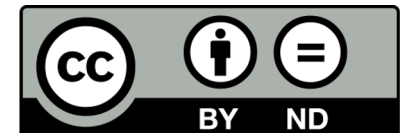


EOSC Architecture

The EOSC Future Overview

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Technology and Integration Pillar Leads
EOSC Future TCB Chairs

The EOSC Future project is co-funded by the
European Union Horizon Programme call
INFRAEOSC-03-2020, Grant Agreement 101017536

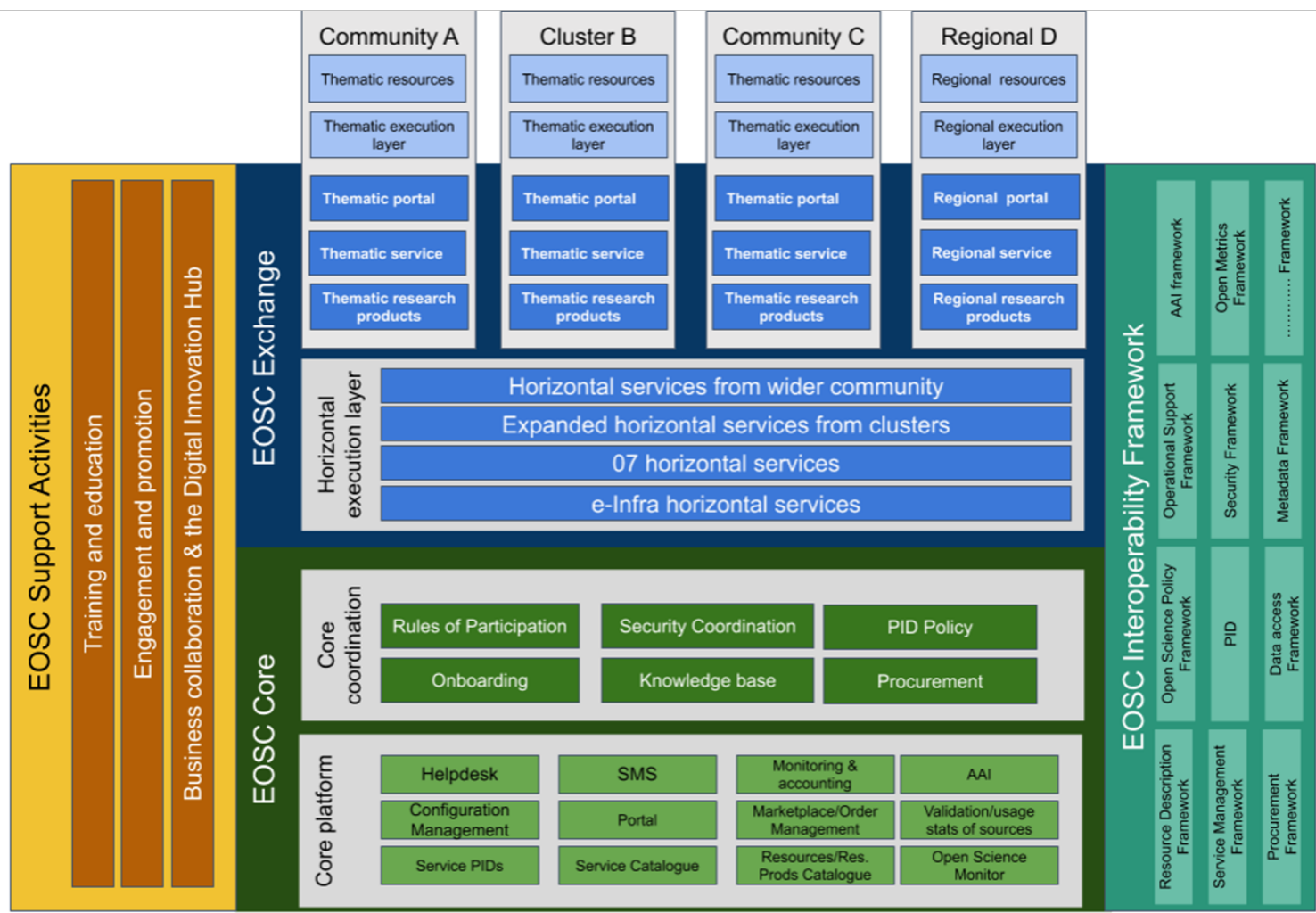




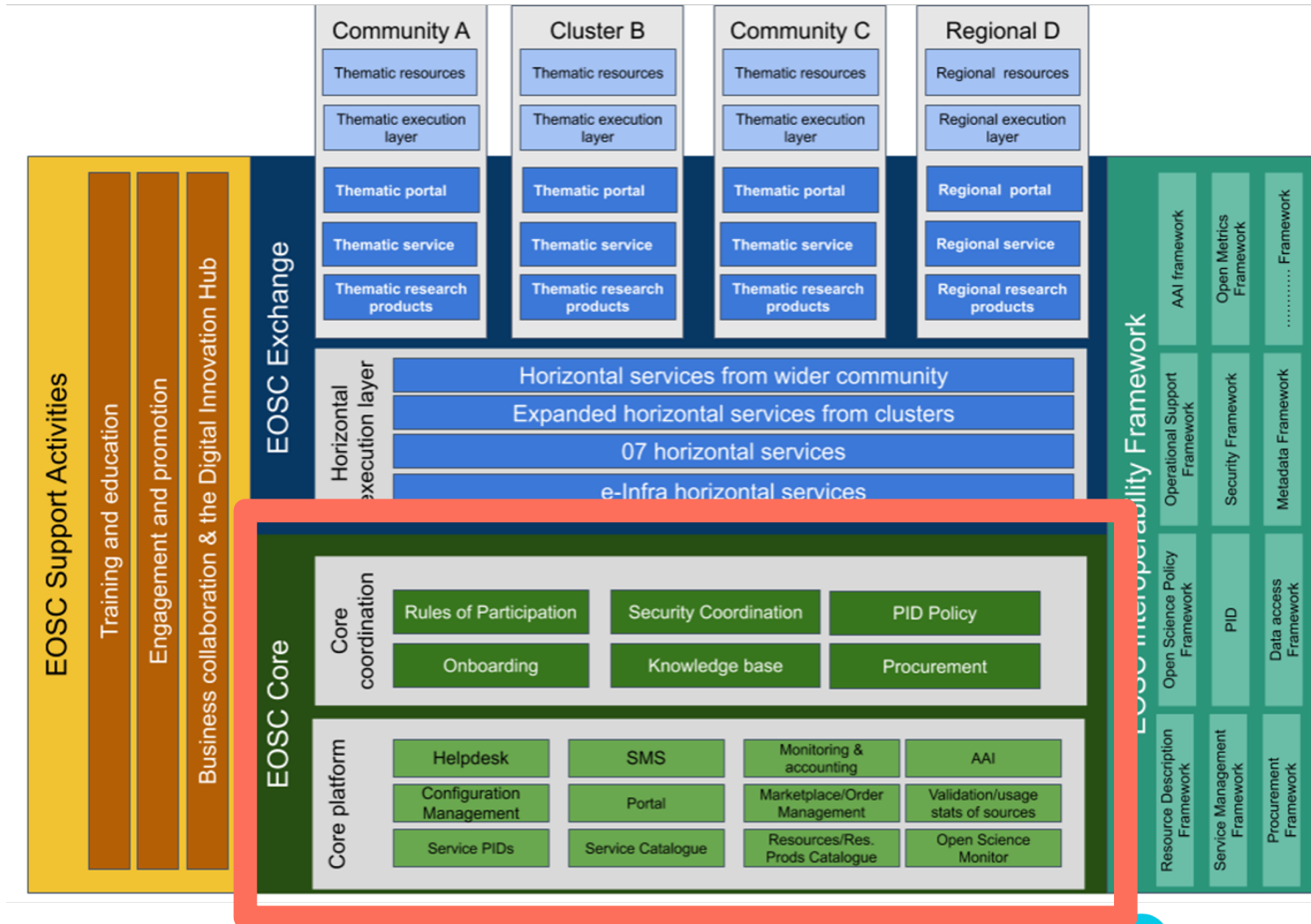
Guiding principles

1. The EOSC Future core platform **federates** existing and new infrastructures into a **system of systems**
2. EOSC Future delivers the '**glue-layer**' that allows for the composition of resources across infrastructures by:
 - a. Providing **APIs** and metadata
 - o Providing **Interoperability Frameworks**
 - o Providing **portal capabilities**
- Setup the **EOSC-Core**
- Populating the **EOSC-Exchange**
- Technical roadmap is driven by **user requirements** and implemented as an, over time increasing in complexity, set of user capabilities

