

EOSC - virtual research environment

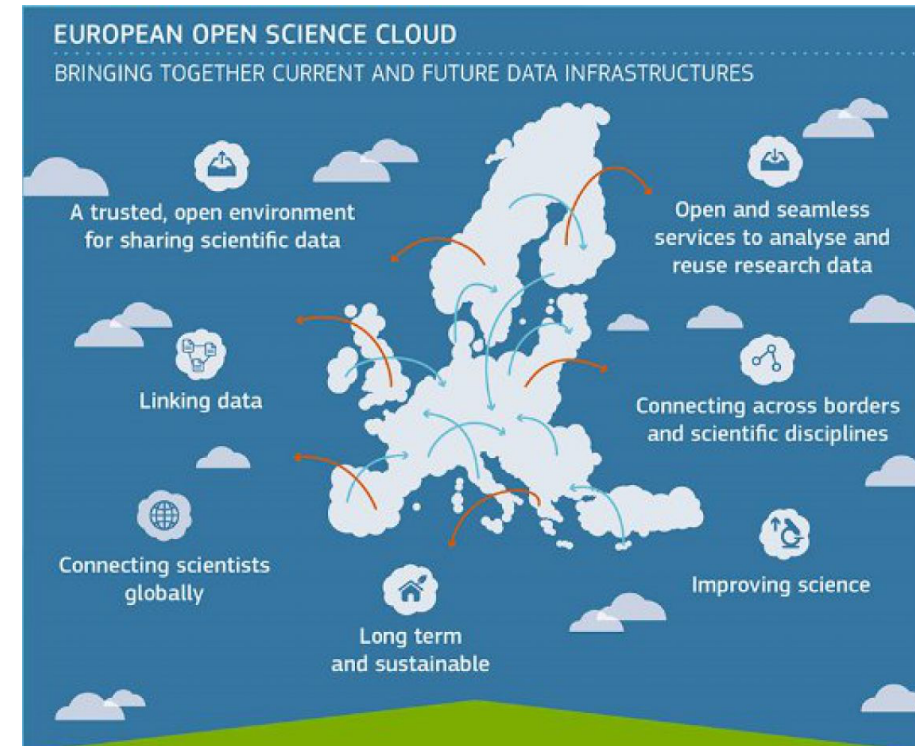
National Capacity Building NI4OS Training - BA
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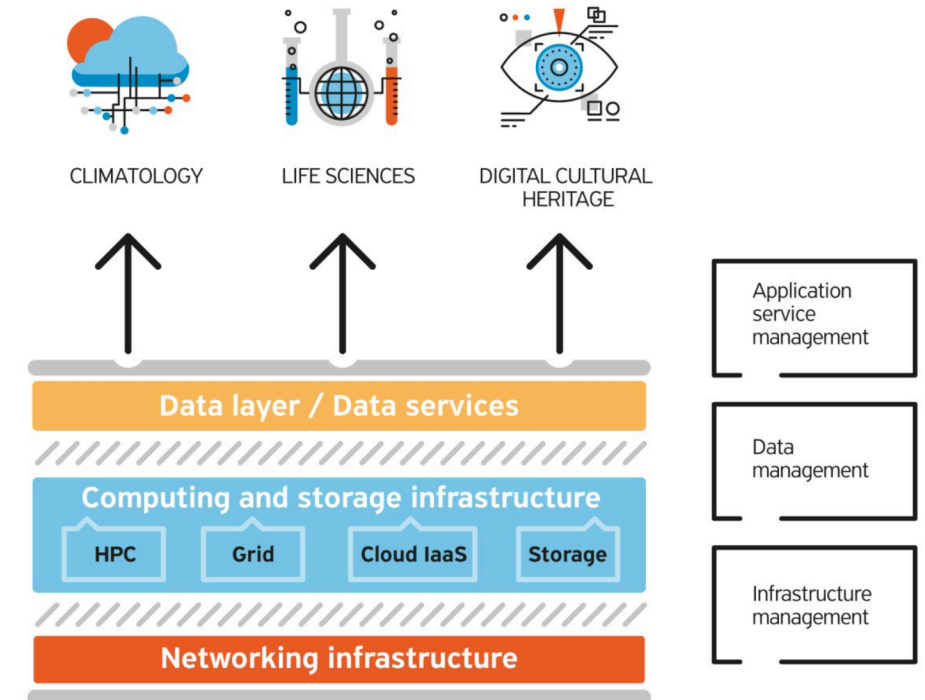


