

# Building European Open Science Cloud together: Perspectives from eInfraCentral

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European Future Innovation Systems (EFIS) Centre

Workshop “Focus on Open Science”

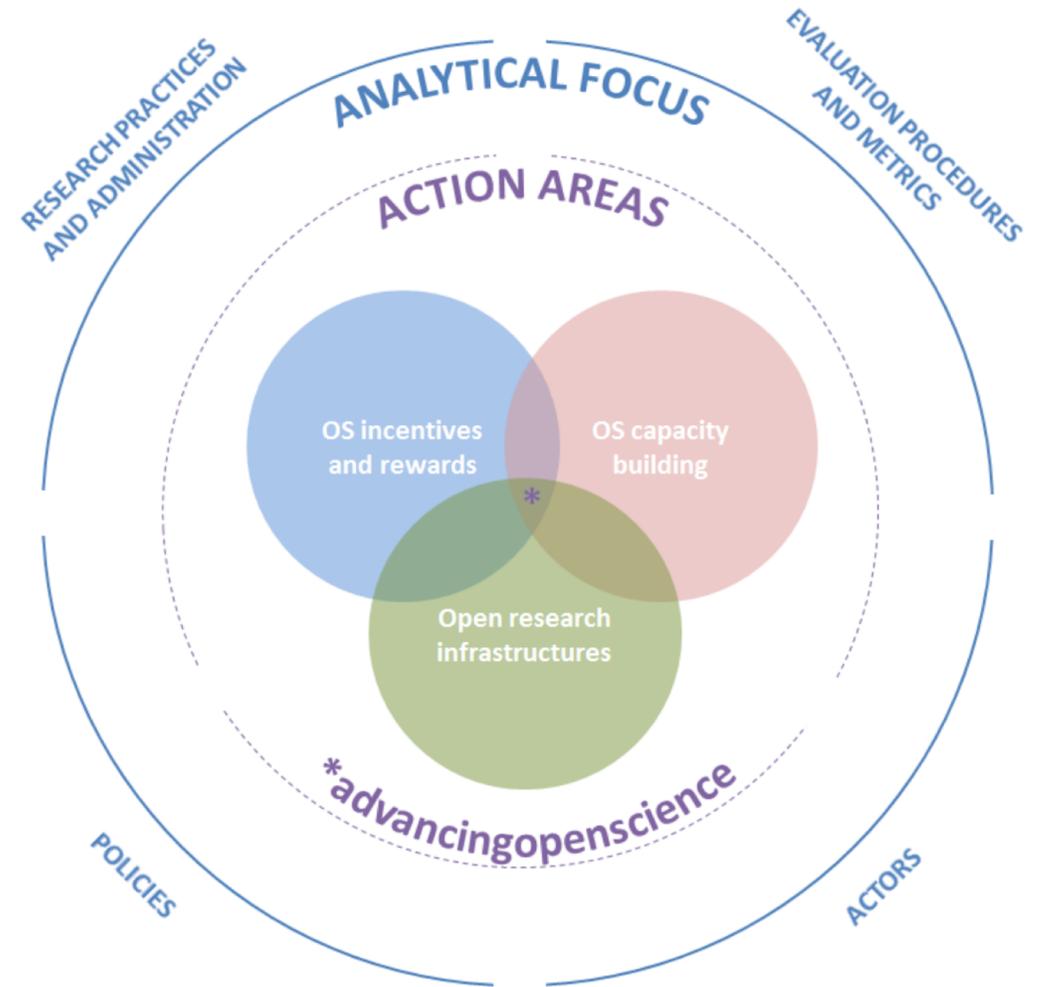
29 October 2019, Kaunas

# Future is open and inclusive

- OS implies that scientific knowledge of all kinds should be **openly shared** as early as is practical in the research process
- OS strives to improve **accessibility** to and **reusability** of research practices and outcomes
  - Open Access to publications; Open Research Data and Methods; Open Code and Software; Open Educational Resources; Open Evaluation, and Citizen Science
- OS also means to design **research in inclusive and accessible ways** for all relevant actors, within and beyond the scientific community
- Provides an opportunity to **rethink the social role of science**, the links to inclusive growth, societal well-being, education and industry

