

# Federation of services and core components of EOSC

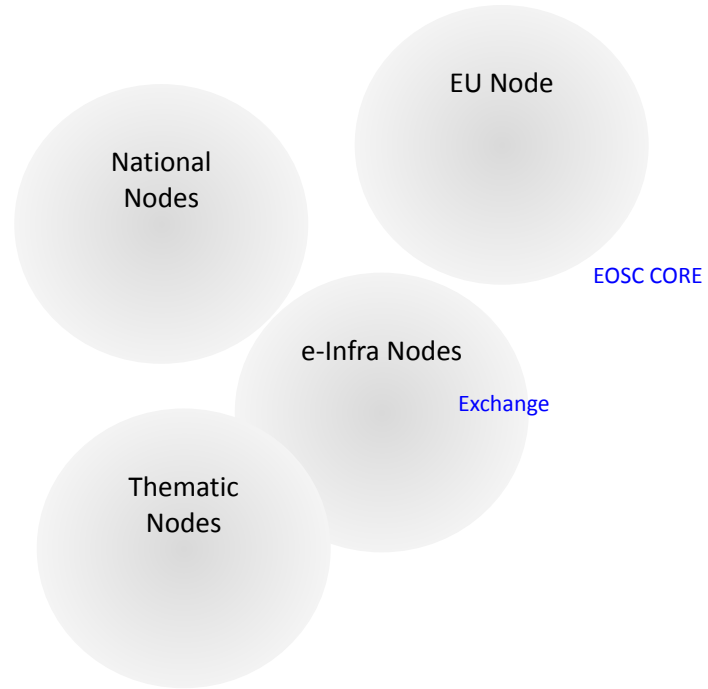
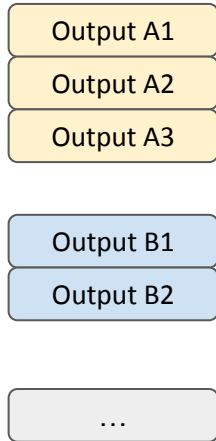
## Integration of related project outcomes

AI4EOSC  
Marcin Plociennnik

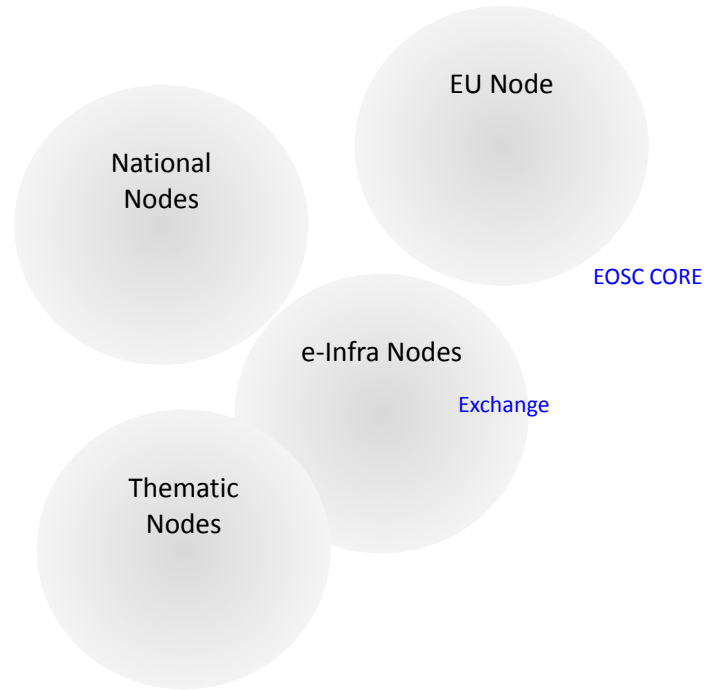
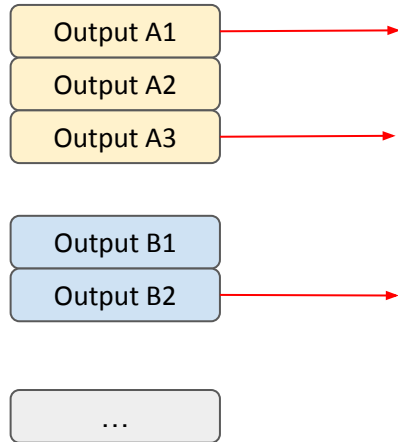
Moderator  
Spiros Athanasiou