EOSC Architecture

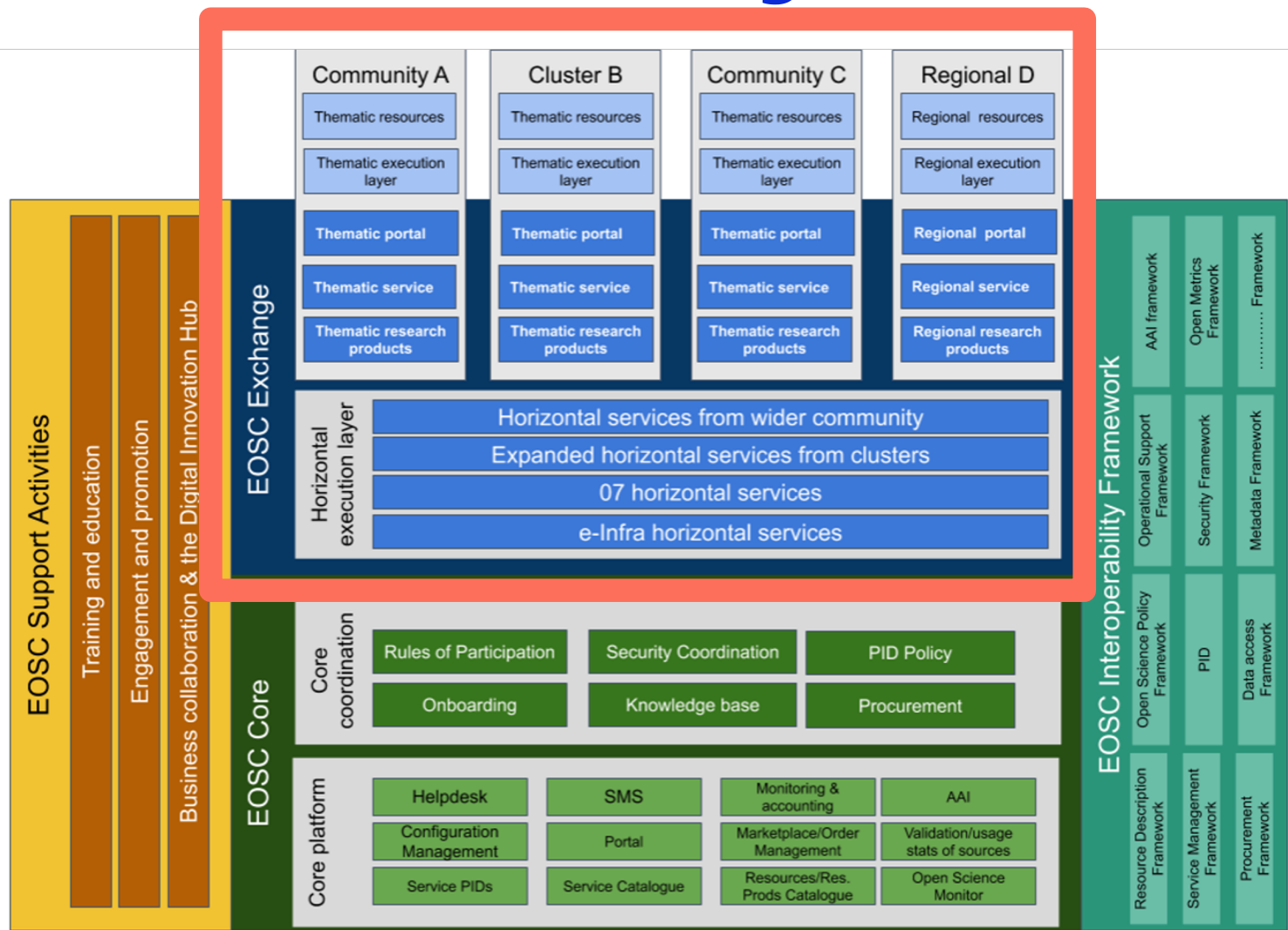


EOSC Architecture - Core



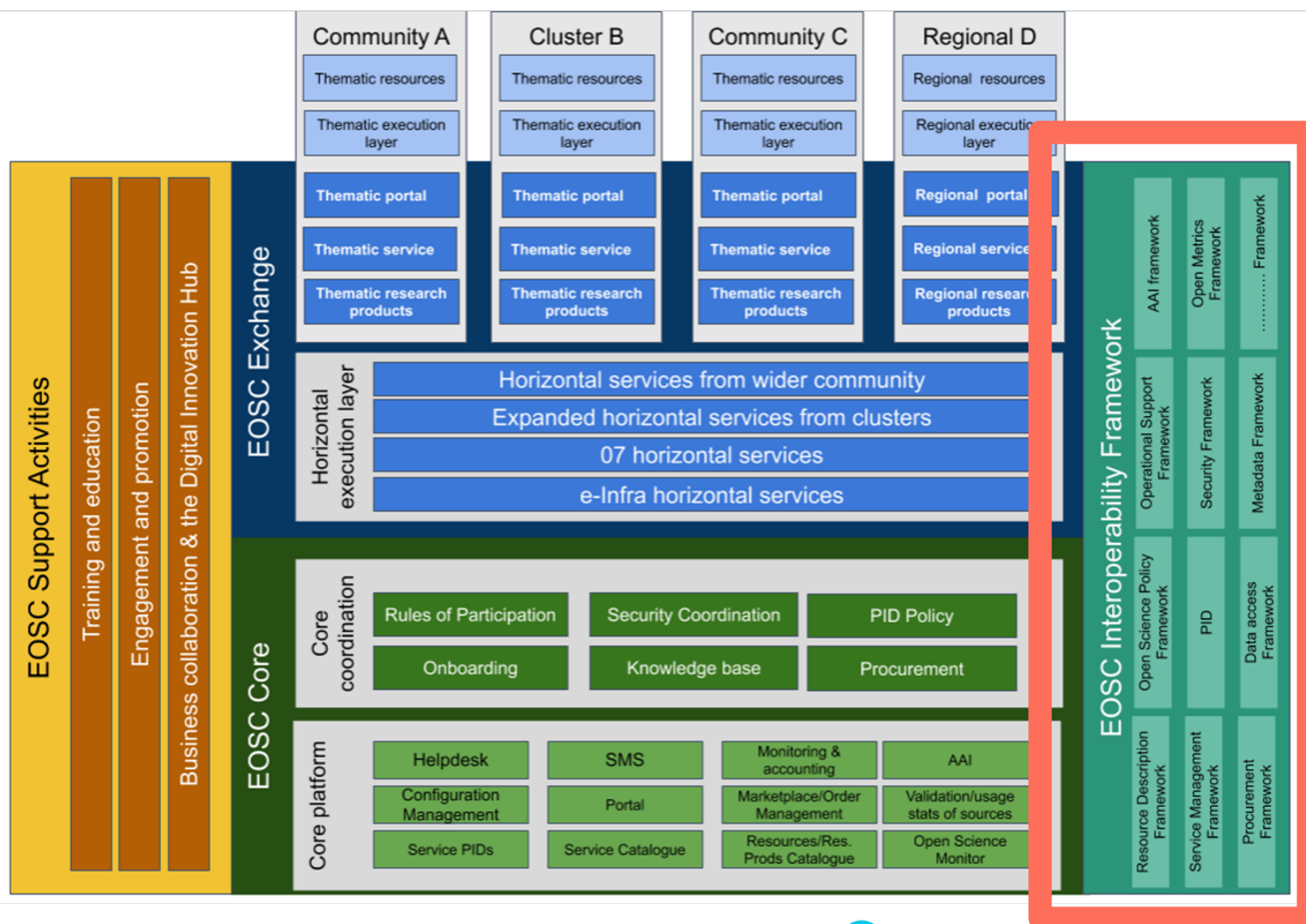
- Core platform
 - Portal
 - AAI
 - Config management
 - Service management
 - Helpdesk
 - Service catalogue
 - ...
- Coordination
 - Policies
 - Security
 - ...