- ❑ EOSC aims and regional perspective
- ❑ EOSC-core, federated data, EOSC-Exchange
- ❑ Services within the NI4OS-Europe project
- ❑ EOSC Working Groups and EB Task Forces
- ❑ EOSC on-boarding and different aspects of a resource description
- ❑ Technology Readiness Level (TRL)
- ❑ EOSC Integration Level (EIL)
- ❑ Management Integration Level (MIL)
- ❑ Cumulative levels of integration
- ❑ Best practices for onboarding

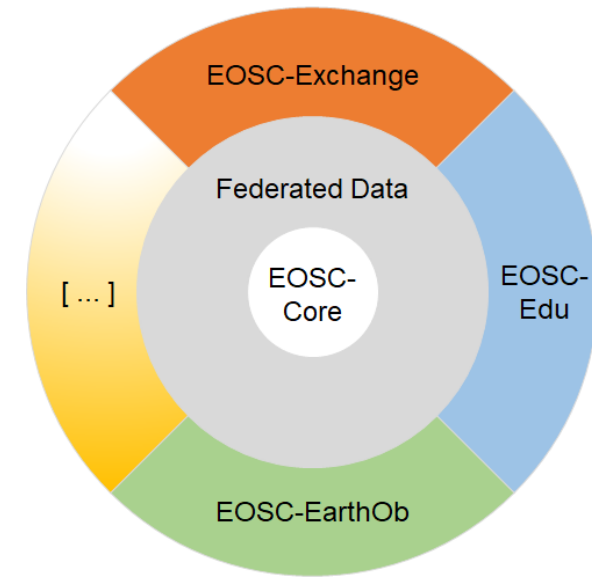
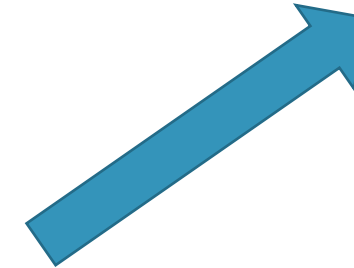
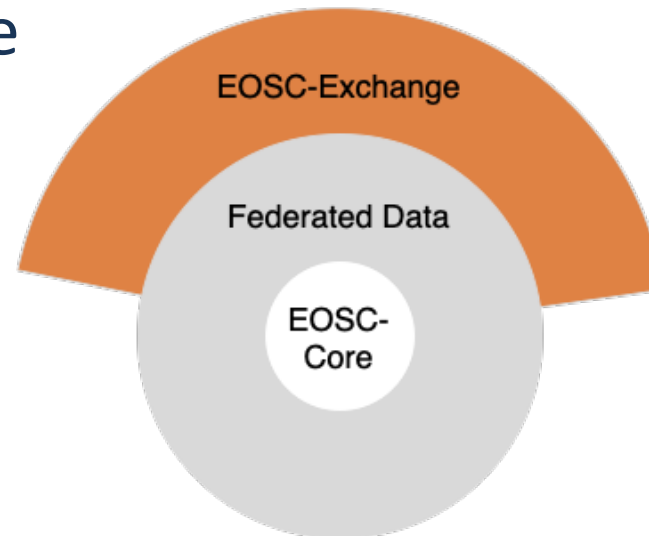
- ❑ Trusted digital platform for the scientific community
- ❑ Seamless access to data and interoperable services
- ❑ Discovery and mining to storage, management, analysis and re-use
- ❑ Stakeholders
 - ❑ Research funding organization
 - ❑ Research organization
 - ❑ Organization supporting research
 - ❑ Organization using research results, SMEs, OS
- ❑ Federation of existing data infrastructures
 - ❑ High-speed connectivity to transport data
 - ❑ Data infrastructures to store and manage data
 - ❑ Powerful HPC/HTC to process data