Rapporteur  
Wim Hugo

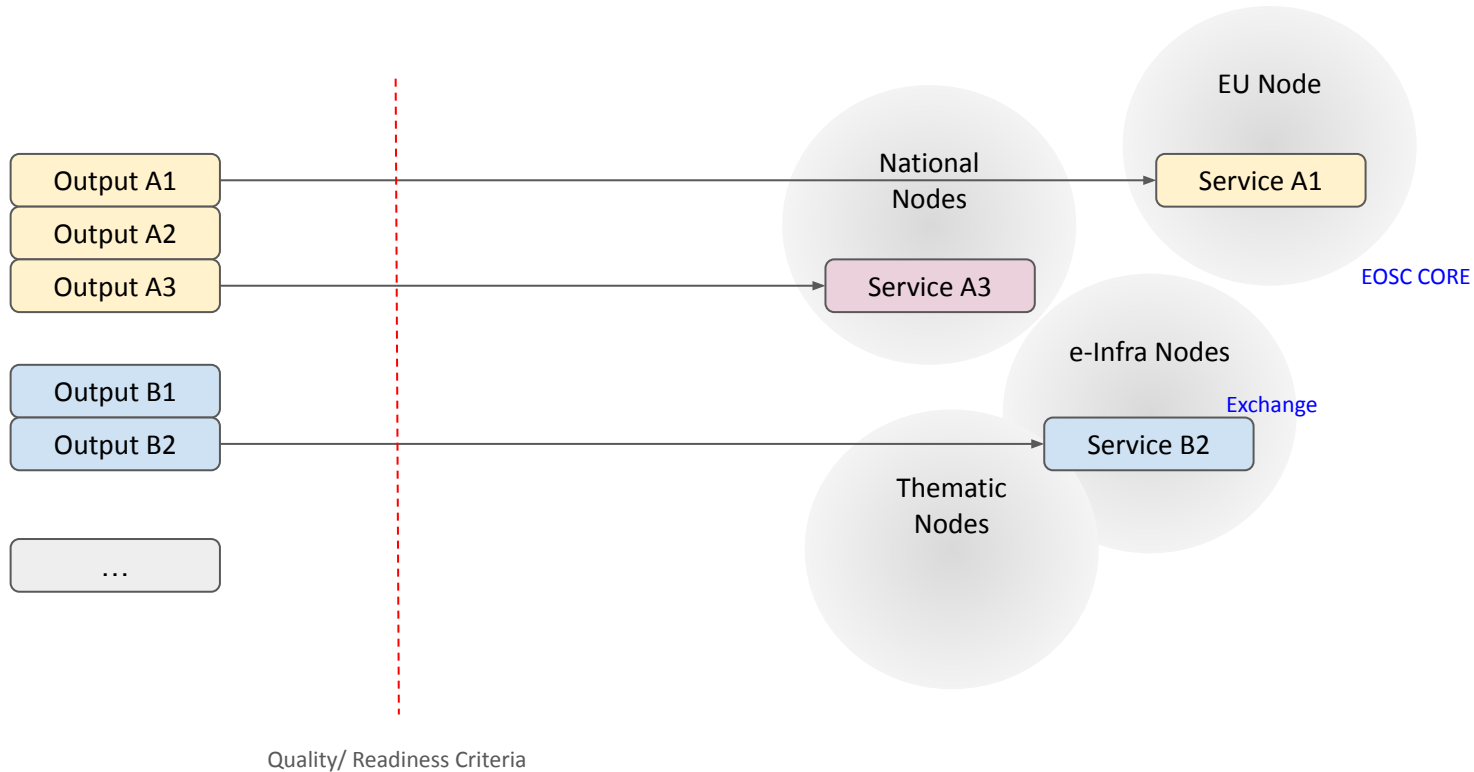
# Projects produce outputs that may be relevant