EOSC Architecture - Exchange



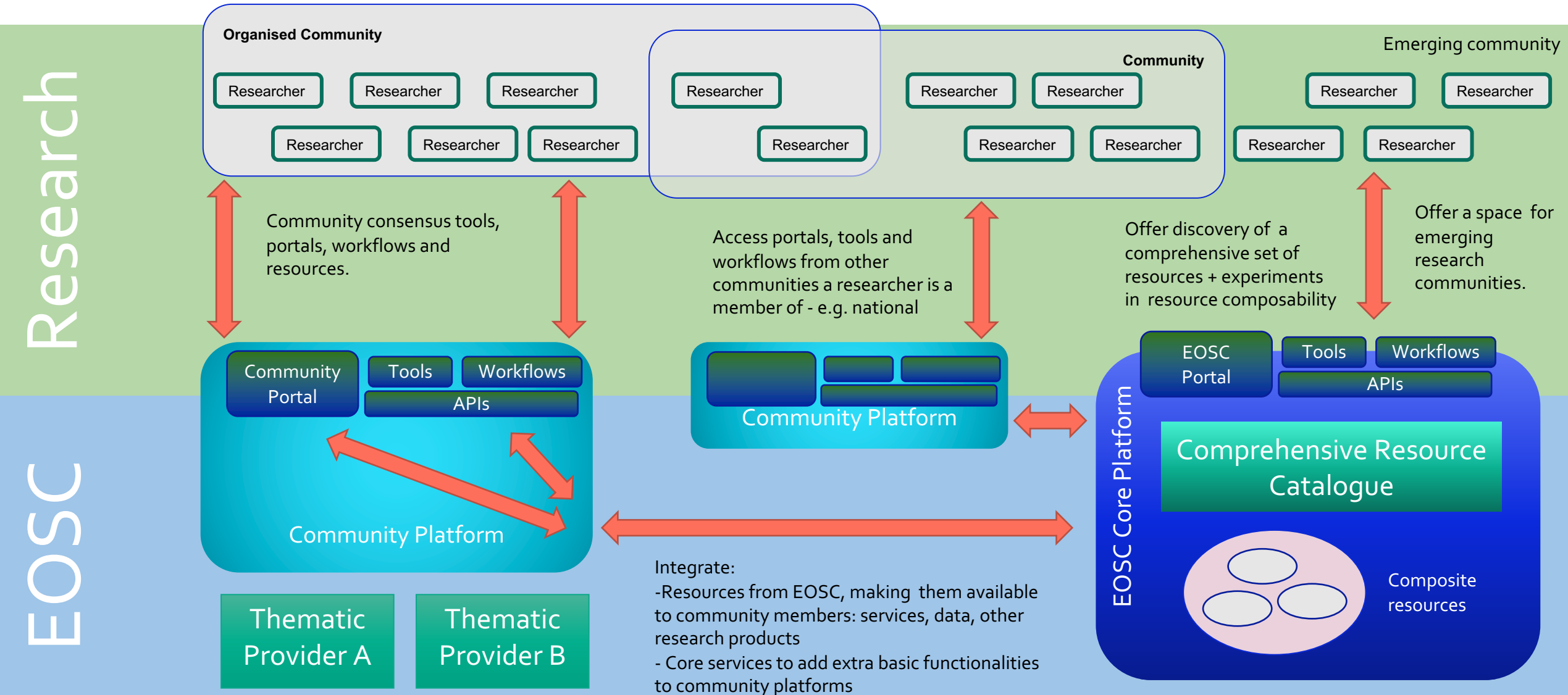
- Community
 - Resources
 - Portal
 - Thematic services
- Horizontal execution layer
 - 07 Projects
 - e-Infra
 - Clusters
 - Community

EOSC Architecture - EIF



- Resource Description Framework
- (Persistent) Identifiers
- AAI
- Metadata and Ontologies
- Accounting
- Monitoring
- Order management
- Helpdesk

