# KER 7: Business and Sustainability Models for Services and the Hub

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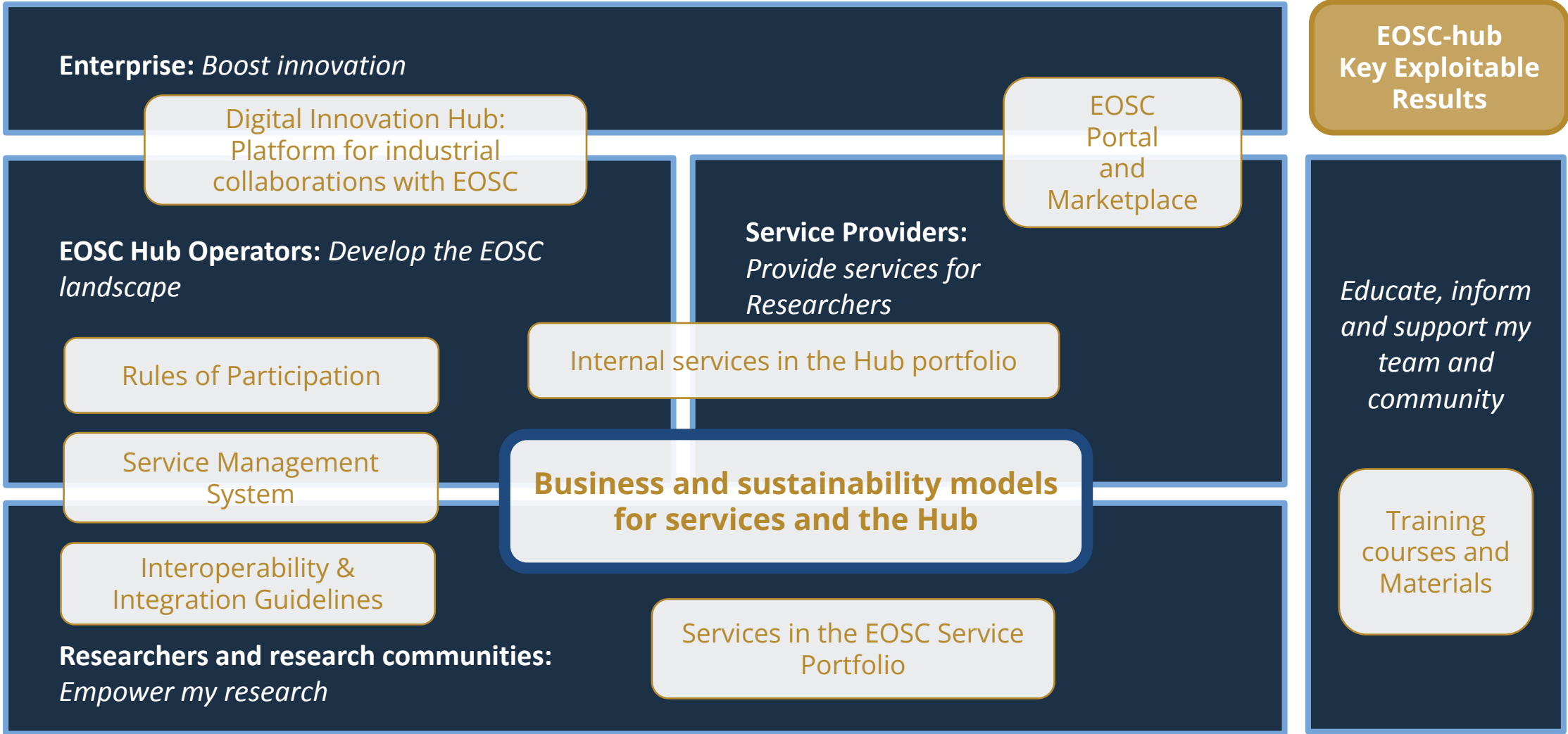"Business Models and Procurement"