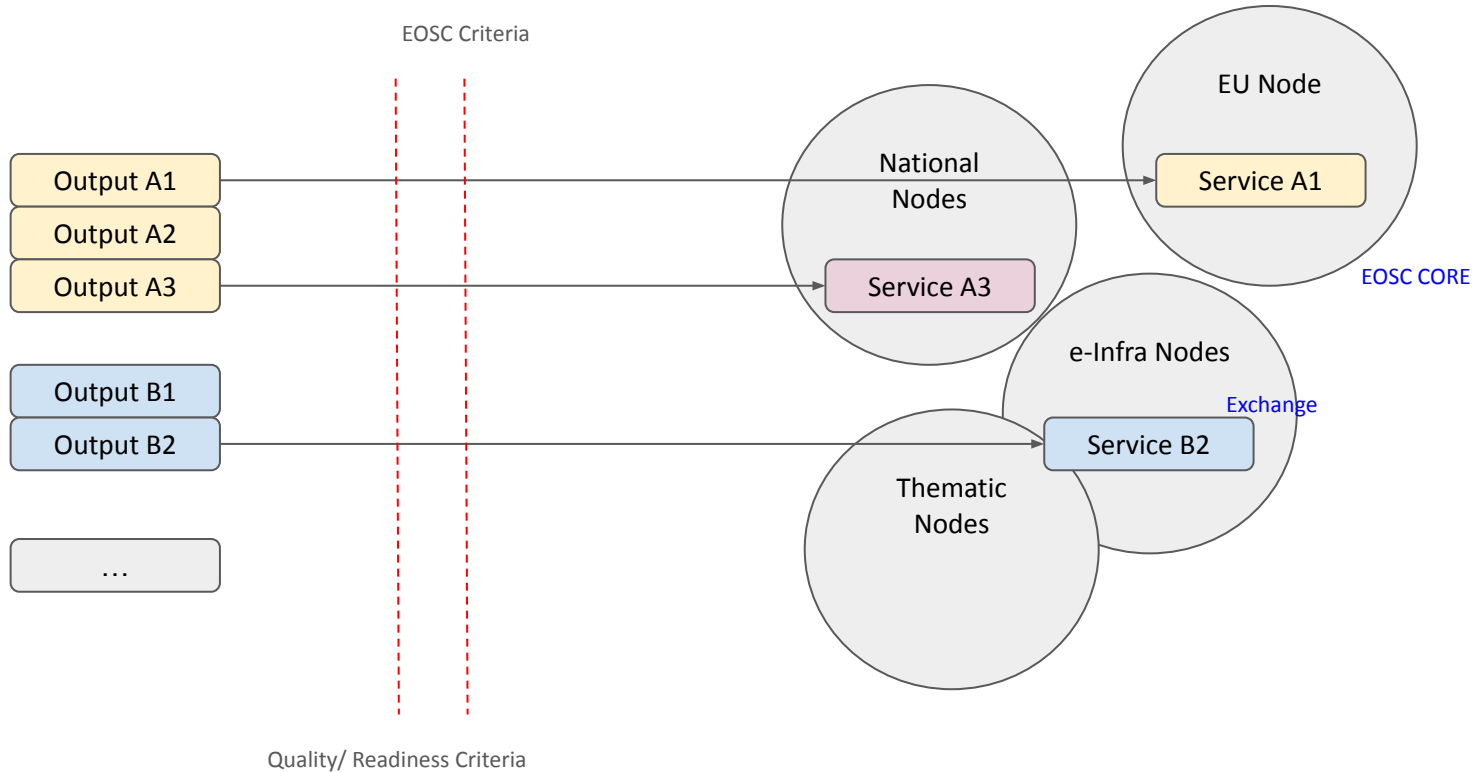
# Clear Definition of Incentives: Why Bother?