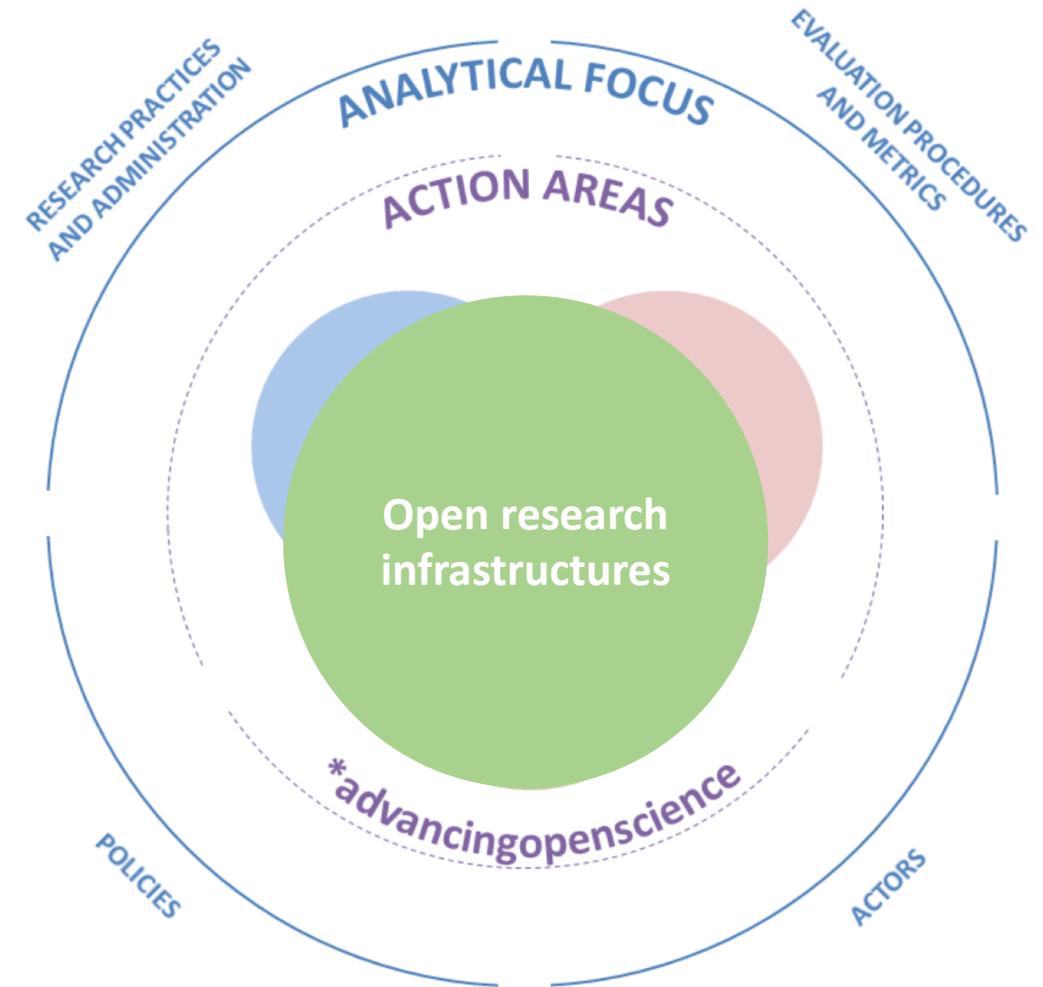
# Open challenges for Open Science

- How research is done and knowledge is produced
- How knowledge is shared, circulated, reused and preserved across disciplines and beyond science
- How research is valued and researchers are rewarded
- How research is funded and incentivised
- How researchers are trained