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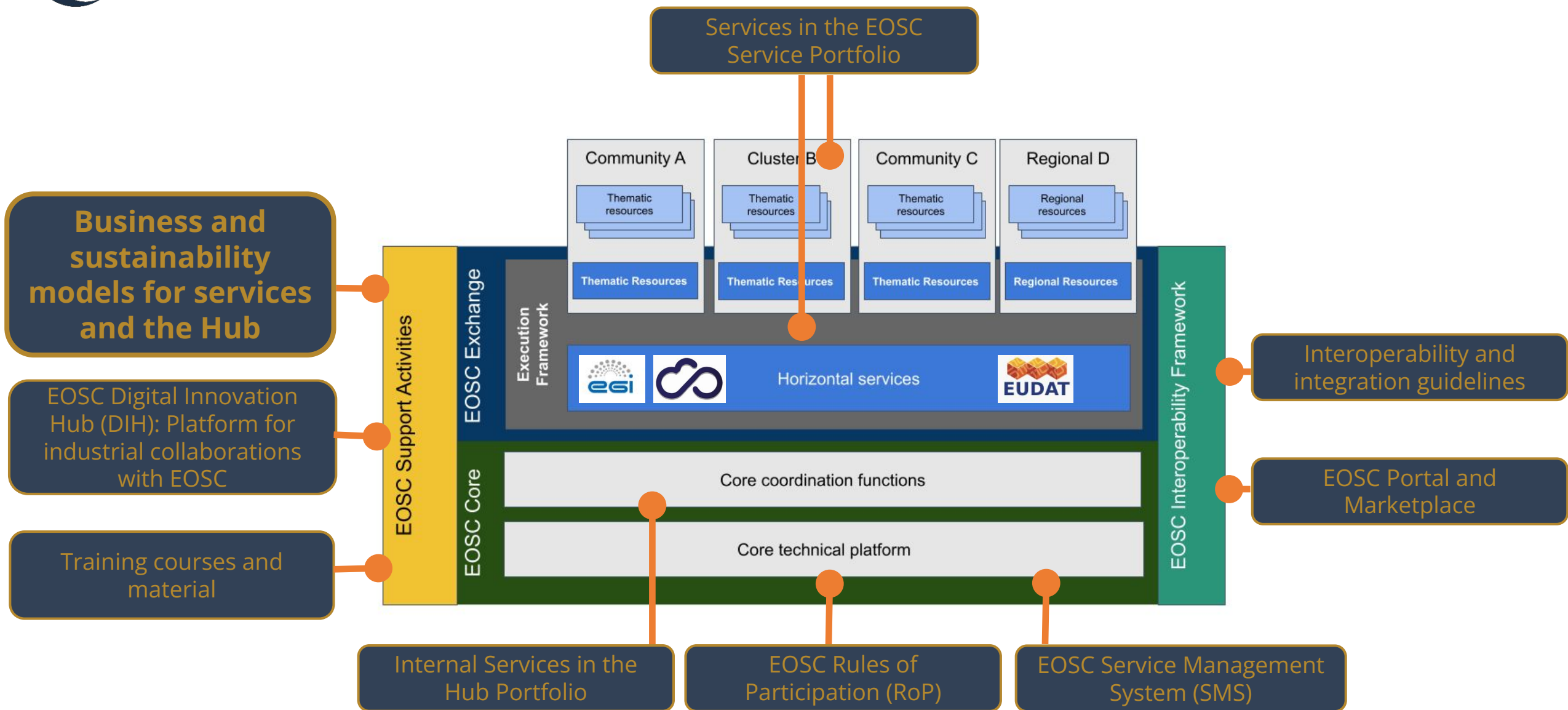**Dissemination level**: Public
Disclosing Party:  Project consortium
Recipient Party: European Commission

# Description of the KER

| | |
|---|---|
| **Description** | ● Analysis and adaptation of business and sustainability models for resources in the EOSC as a shared innovation ecosystem |
| **Type** | ● Business models, documents and reports |
| **Key innovation** | ● Description of the structure and content of the EOSC, i.e., what needs to be sustained<br>● Analysis of challenges in cross-border service provision<br>● Procurement and business models for acquiring services for the EOSC<br>● Recommendations and roadmap for future work |
| **Related information** | ● Alignment with first EC EOSC implementation roadmap<br>● Various consultations with different stakeholder groups including research communities<br>● Regular engagement with the Sustainability and Architecture WGs<br>● Output referenced in EOSC SRIA |