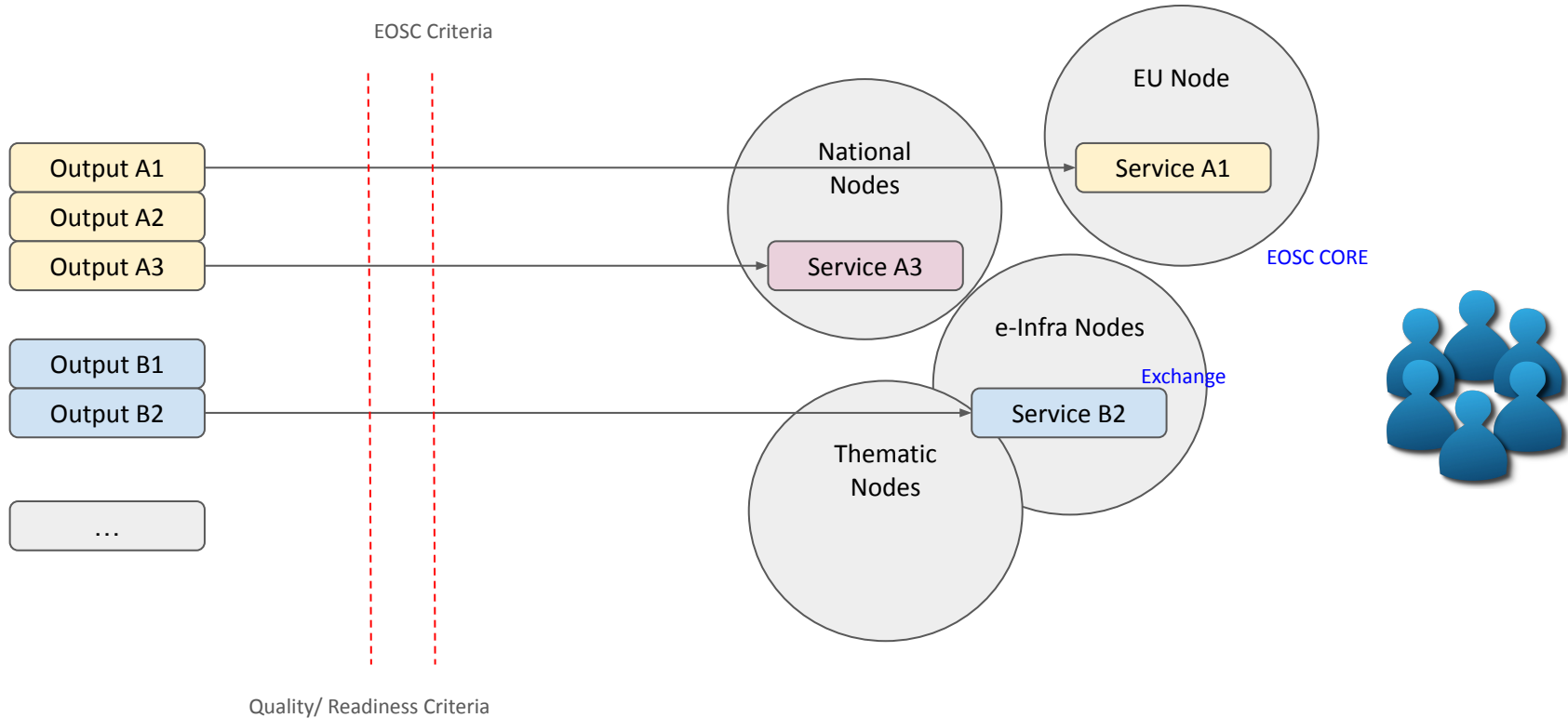
# Clear Definition of Quality and Readiness