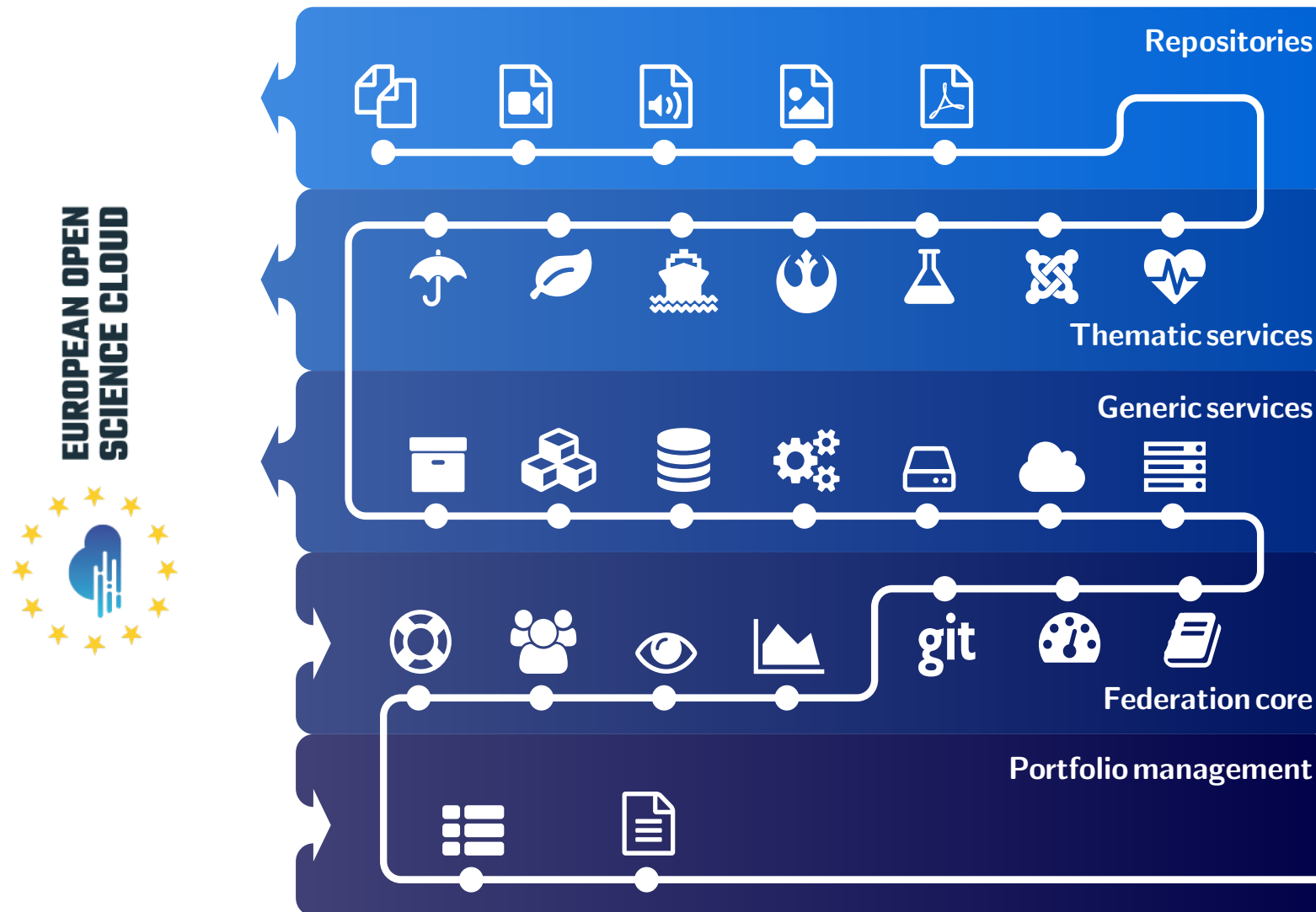
- ❑ SEEREN project series established regional networking infrastructure
- ❑ SEE-GRID project series established Grid computing infrastructure
- ❑ SEE-GRID-SCI further support regional research communities
- ❑ HP-SEE project established the regional HPC infrastructure
- ❑ VI-SEEM project tried to link previous into a single infrastructure



- ❑ Resource catalogue and resource description template
- ❑ Helpdesk and support team
- ❑ Authentication and authorization infrastructure
- ❑ Monitoring and accounting infrastructure
- ❑ Software and data repository
- ❑ Training infrastructure