# Contribution to the EOSC Implementation



**EOSC-hub**

**Business and sustainability models for services and the Hub**

EOSC Digital Innovation Hub (DIH): Platform for industrial collaborations with EOSC

Training courses and material

Services in the EOSC Service Portfolio

Interoperability and integration guidelines

EOSC Portal and Marketplace

Internal Services in the Hub Portfolio

EOSC Rules of Participation (RoP)

EOSC Service Management System (SMS)

# Innovation

# Procurement and Business Models



**Market Research**

To understand
- Usage models and demand for services
- Challenges in /using offering digital services
- Current delivery models

To identify
- Preferred delivery models
- Funding streams and procurement strategies
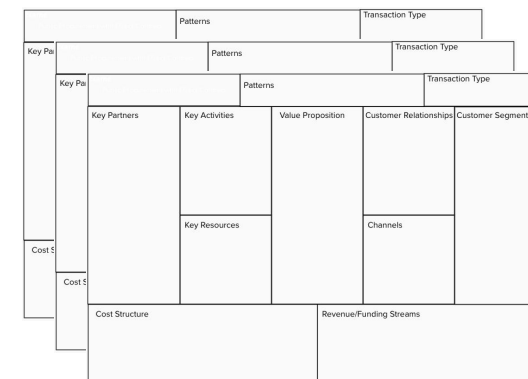- Areas of improvements for business models



**4 Case Studies**

1. Practical Experiences of Voucher Use - HNSciCloud and OCRE
2. Practical Experiences of Public-to-Public Service Provision supported by the H2020 Virtual Access mechanism
3. Public-to-Public Cooperation with Cost-Recovery Mechanisms
4. Practical Experiences with Demand Aggregation: SURFnet and the GÉANT IaaS Framework



**6 Patterns**

1. Let the best emerge
2. Simplify/streamline the procurement process
3. Aggregate demand for economies of scale
4. Opening up existing research resources to more researchers
5. Joint funding on common interest
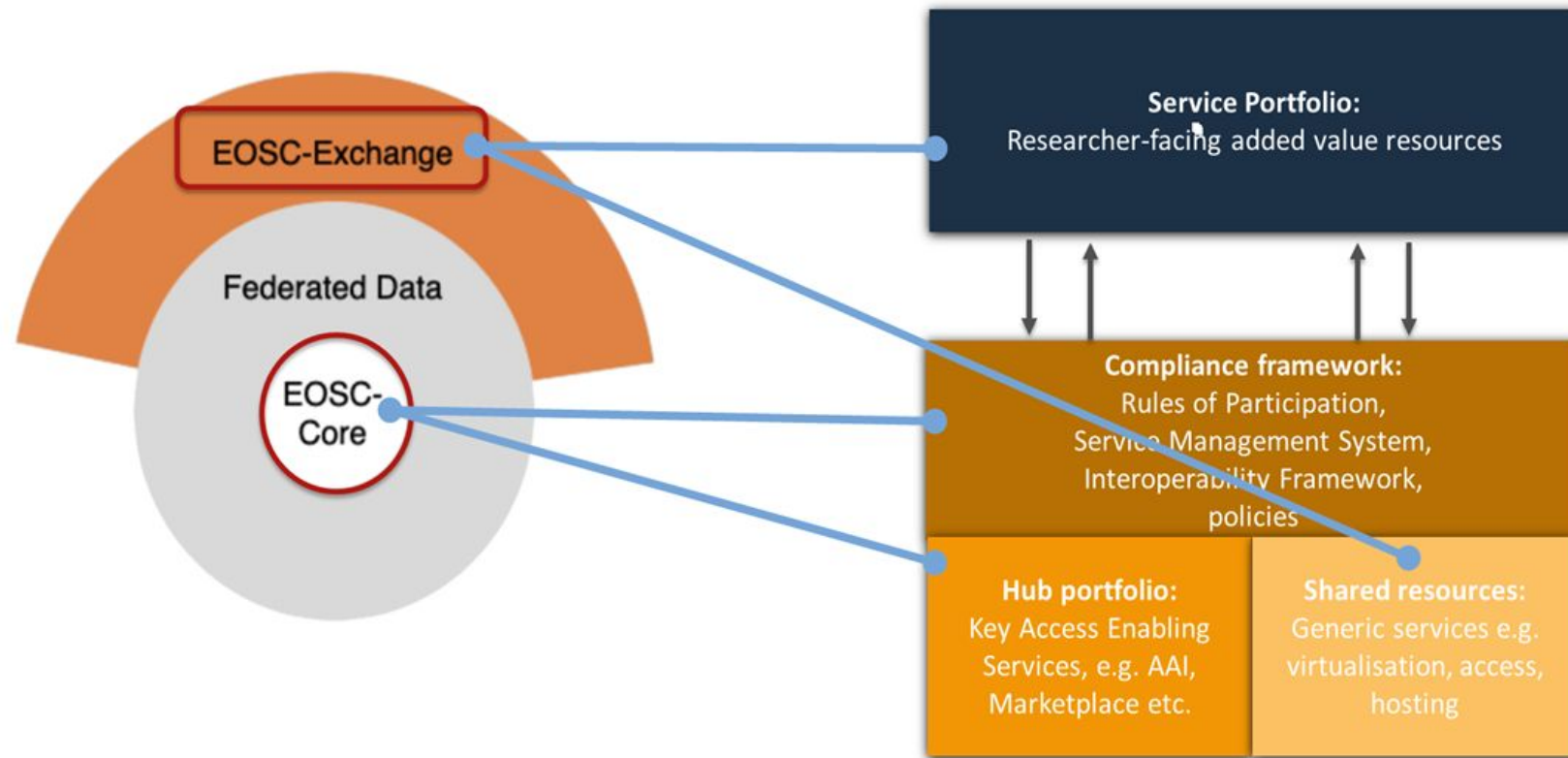6. Public-to-public cooperation with reimbursement