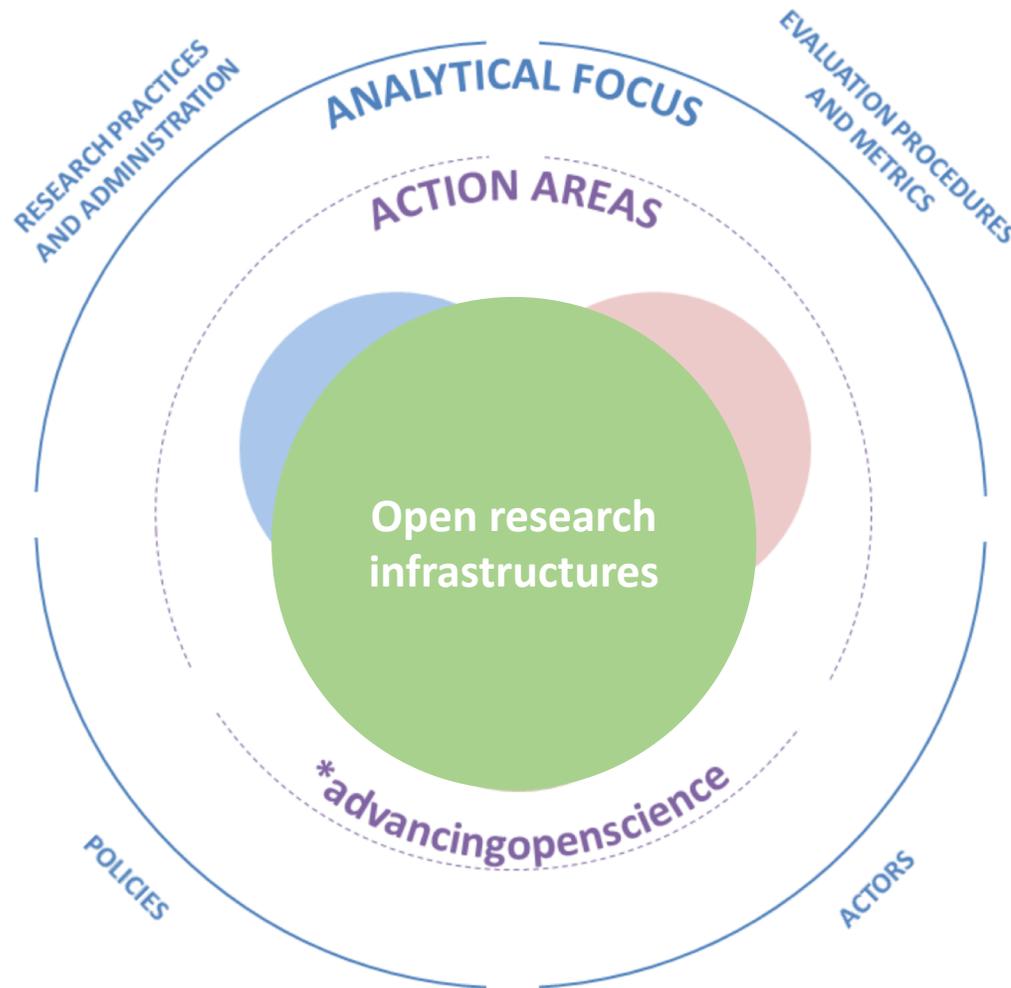


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# Focusing on research infrastructures



1. How to increase collaboration and sharing of resources?
2. Will a potential shift from funding projects to funding use of services provided help with 1 and increase 3?
3. How sharing of data and resources will lead to more technological and scientific breakthroughs and higher socio-economic impacts?



eInfra Central

# eInfraCentral implementing European Open Science Cloud

Workshop “Focus on Open Science”

29 October 2019

Kaunas



HELLENIC REPUBLIC  
National and Kapodistrian  
University of Athens



Leibniz  
Universität  
Hannover



# Project in a nutshell

- Coordination and support action funded by Horizon 2020 (call: INFRASUPP-2016-1)
- January 2017 – June 2019 (30 months)
- 9 project partners, incl. 5 e-Infras
- Budget: €1,499,037.50



HELLENIC REPUBLIC  
National and Kapodistrian  
University of Athens



# Timeline



# Implementation projects

European Commission's [Implementation Roadmap for the European Open Science Cloud](#) names four projects among the key building blocks of EOSC



