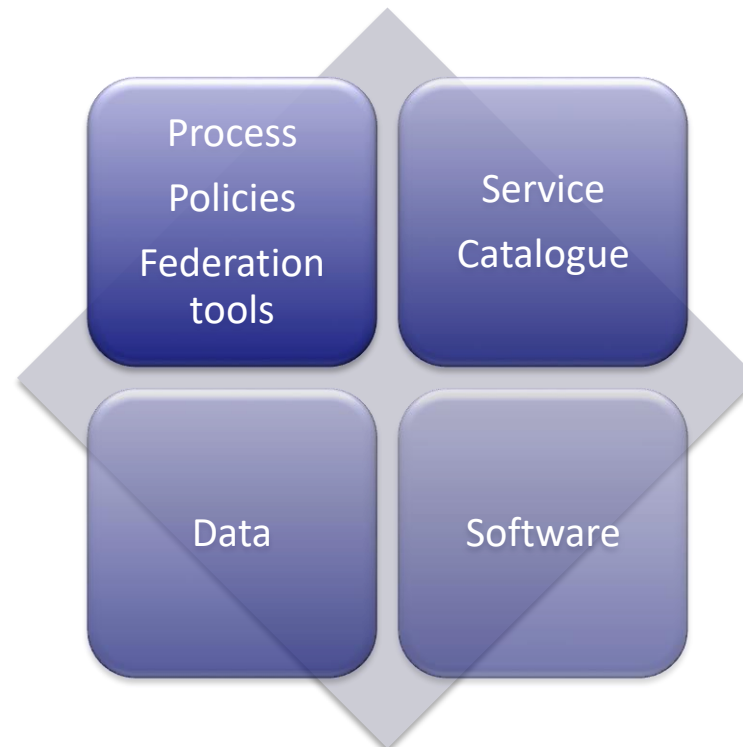
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## Mission 1/2

**EOSC-hub** mobilises providers from the EGI Federation, EUDAT CDI, INDIGO-DataCloud and **20** major research e-infrastructures offering **services, software and data** for advanced data-driven research and innovation.

## Mission 2/2

The project will create the **Hub** the integration and management system of the future EOSC



### **EOSC-hub in numbers**

Duration: **36 months**

Start date: **1 Jan 2018**

End date: **31 Dec 2020**

Tot. funding: **33.4 Million**  
(**30 M from EC**)

# partners: **74**

Countries involved: **23**

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## The Hub

- The Hub acts as a European-level contact point for researchers and innovators to discover, access, use and reuse a broad spectrum of resources for advanced data-driven research.
  - Through the virtual access mechanism, more scientific communities and users have access to services supporting their scientific discovery and collaboration across disciplinary and geographical boundaries.
  - The project will support the integration additional thematic services from other communities and disciplines.

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## The Hub: Functions

- Manage alignment of services to defined policies and standards
- Define/maintain/review service level agreements
- Conduct service audits and quality assurance reviews
- Manage end-to-end service level management performance retaining overall accountability
- Provide the tools for aggregating demand and supply, make services and research artifacts discoverable and accessible at European level etc.

# Objectives

Simplify  
access

- Broad portfolio of products, resources and service through an open and integrated service catalogue

Remove  
fragmenta  
tion

- Standards for interoperability of compute, storage, data and software platforms