**8 Business Models**

1. Public procurement with direct contract (by EC or national bodies)
2. Public procurement via framework agreement (without a CPB)
3. Public procurement with demand aggregation and a Central Purchasing Body (CPB)
4. Virtual Access (via EC grant)
5. Cross-border pooling of resources (in-kind)
6. Cross-border pooling of resources (in-kind + in-cash)
7. Public-public cooperation with cost recovery – "horizontal" (Dir. 2014/24/EU Art.12.4)
8. Public-public cooperation – "vertical" (in house) (Dir. 2014/24/EU Art.12.1)

# Recommendations: Procurement & Business Models

| Topic | Addressed aspects | Addressed stakeholders |
|---|---|---|
| Business models | Fit for purpose | Funders, EOSC Governance |
| EC Procurement for EOSC (Launch expected in 2022) | Fit for purpose<br>Fit for market maturity<br>Adaptability<br>Possible business models | EC |
| | Readiness to tender<br>Risk analysis<br>Joining forces | Service providers from both public and private sector |
| Role of EOSC Association | Possible complementary role to EC procurement<br>Possible role as CPB | EOSC Association |
| Overall EOSC strategy | Stepwise approach to evolve business models,<br>Scenario planning<br>Follow-up on business model analysis | EOSC Governance |

# Initial Proposals for the EOSC Federating Core

- Proposals for the composition and organisation of the Federating Core
- Consultation and feedback
- Progressed definition of EOSC - provided input to the Sustainability Working Group



Source of EOSC-Exchange/EOSC-Core diagram: Solutions for a Sustainable EOSC-tinman
(https://docs.google.com/document/d/1sEXhoxZ6i8n5p_hCgpNxdq8kAywQKMhjqbz4cjTWcKE/edit#)