and

tasks to build EOSC Portal

# Timeline

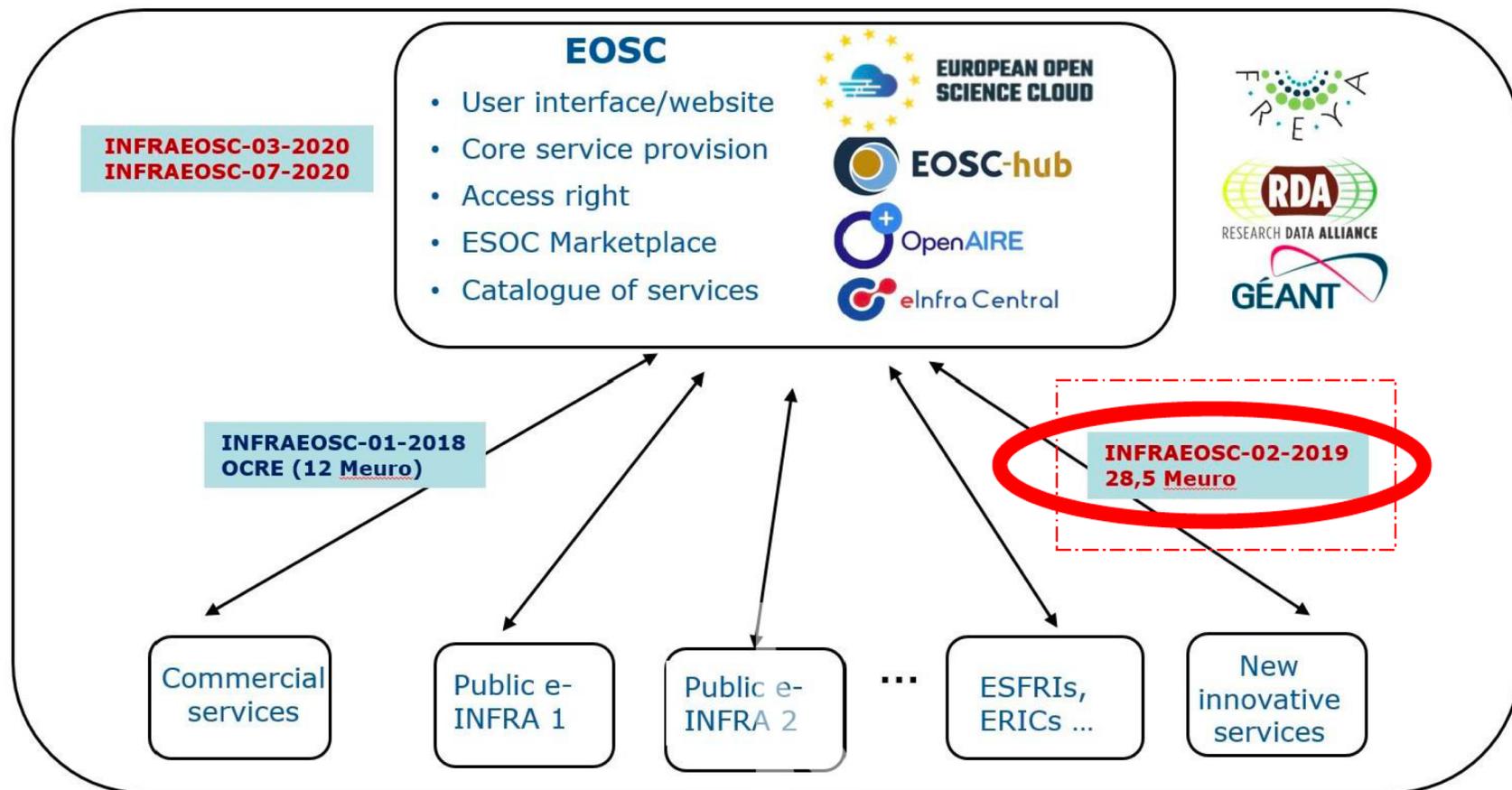


**EUROPEAN OPEN SCIENCE CLOUD**

**The EOOSC Portal**  
Accelerating the transition to open science & open innovation

The banner features a blue and yellow background with a network of nodes and lines. On the left is the European Open Science Cloud logo, which includes the European Union flag and a cloud icon. On the right is the EOOSC Portal logo, which includes a blue cloud icon and the text 'Accelerating the transition to open science & open innovation'. The bottom of the banner is decorated with a blue and yellow wave pattern.

## The EOSC from e-infrastructures perspective



From: Liina Munari, DG RTD

# Our mission



Ensure, that by 2020, a broader and more varied set of users discovers and accesses the existing and emerging Services and Resources for Research

# Core Objectives and Key Results

	Structure an open and guided discussion to consensually define a <b>common catalogue for their services and resources</b>	Reached consensus initially with 5 key e-Infras on standard description of services and resources and APIs. Now includes 24 SPs.
	Develop a <b>web platform</b> to act as the gateway for researchers to browse the catalogue of services and solve the “last mile” problem	Developed a production view of the EOSC Catalogue with 250+ services and resources
	Capture and draw policy and sustainability lessons for the development of the <b>European e-Science marketplace</b>	Lessons from building the catalogue and work with SPs fed into the EOSC Portal development, CatRIS and being further developed and communicated in 2019

<https://catalogue.eosc-portal.eu>



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## Your Gateway for European Services for Research

WHICH SERVICE ARE YOU LOOKING FOR?

