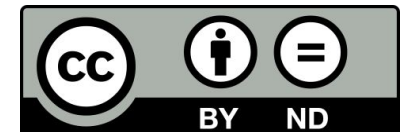


EOSC Future contribution to the MVE implementation

The EOSC Platform

Diego Scardaci (EGI Foundation)
Klaas Wierenga (GEANT)
EOSC Future TCB co-Chairs And Architecture Leads

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

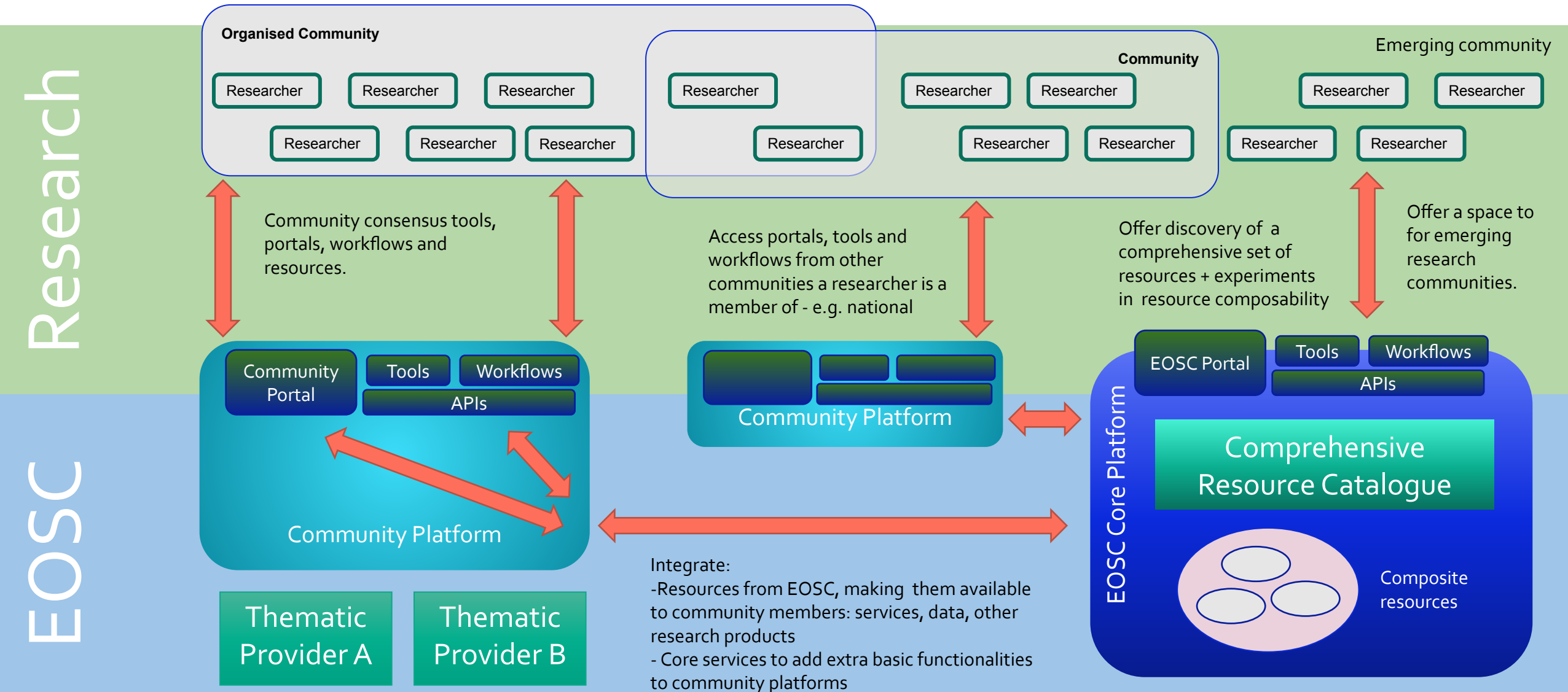




EOSC Future - three key tenets

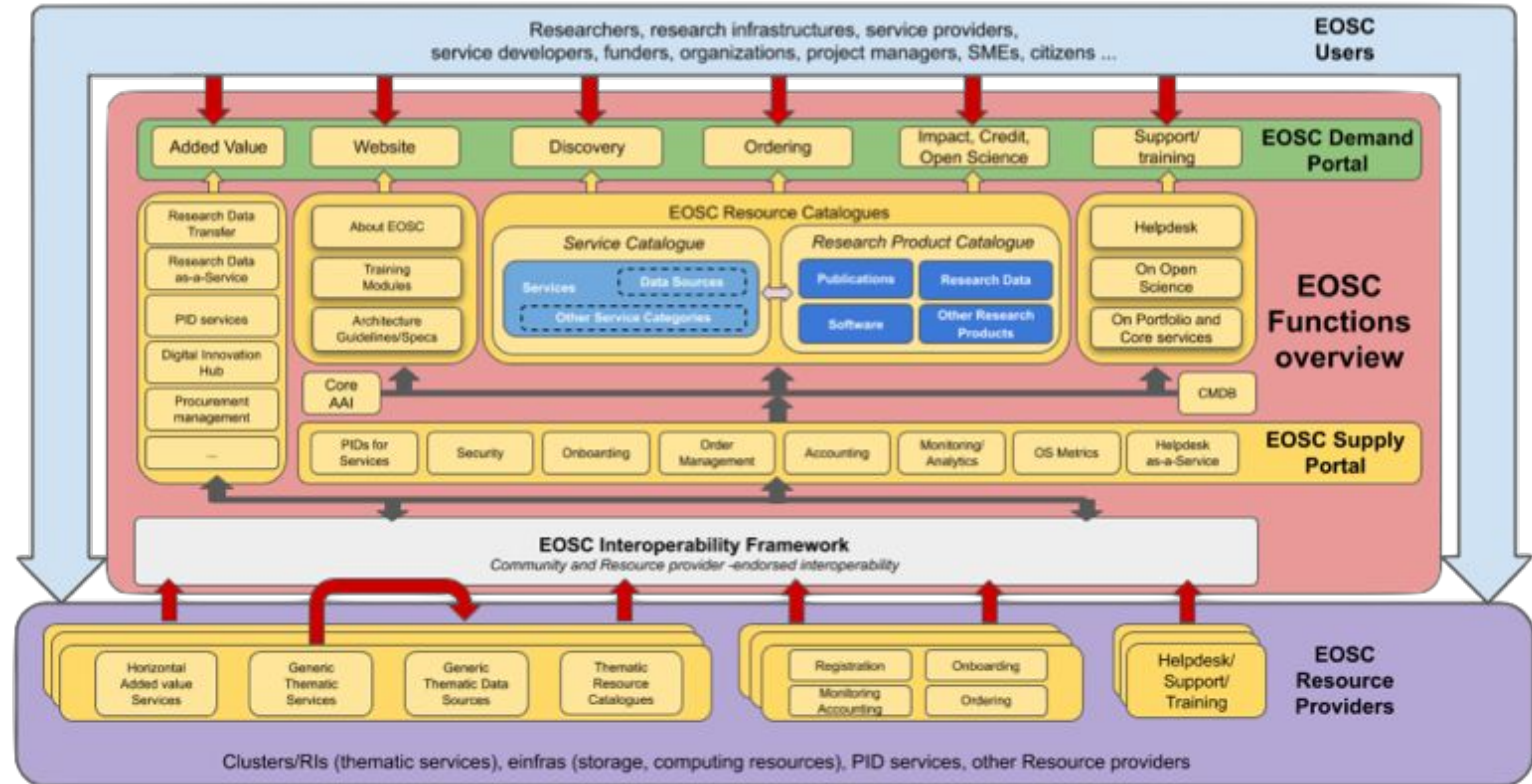
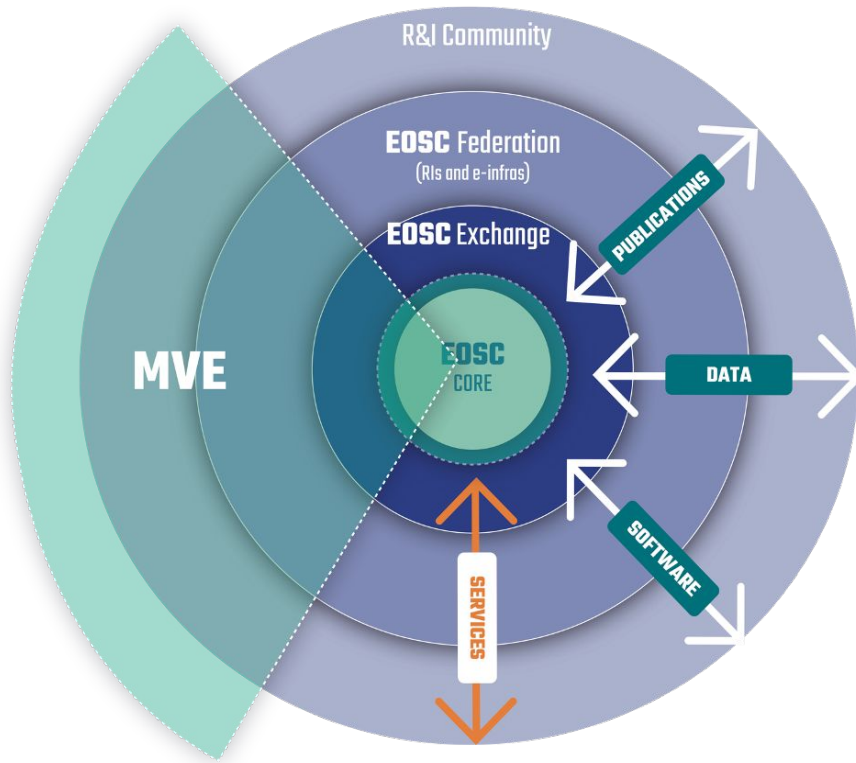
- The **realisation of EOSC-Core and EOSC-Exchange** with interoperable data and resources
- The **integration** of data and resources from the **Science Cluster** communities into the EOSC Platform
- The **direct involvement of users** in the **co-design** and implementation of the EOSC Platform