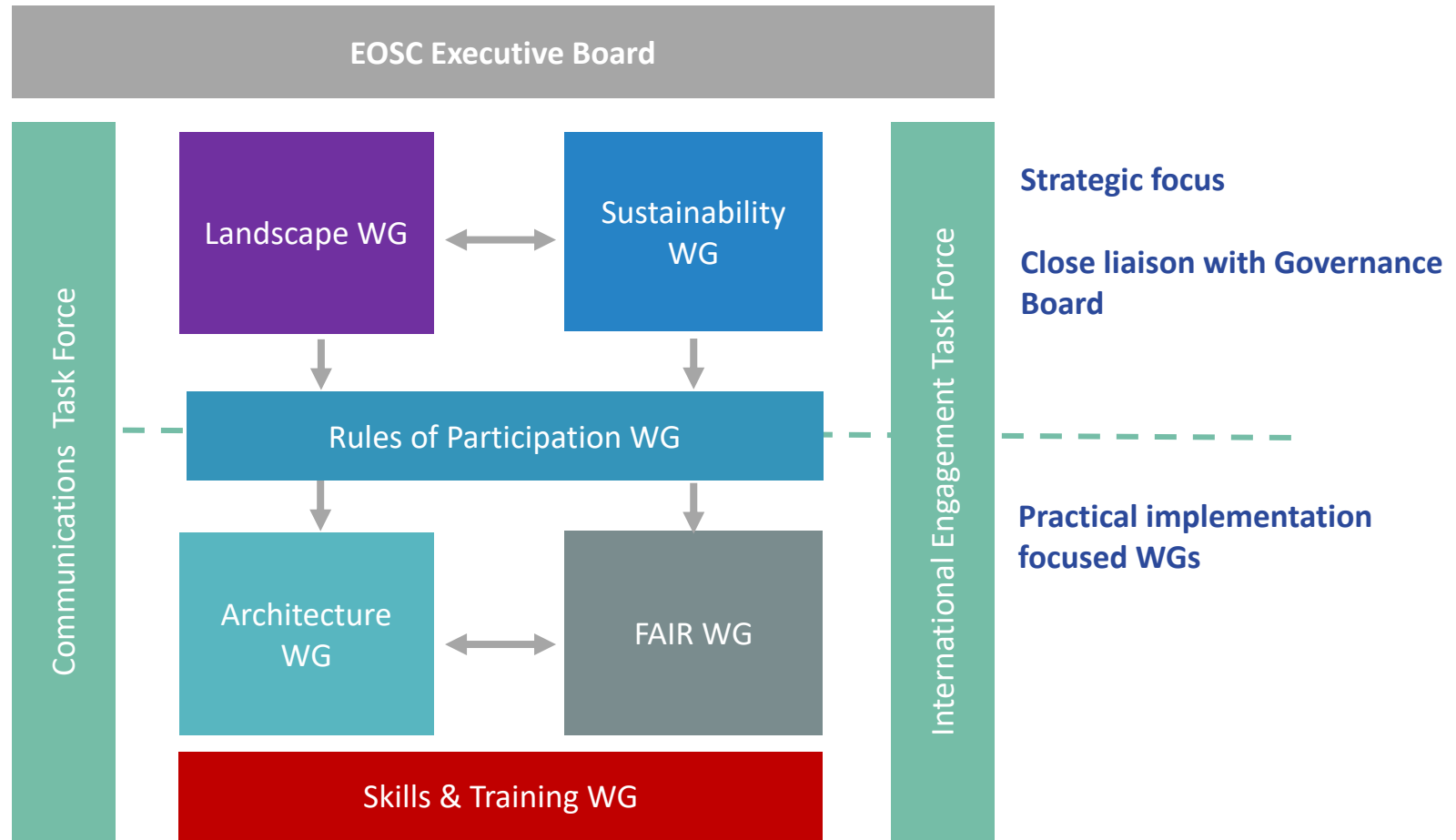


Services within the NI4OS-Europe project



EOSC Working Groups and EB Task Forces

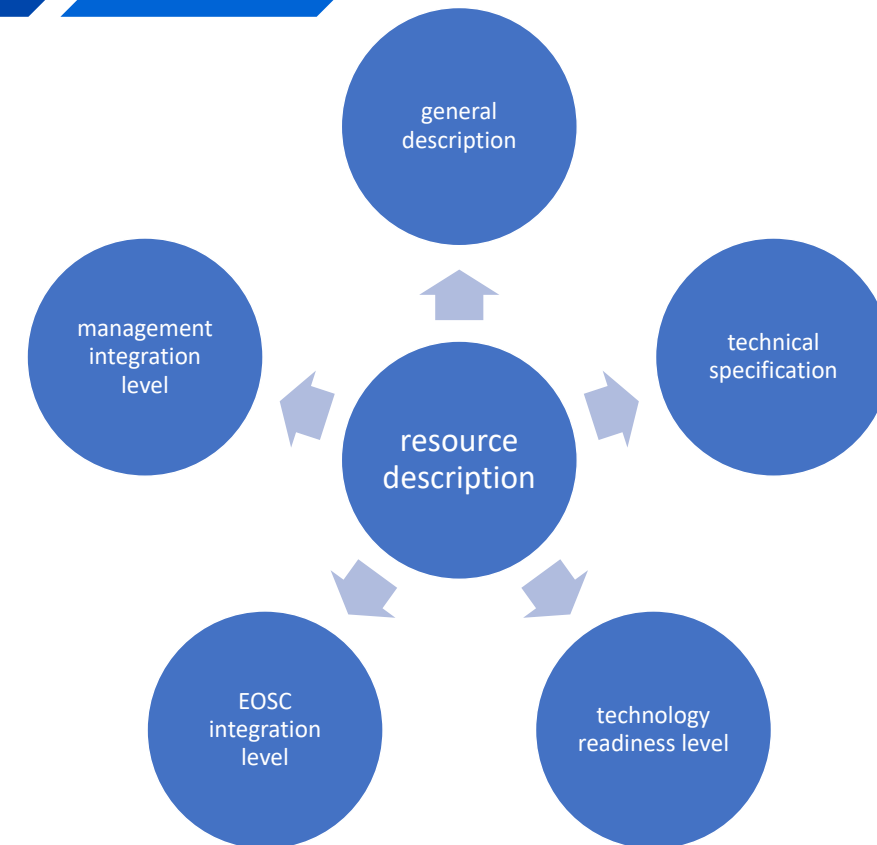
- 6 Working Groups
- On 6 Strategic Priority Areas for EOSC
- 150+ WG Members
- 10 Active WG Task Forces



- ❑ Resource on-boarding includes five main steps



- ❑ Different aspects of a resource description
 - ❑ Non-EOSC-related aspects of resource description
 - ❑ General resource description common for all types of resources
 - ❑ Technical specifications of the resources unique for all types of resources
 - ❑ EOSC-related aspects of resource description
 - ❑ Technology Readiness Level (TRL)
 - ❑ EOSC Integration Level (EIL)
 - ❑ Management Integration Level (MIL)
 - ❑ Scientific impact of a particular resource



Technology Readiness Level (TRL)

- ❑ Assess a resource development stage
- ❑ From the on-boarding perspective, only high-level TRLs are of interest
- ❑ However, in our portfolio system, we will also collect and describe resources that are currently under development
- ❑ EOSC features and functionalities that could be integrated and reused in the early resource development stage



EOSC Integration Level (EIL)