SEARCH

The catalogue gives access to:  
**254** services, **4,4M** datasets, **141K** software and applications,  
**34,6M** publications and **3M** other research products,  
offered by **23** Service/Resource Providers and Aggregators, organized in **168** entries.

# EOSC (eInfraCentral) Catalogue



eInfraCentral catalogue provides access to 255+ services and resources in 155 entries of 24 SPs from the public and private sector in a fully functional catalogue with a production view (EOSC) and a beta for testing new advanced functionality





## The European Open Science Cloud (EOSC)

*Offers 1.7 million European researchers and 70 million professionals in science and technology a virtual environment with open and seamless services for storage, management, analysis and re-use of research data, across borders and scientific disciplines.*

[More about EOSC](#)

The EOSC portal has been jointly developed and maintained by the eInfraCentral, EOSC-hub, EOSCpilot and OpenAIRE-Advance projects funded by the European Union's Horizon 2020 research and innovation programme with contribution of the European Commission.

# All you need to know about the EOSC



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Member States

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## EC Documents



### Future of scholarly publishing and scholarly comm

The European Commission published the report from the Expert Group titled "The Future of... The report discusses the strengths and weaknesses of the current system of scholarly comm... suggests actions and ways to improve and change it where needed.

Link: <https://publications.europa.eu/en/publication-detail/-/publication/46447...>

[KI0518070ENN.en\\_.pdf](#)



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## Events

News

Forthcoming Events

Past Events



12 APRIL 2019  
TO 17 SEPTEMBER 2019

### Workshop series: Services to support FAIR Data

OpenAIRE, RDA Europe, FAIRSFAR and EOSC-hub are happy to announce a series of three workshops, two in April and one in September, called 'Services to Support FAIR data'.