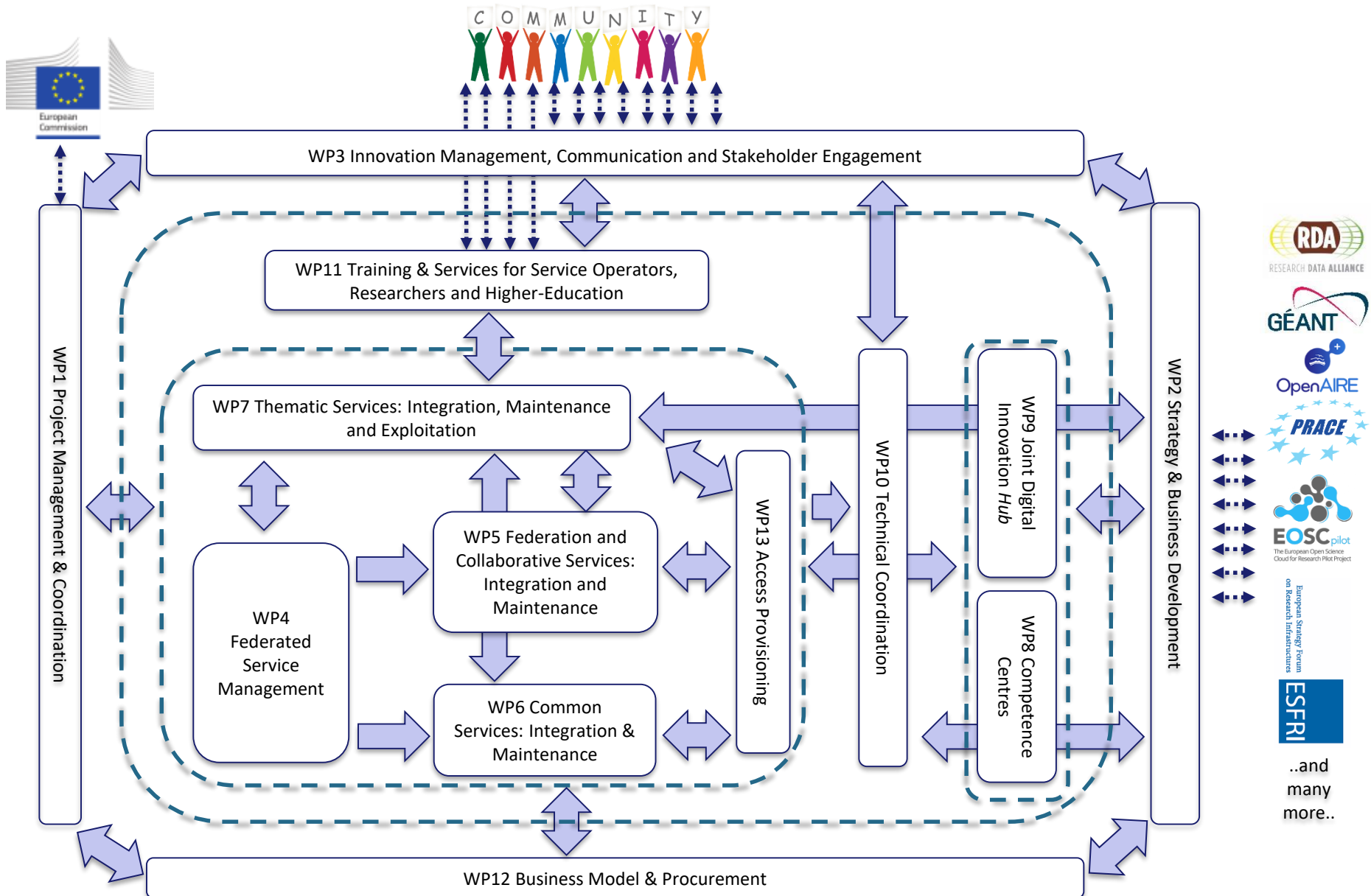
Open  
access

- Recovery of virtual access costs for international research collaborations

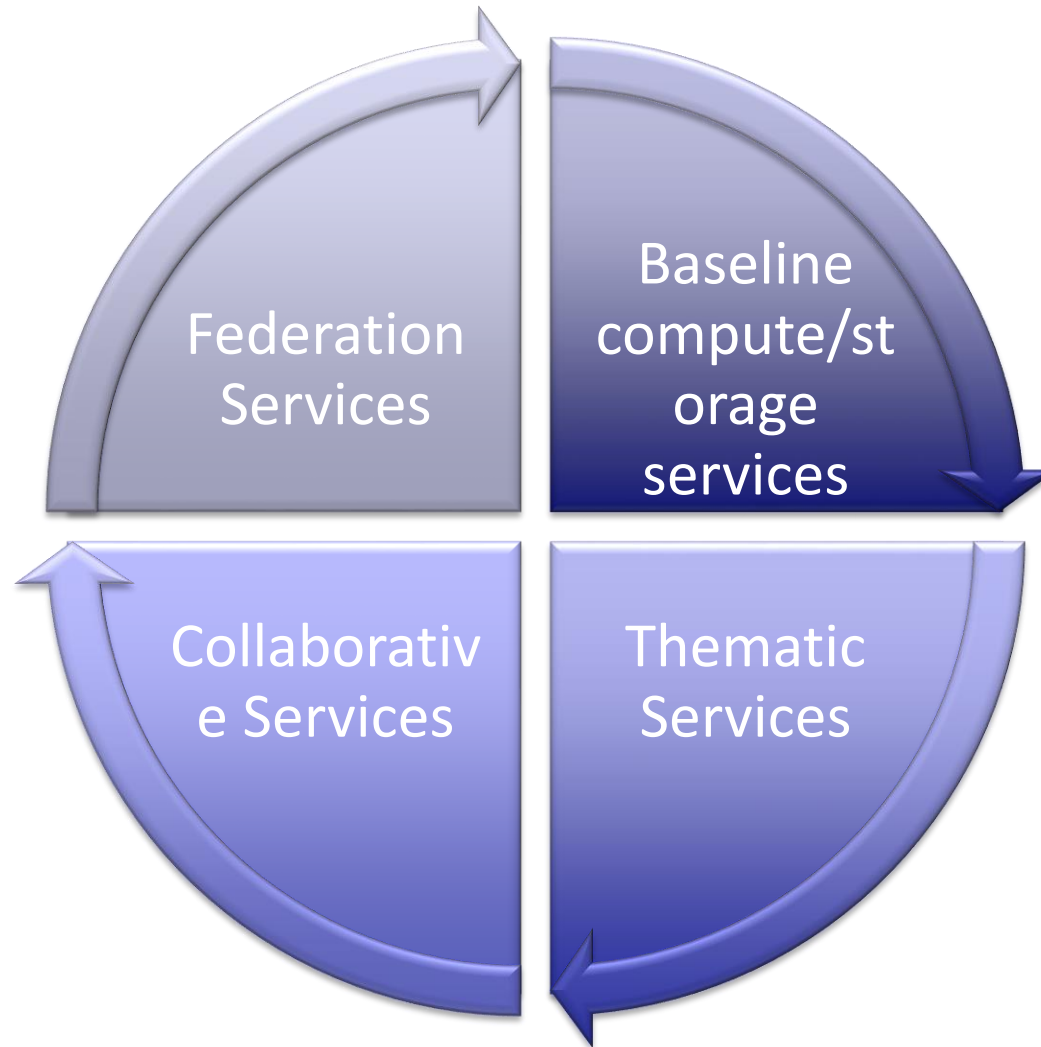