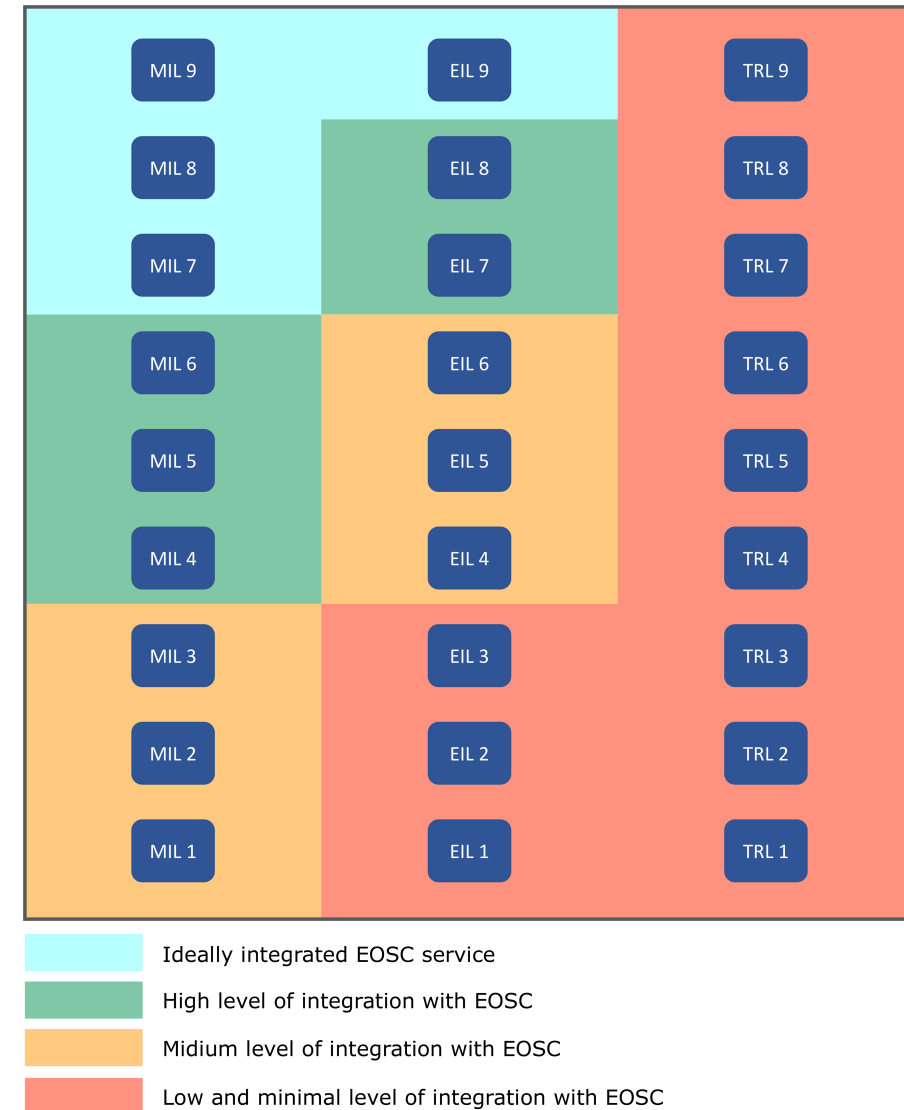


- ❑ Procedures and policies will ensure the practical implementation of various Rules of Participation
- ❑ Although resource management reflects the achieved EIL, it imposes some concrete obligations on the resource providers
- ❑ We have introduced nine different levels that the resource could reach in the integration with the project's resource management procedures and policies