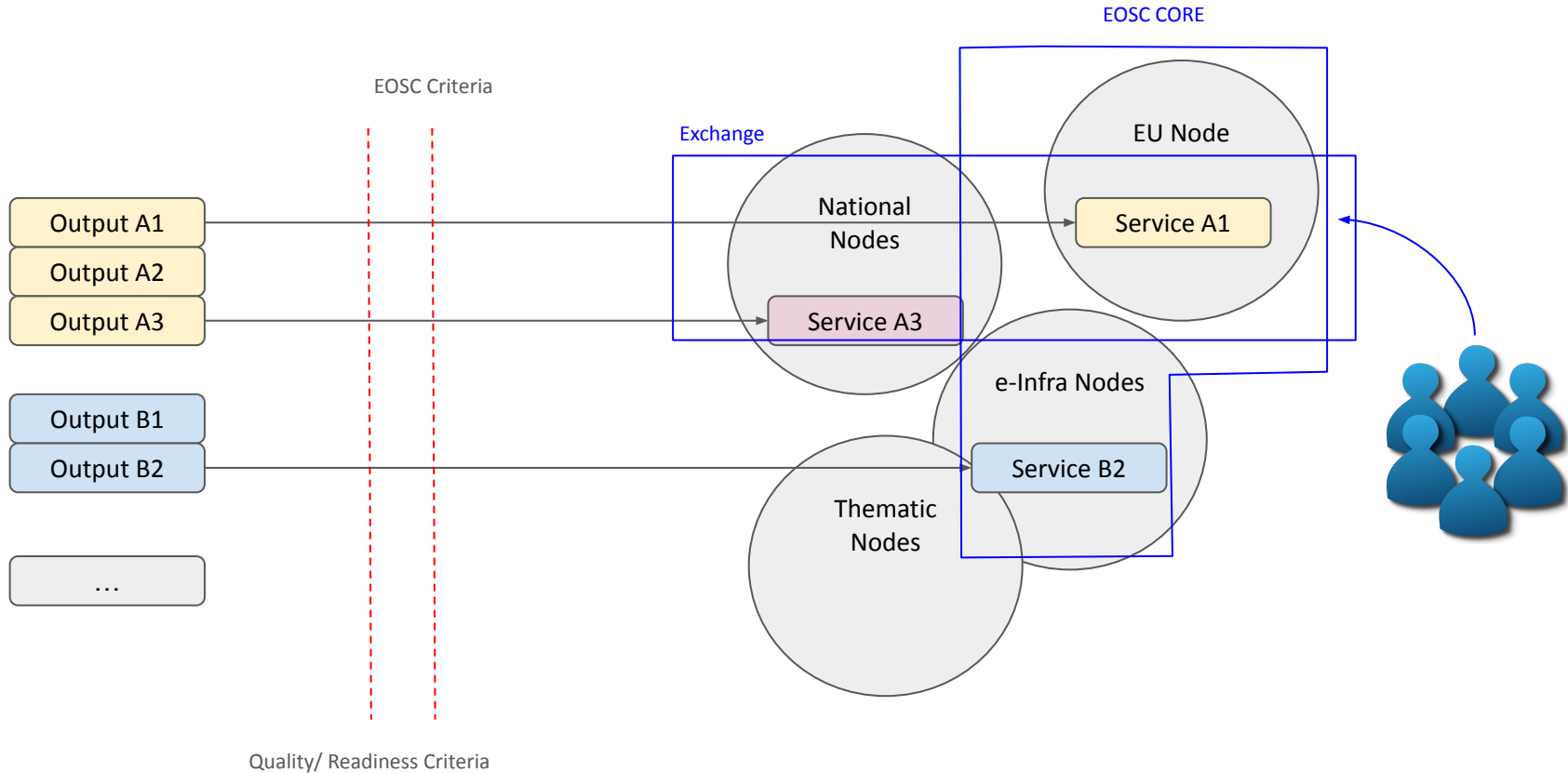
# Clear Definition of Node Characteristics