Innovation

- Increase innovation capacity through a knowledge hub

# EOSC-hub at a glance

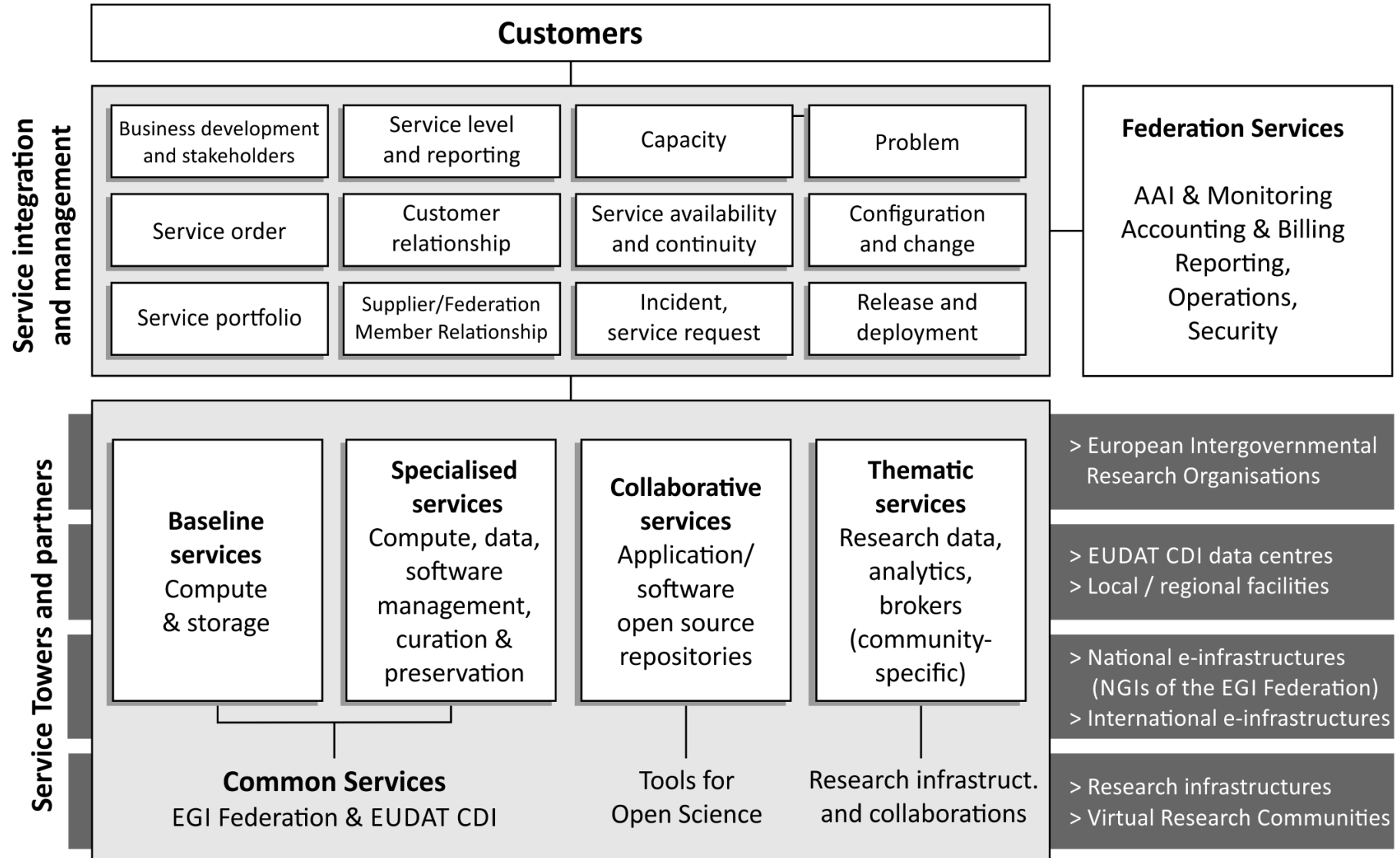


# Service Catalogue