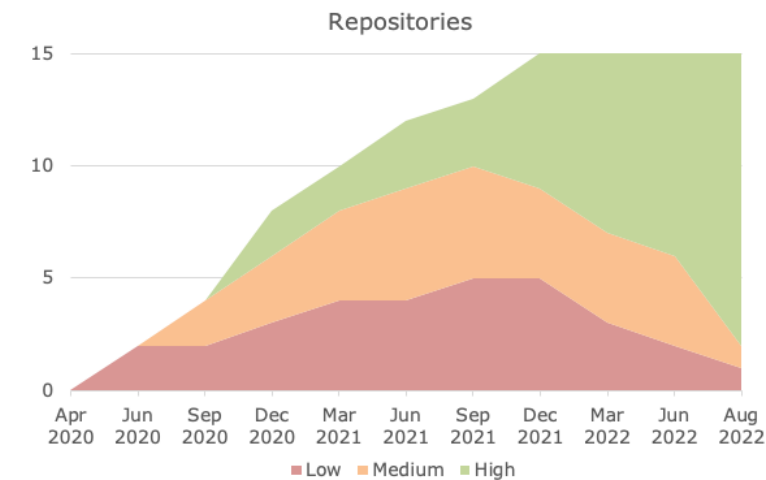
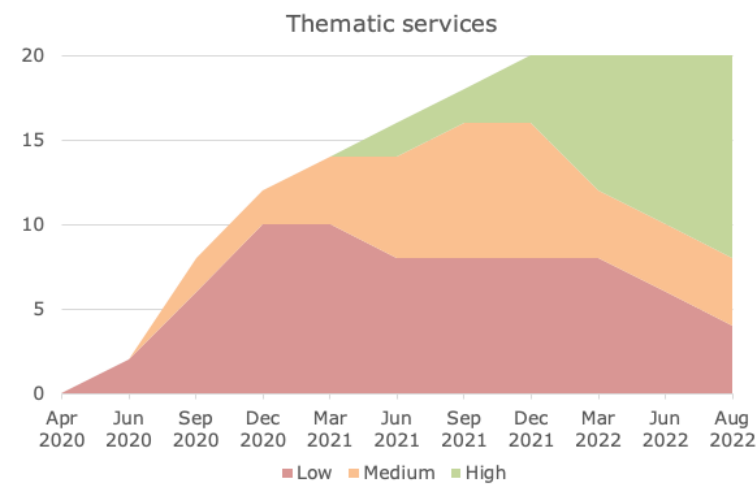
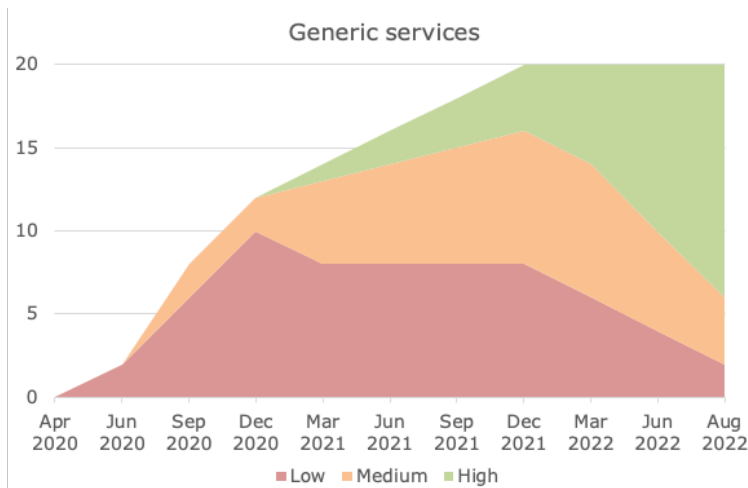
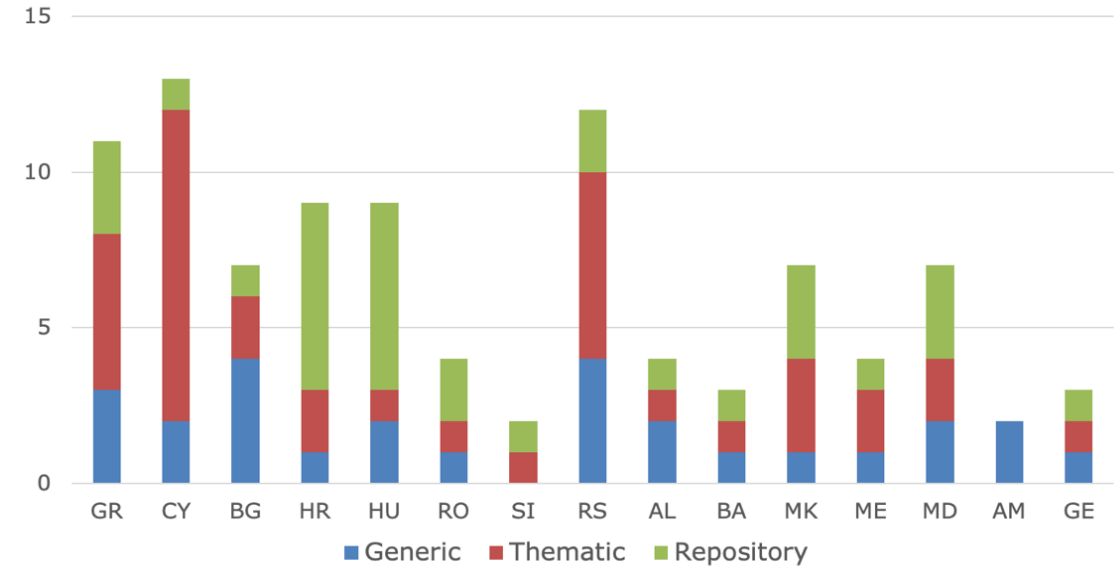
Cumulative levels of integration

- ❑ Cumulative levels of integration with EOOSC
 - ❑ Low and minimal level of integration with EOOSC
 - ❑ Medium level of integration with EOOSC
 - ❑ High level of integration with EOOSC
 - ❑ Ideally integrated EOOSC resource
- ❑ Should not be considered as a static set of rules, they reflect the current EOOSC development stage and will evolve through time following the EOOSC expansion
- ❑ EOOSC-core resources have to evolve dynamically with the EOOSC-Exchange layer



Regional services

- At the moment, 97 resource descriptions collected
- On-baording timeline



- ❑ Reference architecture: template solution for an architecture
- ❑ EOSC Technical Architecture
 - ❑ Infrastructure level
 - ❑ Framework to define the interoperability guidelines
- ❑ Building Block
 - ❑ basic element: scope, features, standards, APIs, etc.