> NEWS

> FORTHCOMING EVENTS

> PAST EVENTS



### Prompting an EOSC in practice



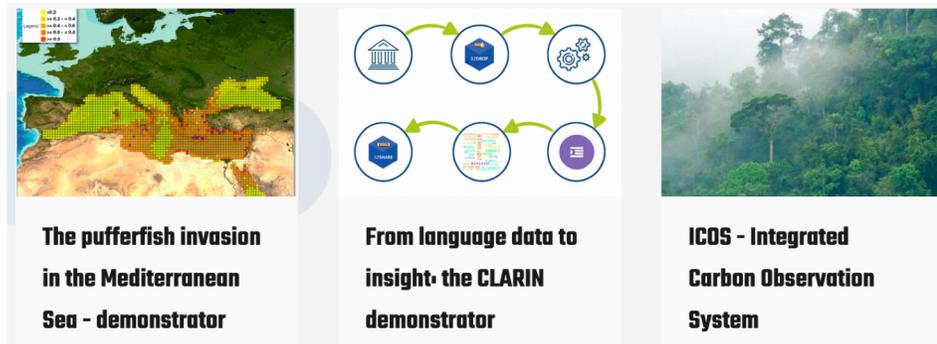
### EuroHPC Summit Week 2019

The fourth edition of the EuroHPC Summit Week will take place from 12 - 17



# Promoting the EOSC-in-practice

## • Use Cases

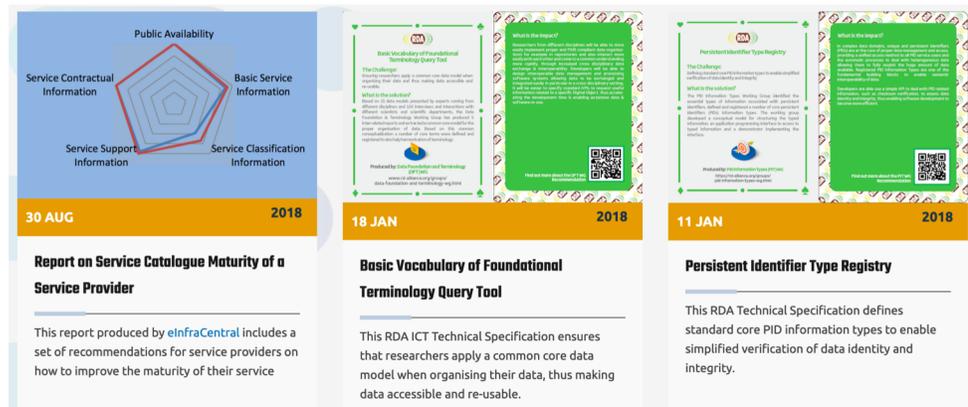


**The pufferfish invasion in the Mediterranean Sea - demonstrator**

**From language data to insight: the CLARIN demonstrator**

**ICOS - Integrated Carbon Observation System**

## ○ Best Practices



**Report on Service Catalogue Maturity of a Service Provider**  
30 AUG 2018  
This report produced by [infraCentral](#) includes a set of recommendations for service providers on how to improve the maturity of their service

**Basic Vocabulary of Foundational Terminology Query Tool**  
18 JAN 2018  
This RDA ICT Technical Specification ensures that researchers apply a common core data model when organising their data, thus making data accessible and re-usable.

**Persistent Identifier Type Registry**  
11 JAN 2018  
This RDA Technical Specification defines standard core PID information types to enable simplified verification of data identity and integrity.

## Open Call

We are looking for concrete examples of "EOSC-in-practice" stories: submit yours!

### What is an "EOSC-in-practice" story?

EOSC-in-practice stories are use cases or success stories that highlight how EOSC services and resources can support the daily work of researchers and innovators. Examples of EOSC-in-practice stories can be found [here](#).

An "EOSC-in-practice" story should:

- describe the scientific/technical/research/business challenge
- explain how this challenge was tackled via the usage of the EOSC portal services & resources
- highlight the benefits obtained from the EOSC (time/cost savings, efficiency, etc.)
- demonstrate the cross Research Infrastructure Use Case benefits

### How can I publish my "EOSC-in-practice" story on the EOSC portal?

- Submit your story using the webform below
- The EOSCportal editorial board will review and validate the content of your story
- If your story meets the above-mentioned criteria, it will be published on the portal.

### Why should I submit an "EOSC-in-practice" story?

[www.eosc-portal.eu/eosc-in-practice/open-call](http://www.eosc-portal.eu/eosc-in-practice/open-call)