Researcher view: different benefits



The Starting Point

EOSC Sustainability & Architecture WGs

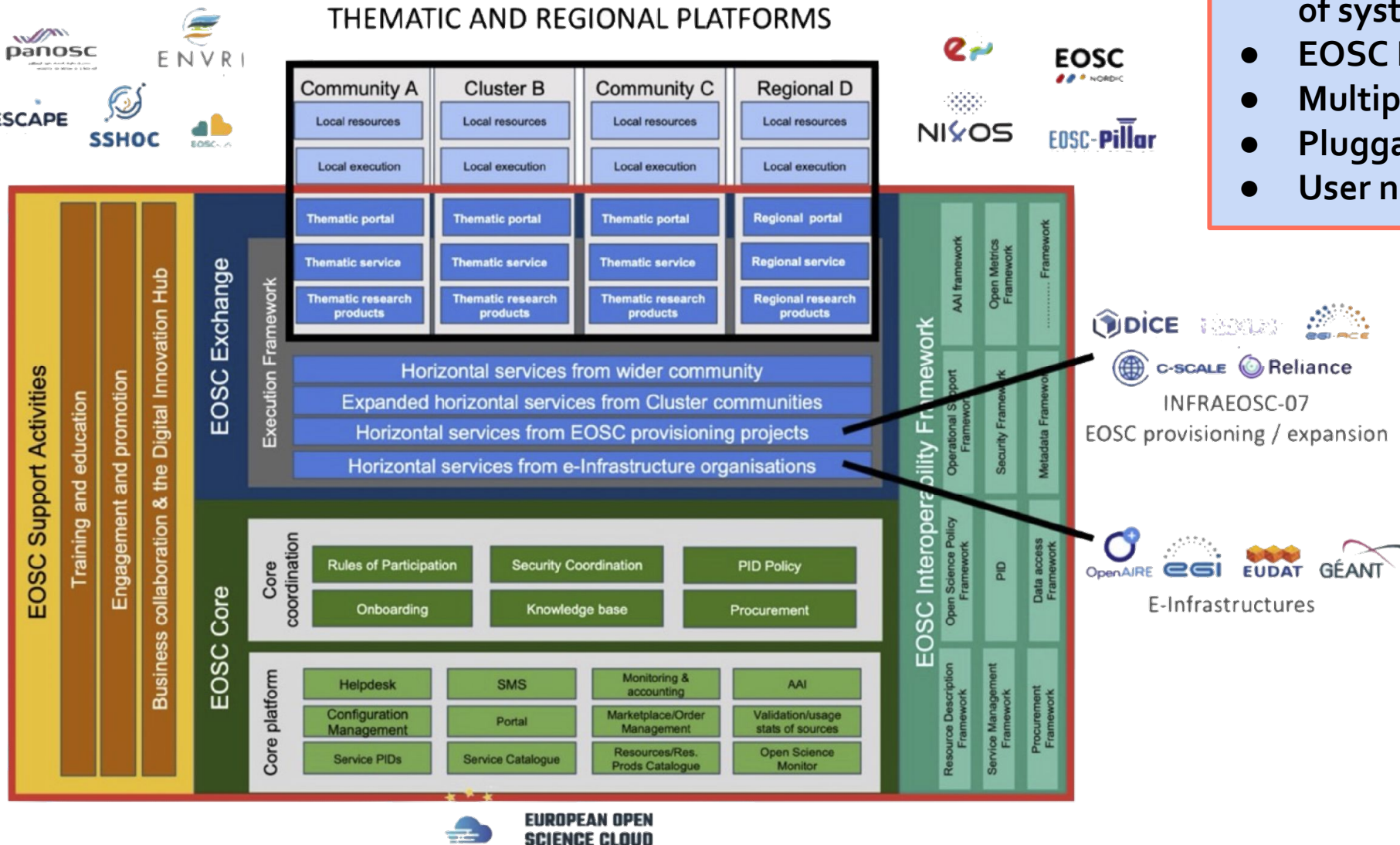


European Commission, Directorate-General for Research and Innovation, Sanden, M., Robertson, D., Appleton, O., et al., *EOSC architecture working group view on the minimum viable EOSC: Report from the EOSC Executive Board Working Group (WG) Architecture*, Publications Office, 2021, <https://data.europa.eu/doi/10.2777/492370>