| Topic | Objectives of Proposed Actions | Stakeholders |
|---|---|---|
| Coordination of research and e-infrastructure strategies and funding policies and investment plans (6 recommendations) | Achieve greater efficiency in allocation of EC and member state funding for e-Infrastructures | National and European e-Infrastructures Ministries, funders, research communities, research infrastructures EOSC Association, members, Partnership Board, Steering Committee, ERA Board, EC |
| Business model for EOSC Shared Resources (6 recommendations) | Define and implement a solution for funding the expected additional marginal costs of consumption of resources arising in the EOSC | EOSC Association EOSC Future/Horizon Europe project EU member states and associated countries EOSC Partnership Steering Board |
| Selection criteria and choice of suppliers for EOSC-Core and -Exchange services from 2024 onwards (1 recommendation) | Ensure due consideration is given to the wider and longer-term consequences of the choices made when selecting suppliers for the EOSC-Core | EOSC Association EOSC Future/Horizon Europe projects |
| Procurement (3 recommendations) | Identification and understanding of the likely or possible consequences of use of public procurement, to inform decision-making and specification of future actions | EGI, EUDAT EOSC Association/EOSC Future |
| Research Support Provision (5 recommendations) | Assess the cost of research support activity to e-Infrastructures, likely demand and take-up of research support as a service, and identify potential funding sources | EGI-ACE, DICE EGI, EUDAT, EOSC Association EC, Horizon Europe projects |

# What benefits does it bring?

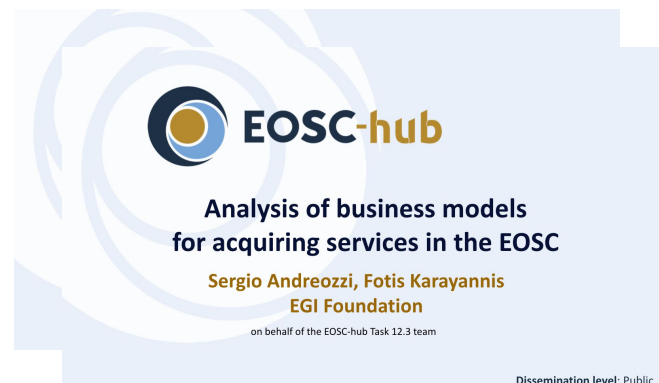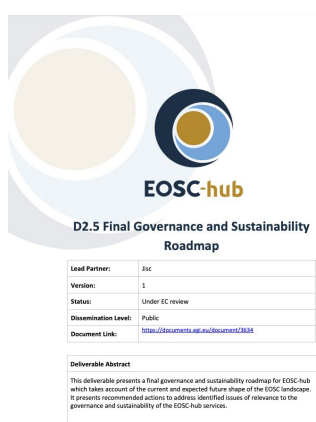| Exploitation audience | Benefits |
|---|---|
| **EOSC-CORE** | Proposed **definition and structure for EOSC**, including EOSC-Core elements<br>**Recommendations** on how to develop **EOSC value-add**<br>Analysis and recommendations on **EOSC business models** and sustainability |
| **Service Providers** | Identified required **functions of EOSC to support service providers**<br>Clarified **possible business models for providing and consuming services in EOSC** |
| **Researchers and research communities** | Identified required **functions of EOSC to support users**, including value-added services<br>-    this leads to more and better research, and increased re-use of resources |
| **Enterprise** | Contributed to clarity of definition of EOSC and pointed to functions providing greater value-add<br>Increased ability to identify and re-use resources through EOSC |
| **EC, Member States, Funders** | Clarified value-add required of EOSC<br>Increased understanding of **suitable business models**<br>Recommendations to increase sustainability of EOSC |

# Exploitation

# Who can exploit the result? For what?

**EOSC-hub**

- **EOSC Sustainability WG**
  - Results taken into consideration for developing the "Solutions for a Sustainable EOSC" Fair Lady report

- **EOSC Architecture WG**
  - Results influenced the report "View on the EOSC MVE"

- **Next EOSC implementation projects**
  - EOSC-Core implementation will continue in EOSC Future project
  - EOSC-Exchange implementation will continue in EGI-ACE, DICE etc

- **EOSC Governance work streams**
  - The final reports will be useful state of the art material for the upcoming EOSC Task Force on "Defining funding models for the EOSC"

- **Any other related activities in implementing the EOSC**
  - Both at National and European level
  - Relevant initiatives to implement an open science cloud outside Europe, e.g. collaboration project between EU and South-Africa to transfer knowledge and best practices