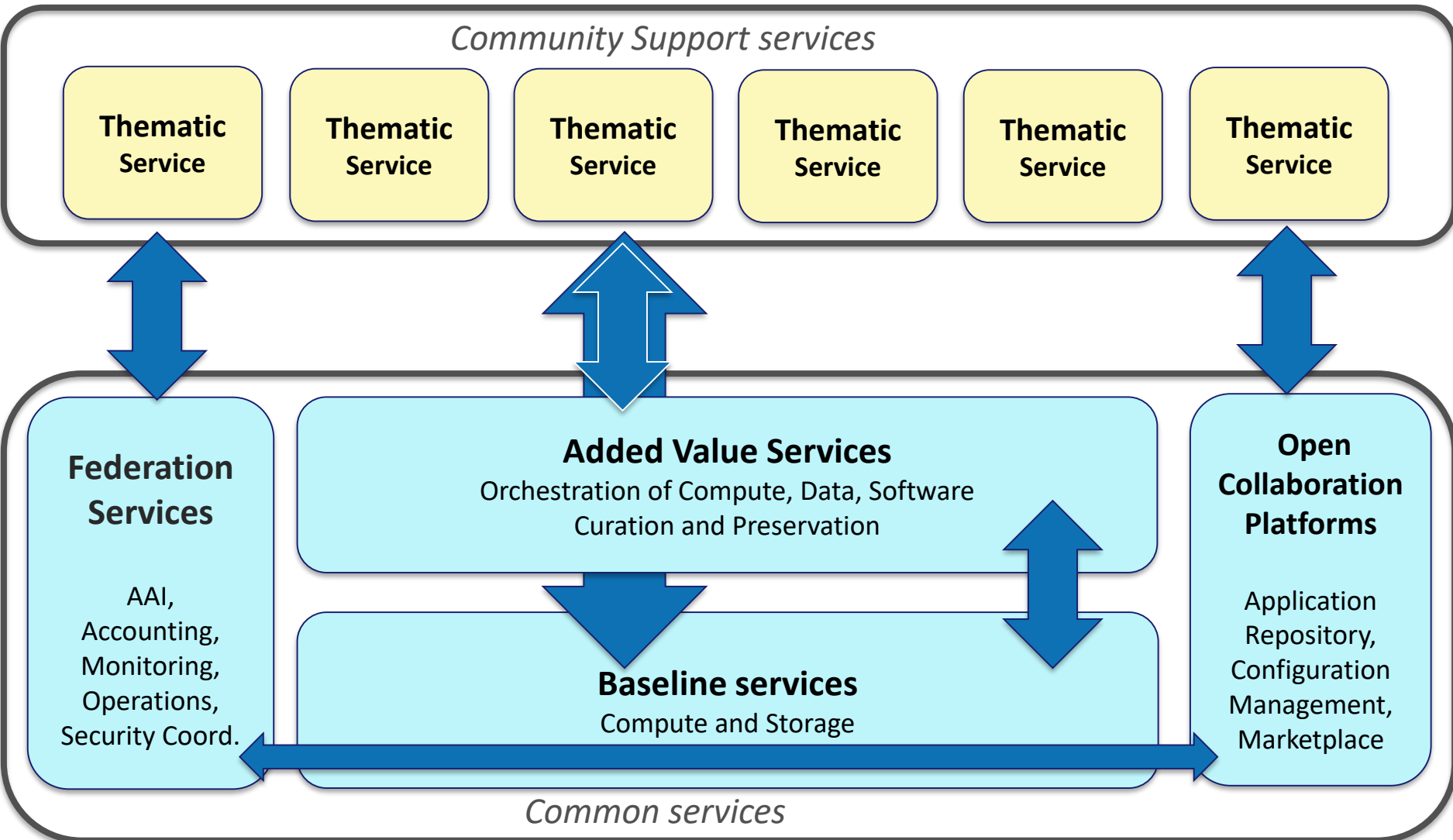




# Service Integration and Access Management

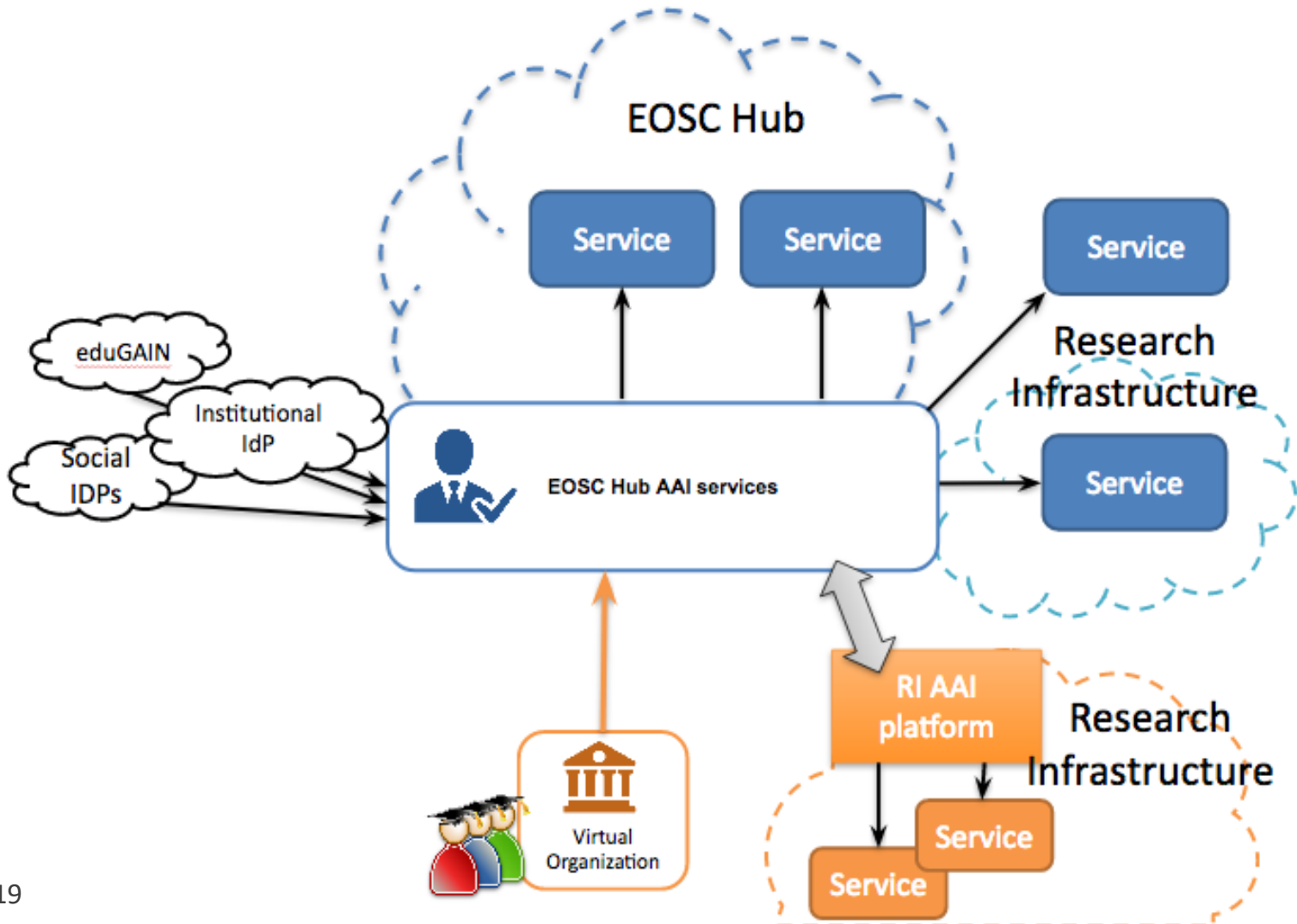


# EOSC – Service Architecture



# Example of