# Contribution 1: SDT v2.00



**FOR COMMENT**



**EUROPEAN OPEN  
SCIENCE CLOUD**

Service/Resource  
Description Templates & Classifications  
for the EOSC

V2.00  
1 August 2019





**Contributors**

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**Acknowledgements**

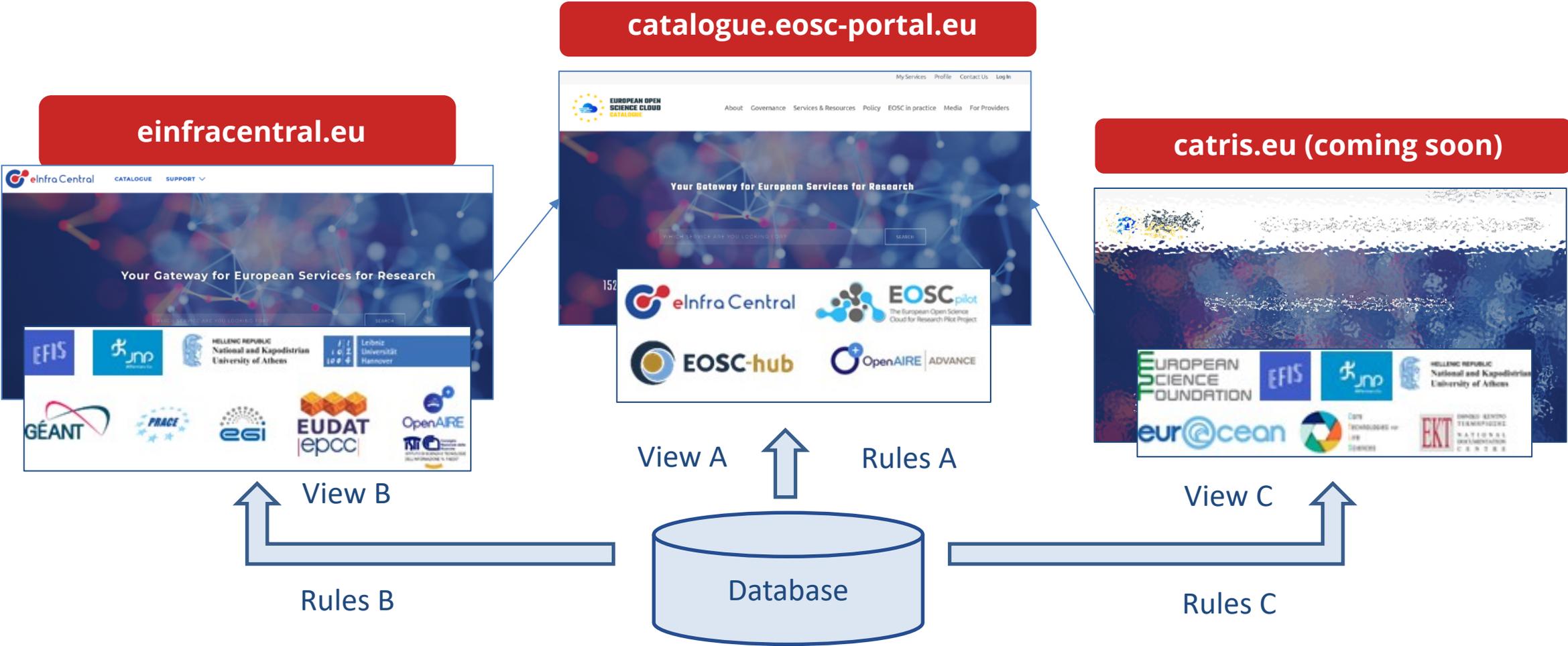
In the framework of: the einfraCentral project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049, the EOSC-hub project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 777536, the OpenAIRE-Advance project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 777541, the CatRIS project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824173, the EOSC Portal collaboration agreement of einfraCentral, EOSC-hub and OpenAIRE-Advance.

## Result 1: The Scientific Resources Description Template (SDT)

A combined effort;  
now also spanning into  
physical research  
infrastructures