The Starting Point EOSC High Level Architecture

Guiding Principles

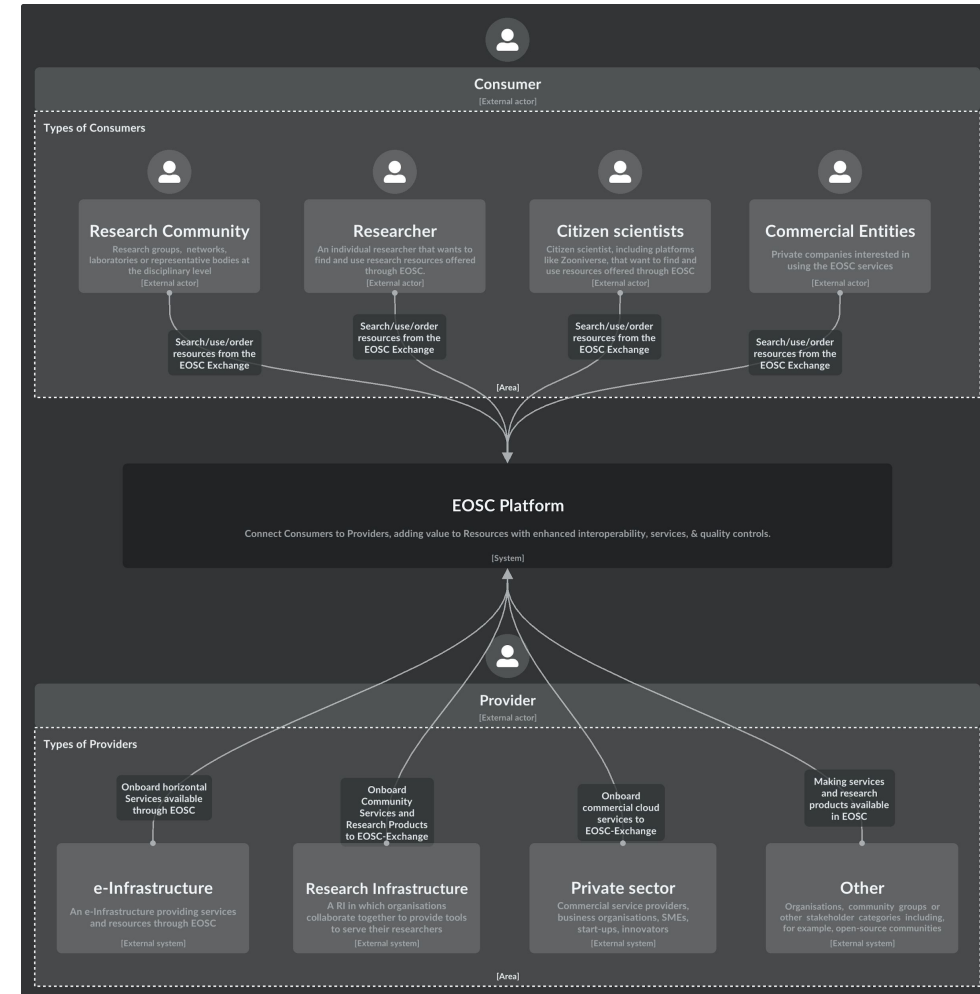
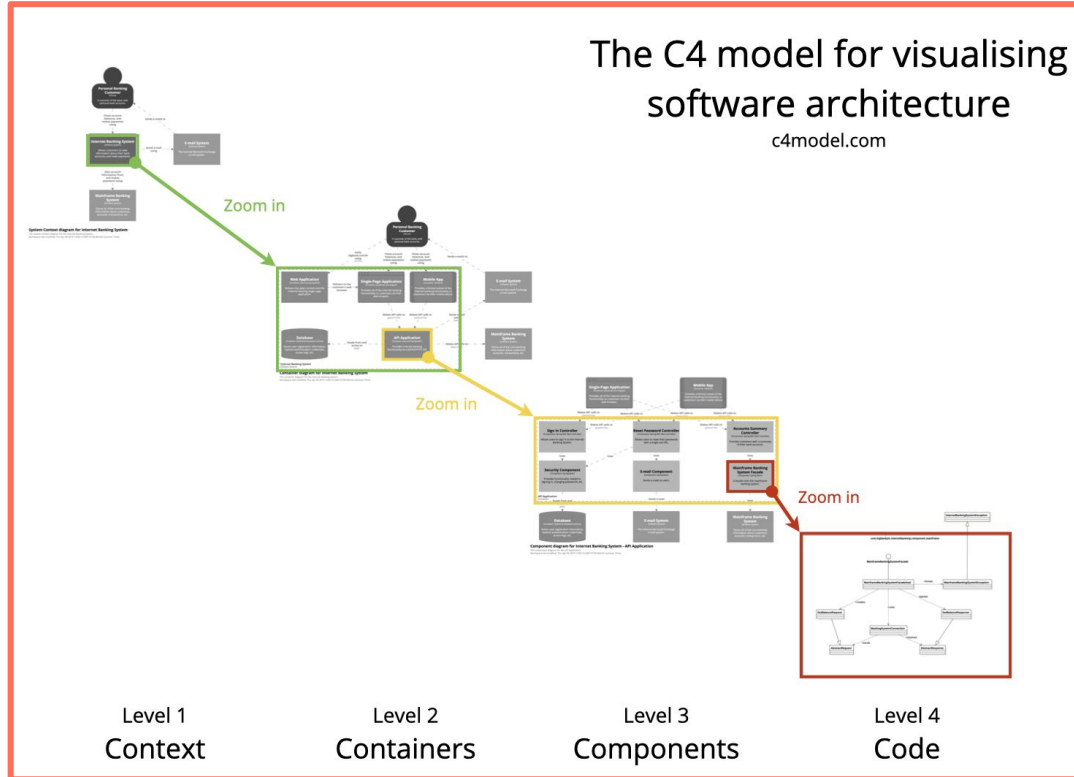
- EOSC Federation as a system of systems
- EOSC Platform as glue-layer
- Multiple access channels
- Pluggable Architecture
- User needs driven