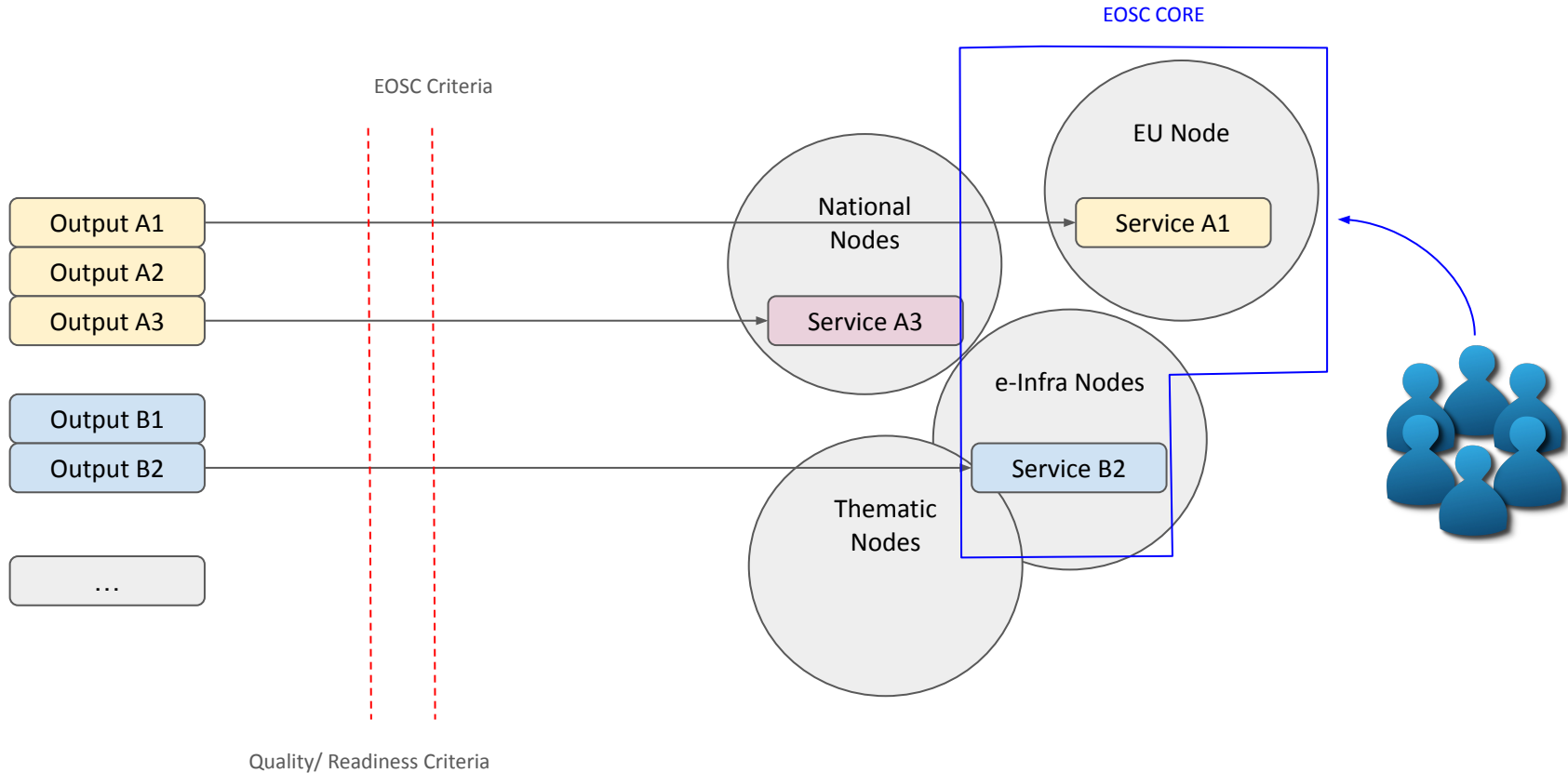
# Clear Definition of User Requirements



# Clear Definition of 'Core', 'Exchange', Etc.



# A clearer picture





# Last Word

Game of Quotes

“ If you don't know where you are going, any road will take you there”

Lewis Carroll

Also: Steve Jobs and Henry Ford ...



# Sustainability of projects' outcomes

## *Breakout session 3*

Moderator: Ilaria Nardello (EOSC-A)

Rapporteurs: Alessandro Rizzo (FAIR-EASE) and Vasso Kalaitzi (FAIR-IMPACT)



## Your project Acronym?

15 of 18 responded • 19 responses

EOSC Steering Board

OSTrails

SciLake

FAIR-IMPACT

RAISE

WorldFAIR

TITAN

EOSCpilot

RDA TIGER

FAIR-EASE

ENTRUST

EOSC4Cancer

GraspOS

StR-ESFRI3

GraspOS

EuroScienceGateway

OSCARS

FAIRCORE4EOSC

Skill4EOSC

# Intro talk #1

- Ingrid Dillo, FAIR-IMPACT project coordinator
  - 1/ FI doesn't produce technical results; 2/ FI is a Coordination and Support Action (CSA); 3/ The project is quite mature;
  - FI started from approach built in FAIR's FAIR project (very successful), lessons learned:
    - Starting early in the project;
    - All the WPs involved;
    - WPs are responsible for their outputs;
    - Throughout the entire life of the project;
    - Consider the stakeholders inside and outside the project;
  - FI approach:
    - Separated task from management project;
    - Sustainability monitored during the project;
    - Each WP responsible;
    - It depends on the uptake by the EOSC partnership (stakeholders)
    - Linked to the synchronisation activities;
  - CSA has a diversity of outputs / Key exploitable results (KER), Key outputs (KO) and Key functions (KF) quite different from other projects and different sustainability pathways.

# Intro talk #1

- Challenges in 2019 (FsF project): landscape the main challenge / overlapping in projects, ...
- In 2024: landscape more complex, more projects; but good news: more options for coordinating projects (meetings, Opportunity Areas, Winter School, ...)
- Overloads... extra pressure on the projects / from the coordination it is difficult to motivate, but sustainability is also based on collaboration!
- Landscape is more uncertain... What about after 2027? the TF and the new ones? EOSC EU node? ... what will the node look like?
- Solutions base on a wider collaboration:
  - build on each other's results from one project to the other
  - think more creatively about sustainability
  - share sustainability approaches (more resources for collaboration among projects)

# Intro talk #2

- Flavius Pana, Research Executive Agency (REA)
- Only questions, no solutions ;-)
- From the proposal stage until after the end of the project;
- ART. 16: it is an obligation / HE: make the results exploitable (up to 4 years after the end). If within 1 year from the end of the project it is not in place, although the project did its best, we need to report it / Horizon results platforms / Results booster: how to make the results sustainable, all the projects are eligible!! > <https://www.horizonresultsbooster.eu/ServiceFAQs/FAQsPage#28>
- Questions:
  - 1/ How do the projects ensure sustainability?
  - 2/ What are the challenges?
  - 3/ What possible solutions can be envisaged?