Researcher view: different benefits





EOSC Future Technical Roadmap



eoscfuture.eu



[@EOSCFuture](https://twitter.com/EOSCFuture)



[EOSCfuture](https://www.linkedin.com/company/eoscfuture)





EOSC Future Technical Roadmap

3 main milestones: M6 - M18 - M30

1. EOSC Interoperability Framework
2. EOSC Core
3. EOSC Exchange



EOSC Interoperability Framework

Technical Roadmap

Interoperability frameworks to enable the integration/composability of EOSC resources

Resource Description Framework

Identifiers

AAI

Metadata and Ontologies

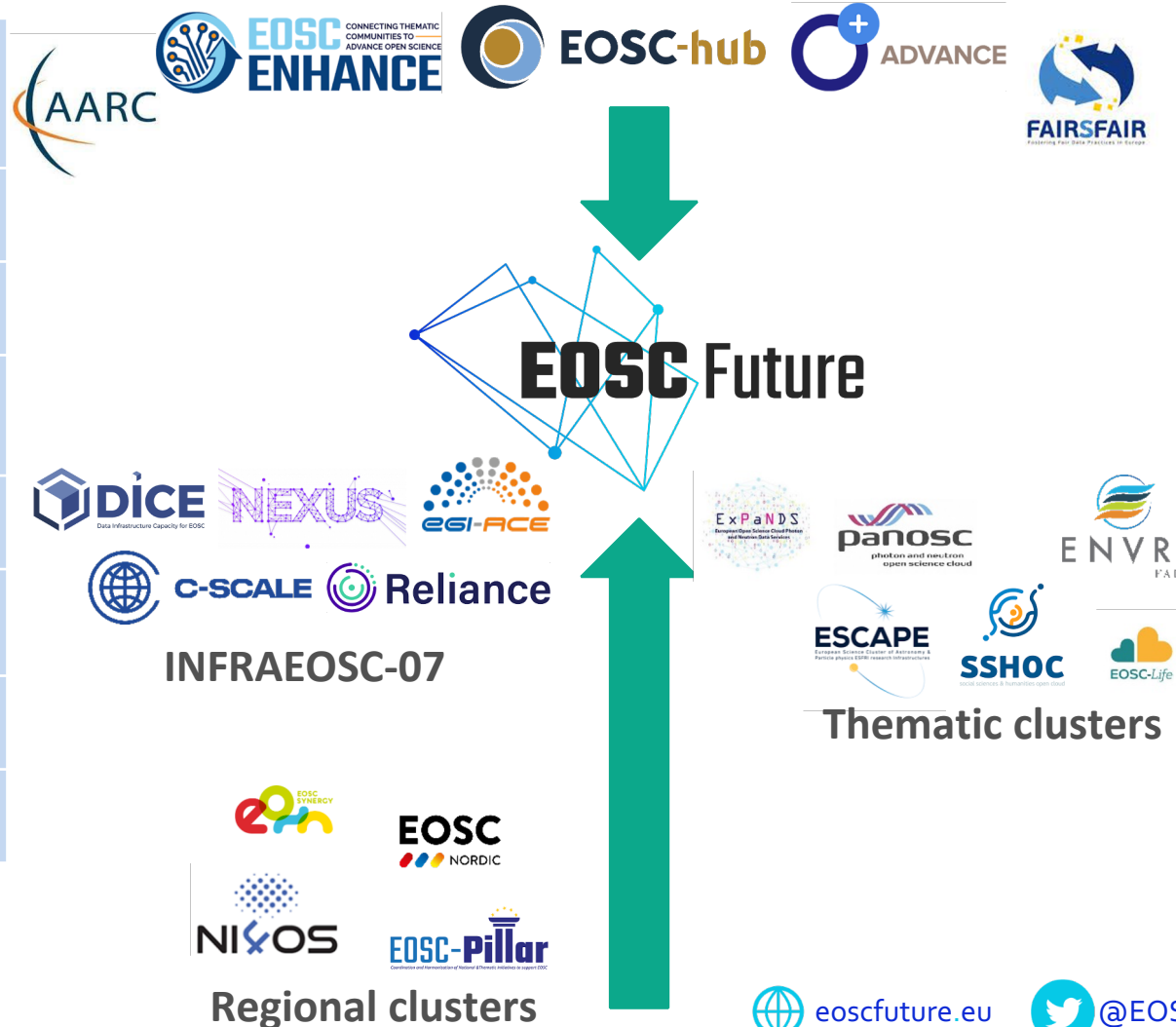
Accounting

Monitoring

Order management

Helpdesk

EOSC Core



Data Platforms for Processing

Data Publishing and Open Data

Cloud Compute
Containerisation and
Orchestration

HTC-HPC Compute

Machine Learning

EOSC Exchange

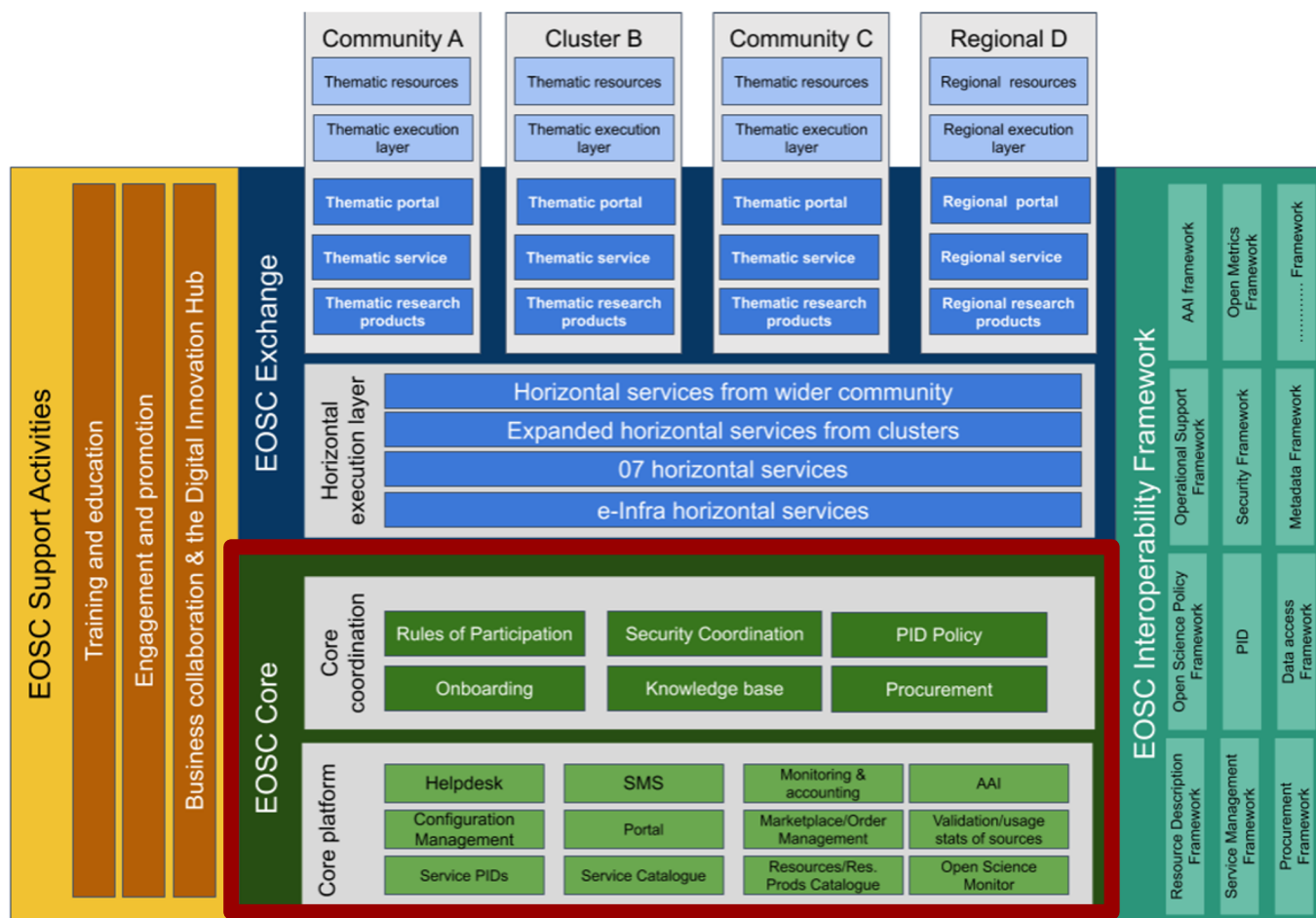
eoscfuture.eu

[@EOSCFuture](https://twitter.com/EOSCFuture)