# IPR approach

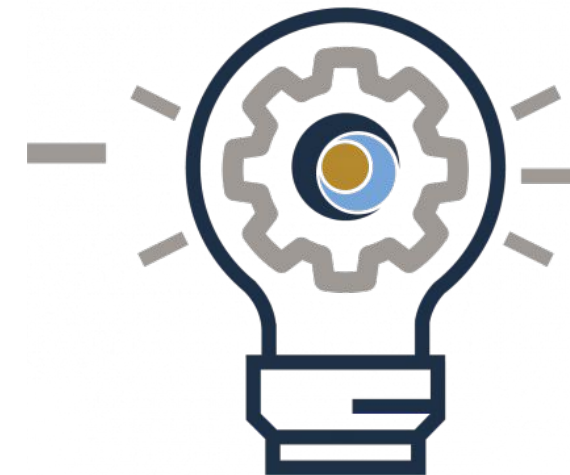The form of the IP is mainly knowledge documented in reports, slidesets and recorded webinars.

Documents (deliverables, briefing papers)

Slidesets

Recorded webinars

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except for Deliverables D2.3 and D2.4 that are confidential to the Project Consortium

# Dissemination & Communication

| EOSC-hub website | • https://www.eosc-hub.eu/publications<br>• https://www.eosc-hub.eu/news/federating-core-governance-and-sustainability<br>• https://www.eosc-hub.eu/news/new-briefing-paper-cross-border-services<br>• https://www.eosc-hub.eu/events/eosc-hub-initial-proposals-eosc-federating-core-definition-governance-and-sustainability<br>• https://www.eosc-hub.eu/webinar-eosc-business-model-recommendations |
|---|---|
| Publications | • **3 Briefing Papers**: (1) EOSC Federating Core (2) EOSC Federating Core v2.0 (3) Provision of Cross-Border Services<br>• Federating Core Community **Position Paper** Working Draft<br>• **D2.5** Final Governance and Sustainability Roadmap<br>• **D12.1** Procurement requirements and demand assessment<br>• **D12.2** Report on business model analysis for procuring services in the EOSC<br>• **D12.3** Business models and procurement: evaluation and recommendations |
| Selected presentations at events | Webinars<br>• "EOSC-hub initial proposals for EOSC Federating Core Definition, Governance and Sustainability" - 6 Aug 2019 - 30 participants<br>• "EOSC Business model recommendations" - EOSC-hub webinar series 15 Sep 2020 - 50 participants<br>• "Analysis of business models for acquiring services in the EOSC" - 31 Mar 2021 - over 30 participants<br>Events<br>• "Initial proposals for EOSC federating Core & Update", **PaNOSC Annual Meeting**, 5 Nov 2019 - 60 participants<br>• "EOSC Federating Core" at **EOSC Symposium**, 25 Nov 2019 - 100 participants<br>• "EOSC Federating Core Proposals" at **Architecture Working Group**, 8 Jan 2020 - 20 participants<br>• "Issues in cross-border consumption of resources in the EOSC" - **EOSC-hub Week**, 19 May 2020 - 150 participants<br>• "Business models and procurement" session - **EOSC-hub Week**, 20 May 2020 - 60 participants<br>• "Business models for procuring services in the EOSC" at the **EOSC Sustainability WG**, 19 Jun 2020, 15 participants<br>• "Challenges in Sustainability of FAIR Research Data and Services for SSH and Beyond" at **Realising the EOSC**, 19 Nov 2020, 120ppl |

# WP participation, further information

| | | |
|---|---|---|
| **WPs in leading roles** | T2.3 <br> Jisc  INFN *Istituto Nazionale di Fisica Nucleare* <br> SURF  egi  CSC | WP12 <br> SURF  egi  CERN <br> GÉANT  JÜLICH *Forschungszentrum* |
| **WPs providing contributions** | WPs: 3, 6, 7, 8, 9, 12, 13 | WPs: 2, 7, 13 |
| **Consultants and other collaborators** | acrosslimits <br> X-officio <br> LEGAL \| GOVERNANCE \| PROCUREMENT | PLATFORM DESIGN TOOLKIT  ASTRON <br> EMBL-EBI |

# Thank you
# for your attention!

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_Questions?_

**EOSC-hub**

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