# The HE Impact WG - from the EOSC WinterSchool to Today

Jan2024: EOSC WinterSchool - HE Impact  
April2024: SEP tool Implemented and tested  
June2024: SEP validation meeting  
June2024: EC/REA meeting



## Lessons Learned

- Uncertainty of the EOSC environment is an issue
- Research Infrastructures may be KER uptakes
- Brokerage events may be of use

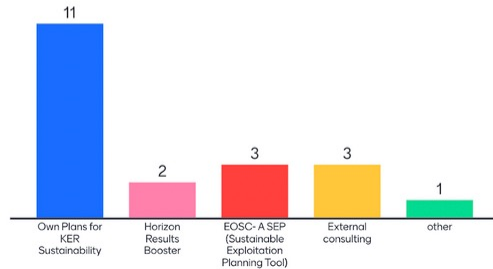
# Discussion

- Projects have to produce an exploitation plan... It is something mandatory. For calls that respond directly to the EOSC, the sustainability needs to come from the EOSC HE Node (FAIRCORE4EOSC, FAIR-IMPACT, etc). If some calls are really specific and sustainability can be based on the node (fit for purpose), other outputs are general enough to be exploited in different ways and environments. Indeed, grants under specific destination and topic the results expected are quite general (RIA), then there is always room enough for defining more focused results... *be careful to address the topic and destination that your project responds to!!*



# Discussion

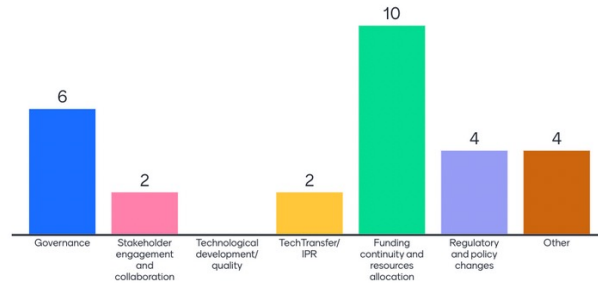
How is your project ensuring the sustainability of the project Outcomes?



- How does the project ensure its sustainability plan?
  - 55% own plans for KER sustainability; At the end the plan is specific... a combination of different tools is possible. Each result is unique and can require a different approach. Results can be focused on one country without having a wider application (?). National stakeholders' engagement is relevant.
- Planning is definitely challenging... or some aspects are.

# Discussion

What is the main challenge (if any) that you are facing?



- What is the main challenge? More than one... **resource allocation**, but also the governance (what happens when the project ends?). Even the EOSC governance is a question now, and the lack of clarity on governance can be a challenge. Stakeholders' engagement is challenging too... It is a marketing strategy too. More than dissemination... It is related to a business strategy (BP?) >> Is it a potential topic for an EOSC Winter School?

# Discussion



What support measures (project calls, meetings, brokerage) events do you envisage? Who should take the lead (partners, EC, EOOSC-A, National Funders)

Meetings for knowledge exchange, best practice, training, EOOSC-A/EC

All of the above are needed

The lead should be taken by the project partners.

The EOOSC Tripartite Governance needs to come up with a path to sustain the results of EOOSC projects (especially for services/software) incl. a body (eg EOOSC-A, related calls/funding, coordination, etc

Encouraging endorsement of eoosc principles and implementation approaches in the various relevant jurisdictions (domains and countries). EC and national funders supported by eoosc-a or task forces



# Discussion

- The EOSC Federation is probably the ultimate partner (not really a client) of the EOSC-related projects... even though other options are possible. The different types of results should be taken into consideration (recommendations, guidelines, services, software). What about the endorsement from EOSC? Especially when this official endorsement is required by potential stakeholders (i.e. FAIR-IMPACT). Endorsement: by the EOSC Tripartite group? The EOSC EU Node? Which governance endorses the outputs?
- Lightweight governance model for Skills4EOSC competence centres. Scalable sustainability to transfer the knowledge through Train-the-Trainer mechanism.
- The Federation is also the way to finally promote the interoperability framework among all the projects.