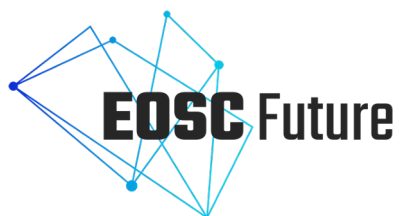
[EOSCfuture](https://www.linkedin.com/company/eoscfuture)



Setup the EOSC-Core



Beta EOSC-Core



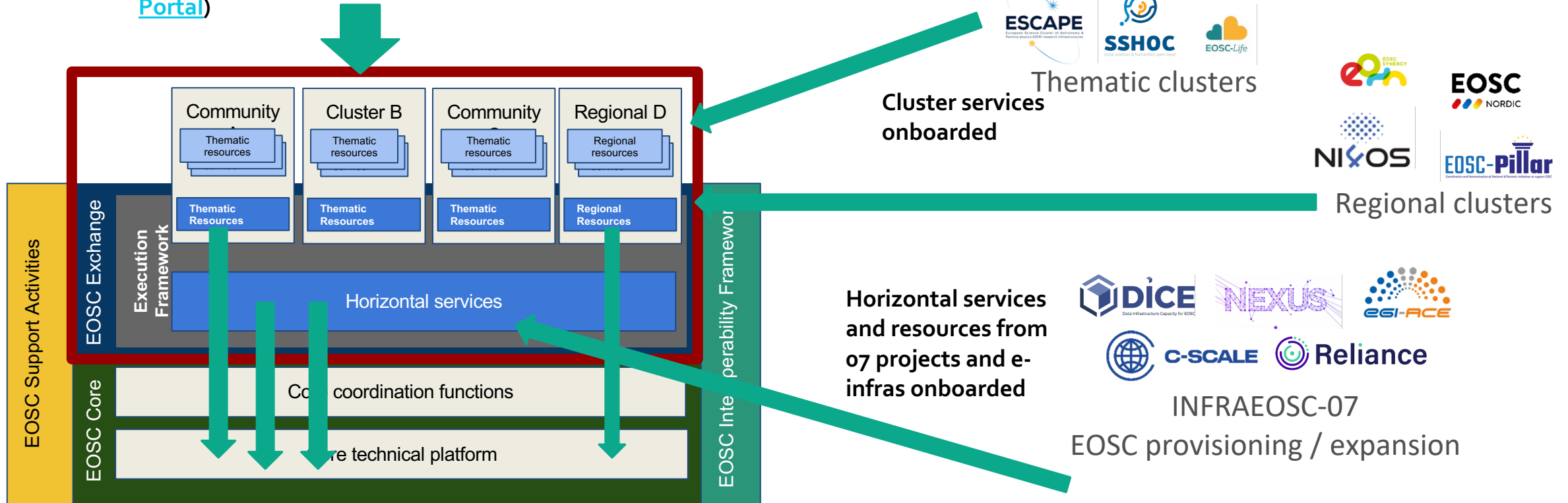
Production EOSC-Core



- EOSC Platform Central functions
- Interfaces for (optional) integrations

Populating the EOSC-Exchange

311 Resources onboarded through EOSC
Future and prior projects (e.g. EOSC-hub,
EOSC Enhance, eIC) (source [EOSC Metrics
Portal](#))



EOSC Horizontal services are delivered (e.g. data transfer, container deployment and orchestration)

The **onboarding process** is extended to include validation of **data sources**

Ability to **create thematic execution environments / VREs** based on integration of compliant thematic, horizontal, and core resources

A large, stylized orange geometric network of lines and dots in the top-left corner of the slide.

Thank you for your attention!

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- Klaas Wierenga (GEANT) <klaas.wierenga@geant.org>