Hub services

## Federated identity and AAI



## Service Providers 1/2

### e-Infra

EGI Federation

EUDAT CDI

### Humanities

Language and  
literature  
(CLARIN)

Arts (DARIAH)

### Engineering

Environmental  
engineering  
(sea vessels,  
LNEC)

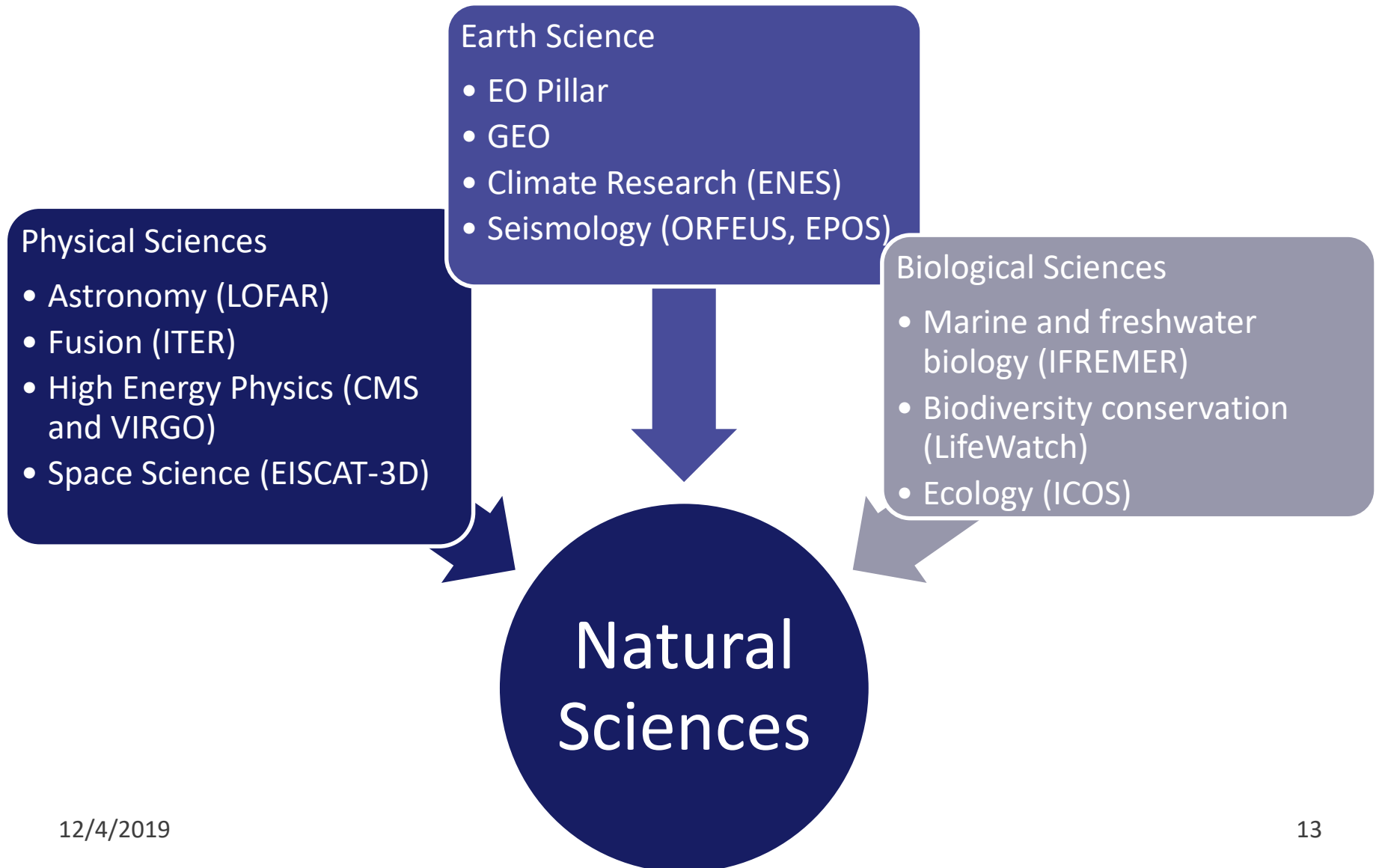
Civil  
Engineering  
(Disaster  
Mitigation)