# Summary

- Building on lessons learned;
- Sustainability is something concerning all the Consortium partners;
- Collaboration among projects is essential to make results exploitable and potentially sustainable;
- Sustainable pathways depend on the type of results;
- Governance is essential for making results sustainable after the end of the project;
- The EOSC federation has an crucial role for the projects' sustainability pathways and particularly for ensuring the EOSC endorsement of projects' results;
- Uncertainty around the EOSC governance and participation rules drive the projects towards alternative home for their solutions;
- The establishment of a process is required to capture all the projects output and work together on an interoperability framework that maximise connections.

# EOSC HE Coordinators

## June 2024

Breakout 5b - Adding value through the EOSC Federation: Users and Resource environments in thematic communities.



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# Agenda

- Introduction, breakout approach (Peter, Sara)
- Intro talk 1: Lise Schrøder, Aqua-INFRA.
- [Intro talk 2](#): Salvador Capella-Gutierrez, EOOSC4Cancer
  
- Discussion question 1:
  - How can EOOSC help us demonstrate and promote the benefits of open science and related collaborative practices for thematic users and resource environments?
- Discussion question 2:
  - What opportunities does the eventual connection to the EOOSC Federation bring to enhance user/resources environments already in place in thematic communities?
- Discussion question 3:
  - What services or features that could be accessible for the Federation could have the largest impact in thematic environments?
- Discussion question 4:
  - What major difficulties or overheads (technical, managerial etc) entail the eventual connection to the EOOSC Federation for thematic user environments?
  
- Summary, discussion readouts (Sara, Peter)

# Adding value through the EOSC Federation: Users and Resource environments in thematic communities

## Practical example from the EOSC4Cancer project

**Reusing catalogues** via common standards

**Open access platform (cBioPortal)** available to anyone

**Data driven harmonisation** of cancer screening programme: interoperability was put in practice in two screening programmes (NL - IT) working together by harmonising a codebook, which was then used also by IT and CZ

**Clinical decision support system:** creation of a (new) standard for semantic harmonisation for clinical decisions



# Discussion question 1: How can EOSC help us demonstrate and promote the benefits of open science and related collaborative practices for thematic users and resource environments?

The **human engagement factor** is perceived as a value add in EOSC. People wouldn't have had the chance to meet without EOSC, domain specific practices would have been shared without EOSC.

EOSC is not a portal, should be considered as **an umbrella framework** going much beyond data.

**Training** becomes strategic at this point: to inform researchers and scientists about the opportunity to use services, tools and methods already in place

**Accessibility** (scientific knowledge more accessible), **Efficiency** (cleaner code, more secure data)  
**Reproducibility** (simplifying the sharing of resources), **Inclusion** (broken down financial and funding barriers)

## Discussion question 2: What opportunities does the eventual connection to the EOSC Federation bring to enhance user/resources environments already in place in thematic communities?

EOSC has the potential of **making available resources from other spaces** (institutes, communities, nodes) not available before, across thematic and geographical research communities.

**Shared authentication** is one of the opportunities, with an unique ID that is broad enough to include availability of a broader set of services (so not just limiting it to EduGAIN)

An **EOSC helpdesk** would be a great opportunity - if sustainability of such a service is ensured

**Scalability of VRE resources** is also seen as an opportunity, with SLAs that can vary according to the type of resources needed, the scope of using the services and the domain

# Discussion question 3: What services or features that could be accessible for the Federation could have the largest impact in thematic environments?

A **managed, reliable cloud service** with ensured uptime service would be the most desirable service for scientific user communities

A **modular SLA model** to be adapted for different services and different scientific communities, so to facilitate the understanding of what services are critical to be ensured at what conditions

A **credit system** could be effective if linked to an effective tracking of usage of resources (and here the AAI is necessary) and an **elastic resizing of resources** across the federation, to avoid stopping services when credits end

**Authentication and Authorization** to processes and data

# Discussion question 4: What major difficulties or overheads (technical, managerial etc) entail the eventual connection to the EOSC Federation for thematic user environments?

Data can be used in many different research environments, what's difficult is **making data findable by other domains** and to describe data in a way that can be integrated to other domains

**Governance and Policies:** adapting to the governance structure and policies defined by the EOSC Federation is not yet clearly assessed

Stronger (human and technological) connection between EOSC and **Digital Twins** should be made

**Time** is a challenge: putting EOSC in practice requires years

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