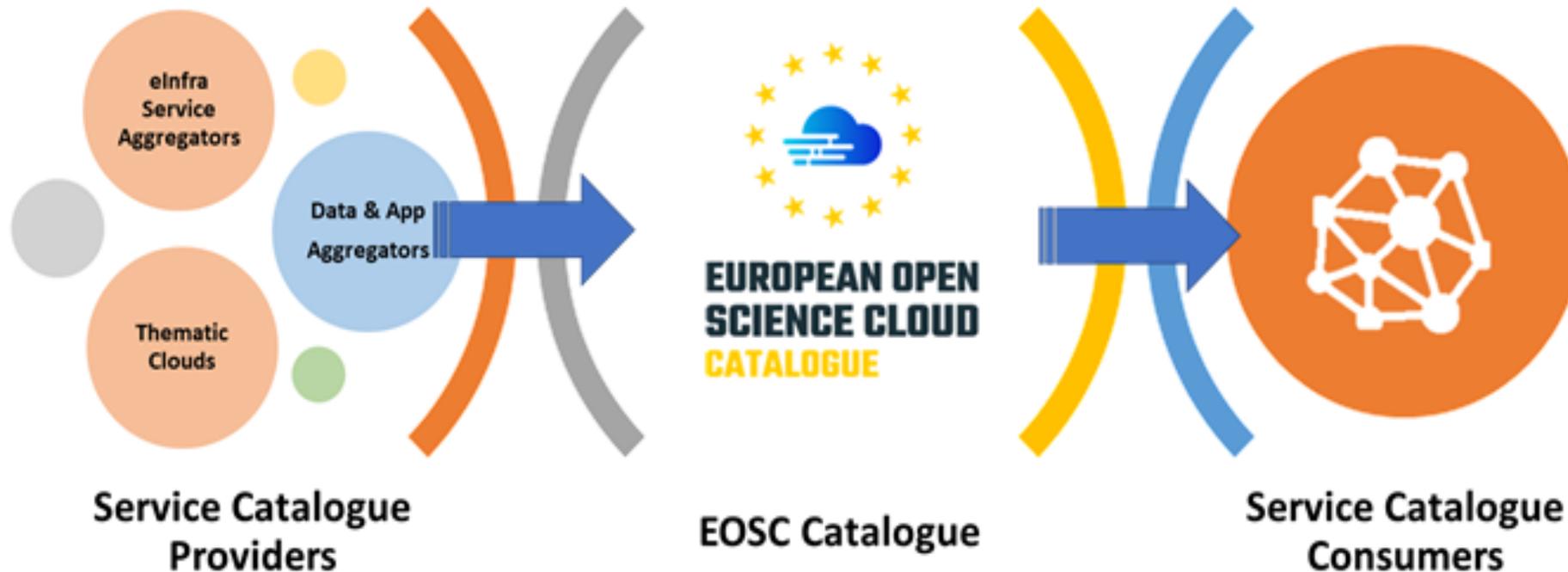


# Contribution 2: EOSC Catalogue



# Contribution 3: APIs for enabling EOSC

REST API for service information exchange in EOSC

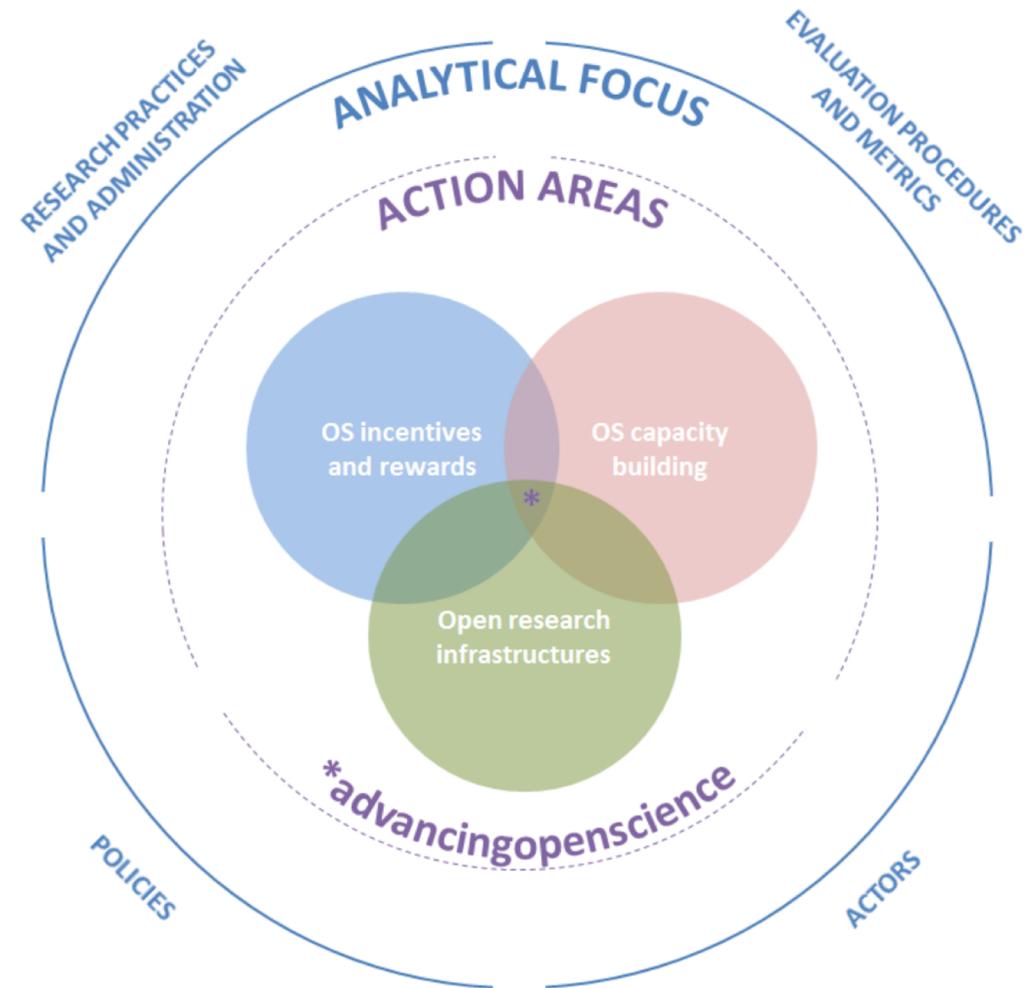


# Contribution 4: “Build-your-own” Catalogue



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# Thank you!



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