### Medical and Health Sciences

Biological  
Sciences  
(ELIXIR)

Structural  
biology  
(WeNMR)

## Service Providers 2/2



# EOSC Domains and the Hub


 GROUP ON  
EARTH OBSERVATIONS


 LABORATÓRIO NACIONAL DE ENGENHARIA CIVIL








 European  
Research  
Infrastructure  
Consortium

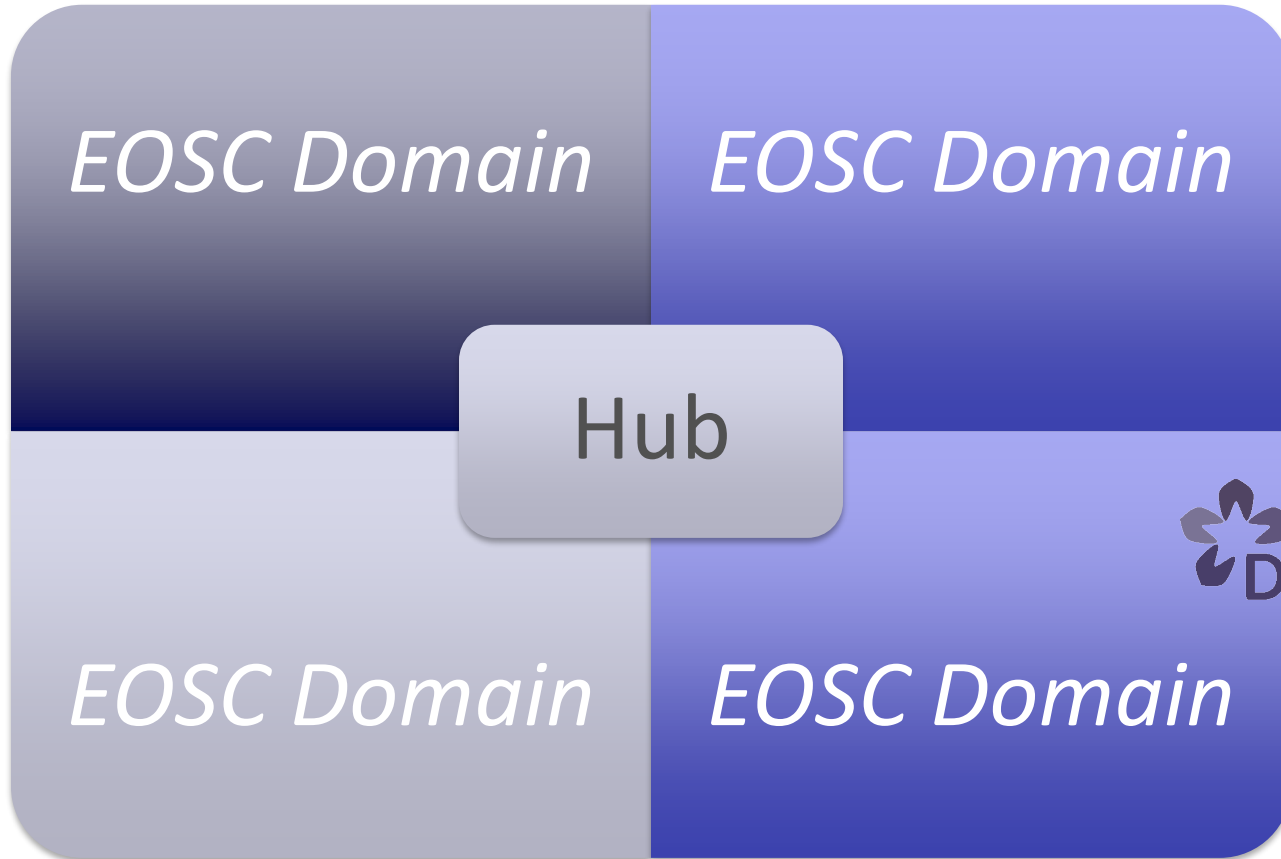





 ENES  
EUROPEAN NETWORK  
FOR EARTH SYSTEM MODELLING










 EUROPEAN PLATE OBSERVING SYSTEM



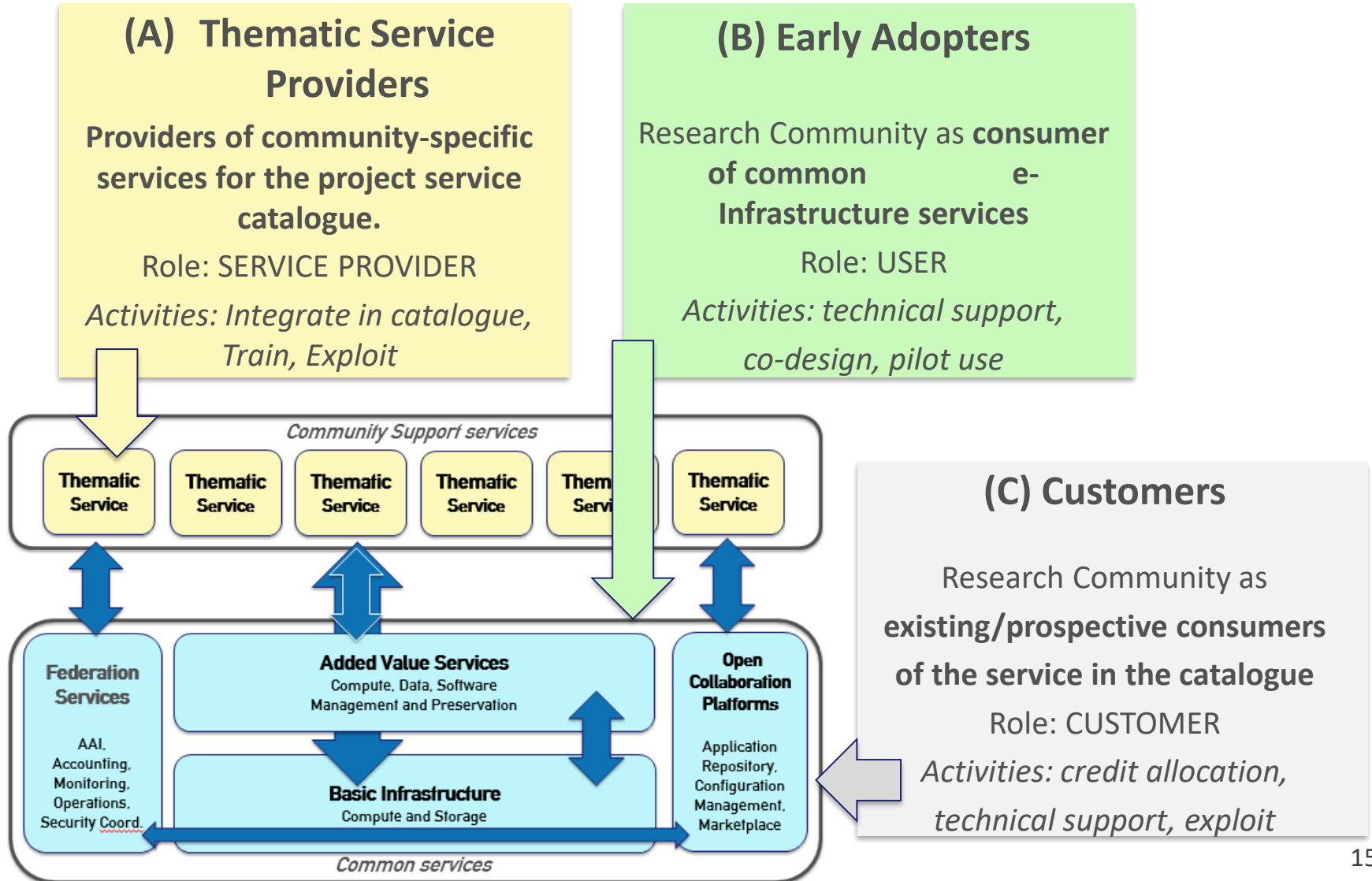




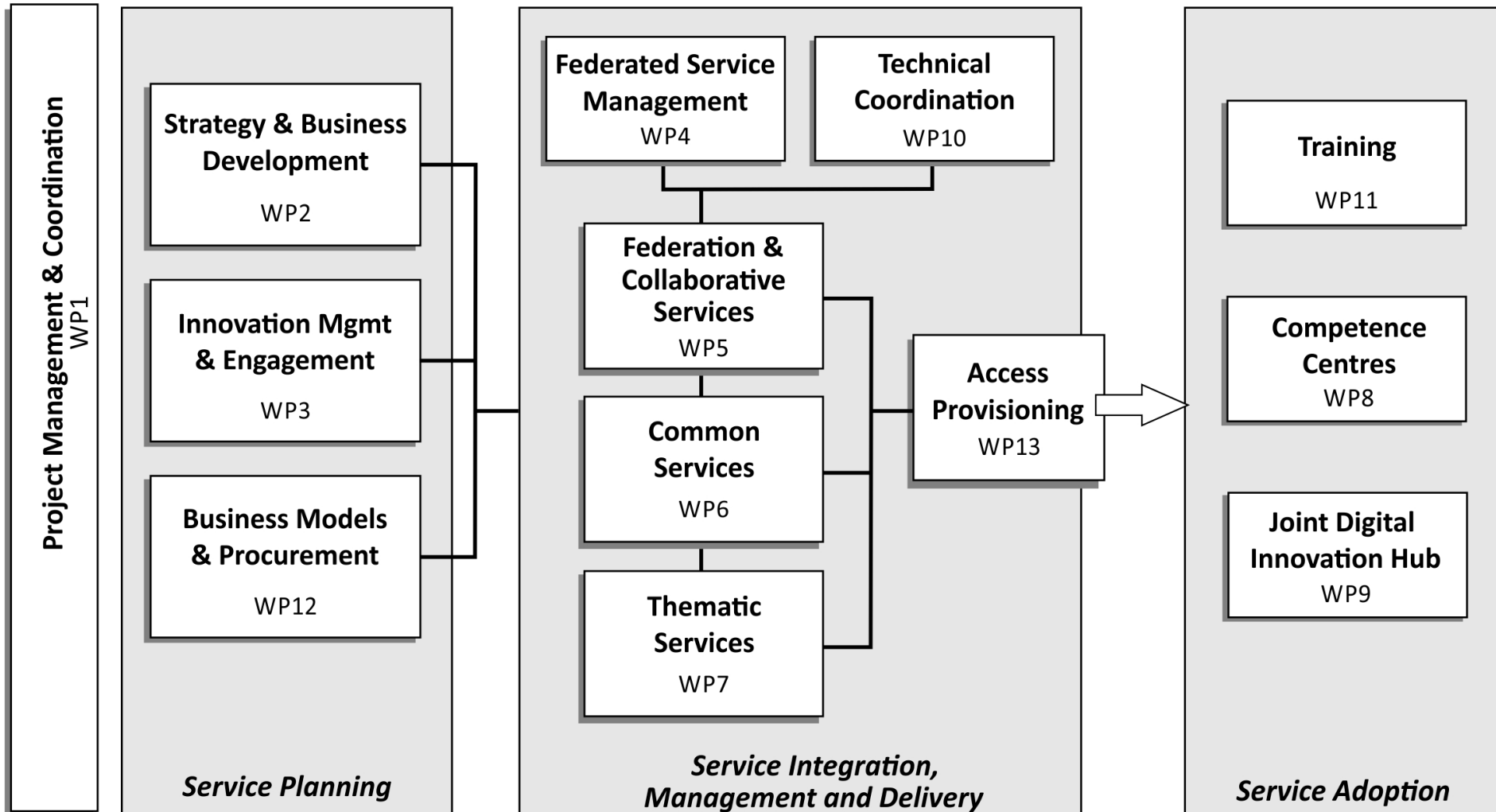

 Europe's eyes on Earth



# Research Communities: Roles



# Service lifecycle





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## (1) Contribution to Governance and Funding

- Be an EOSC service integrator and federator.
- Develop the know-how and the prototype procurement and purchasing framework that interested organisations can use to acquire digital services from either publicly funded infrastructures or commercial providers.

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## (2) Data Culture and FAIR

- Provide production-quality FAIR data and services
- Ensure data can be used as widely as possible across scientific disciplines and between the private and public sector by:
  - Providing third-party public/private data as a service
  - Making core data resources discoverable and accessible
  - Interconnecting existing data infrastructures across Europe

### (3) Research data services and architecture

- Realize a system of EOSC domains
- Deliver the Hub as a contact point for researchers and innovators to easily **discover, access, use and reuse** a broad spectrum of resources for advanced data-driven research.
- **Improve skills and knowledge** among researchers and service operators by delivering specialised trainings and by establishing competence centres to co-create solutions

# Who is behind EOSC-hub?



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## Czechia in EOSC Hub

- CESNET
  - Technology provider – AAI, security, ... (WP3 to WP6)
    - Participation at technical coordination (WP10)
  - Resource provider – cloud and storage VA (WP13)
  - Backoffice services (WP1)
  - Competence Centre – Disaster mitigation (together with MU; WP8)
- CERIT-SC/MU
  - ELIXIR Competence Centre (WP8)
  - Strategy and business development (WP2)

**Thank you**  
**Questions?**