From EOSC Future DoA

From an abstract design to the EOSC Platform

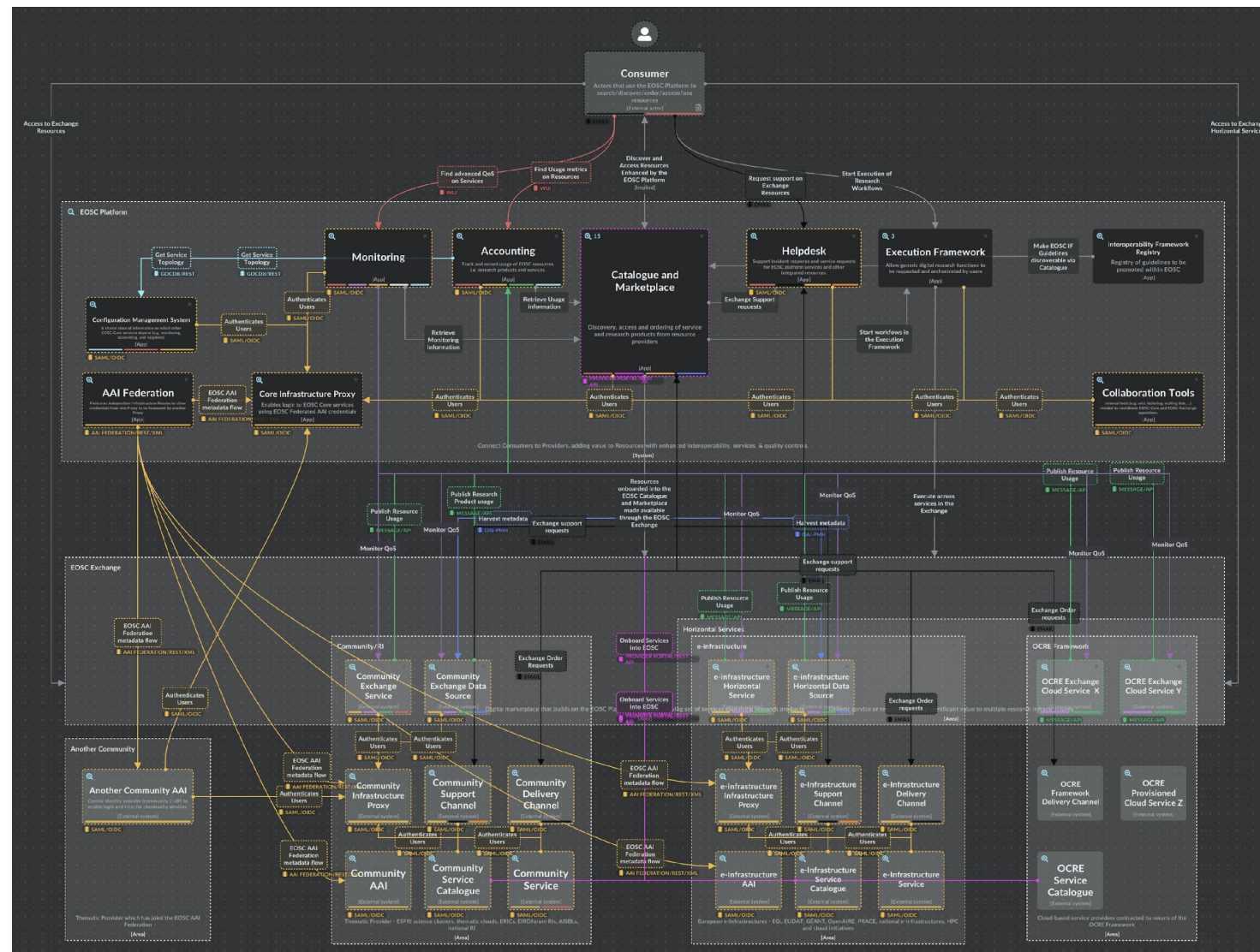
C4 model design principles



- Architecture Logical View
- Description of the components
- Description of the interfaces (standards/APIs)
- Process views to describe main use cases



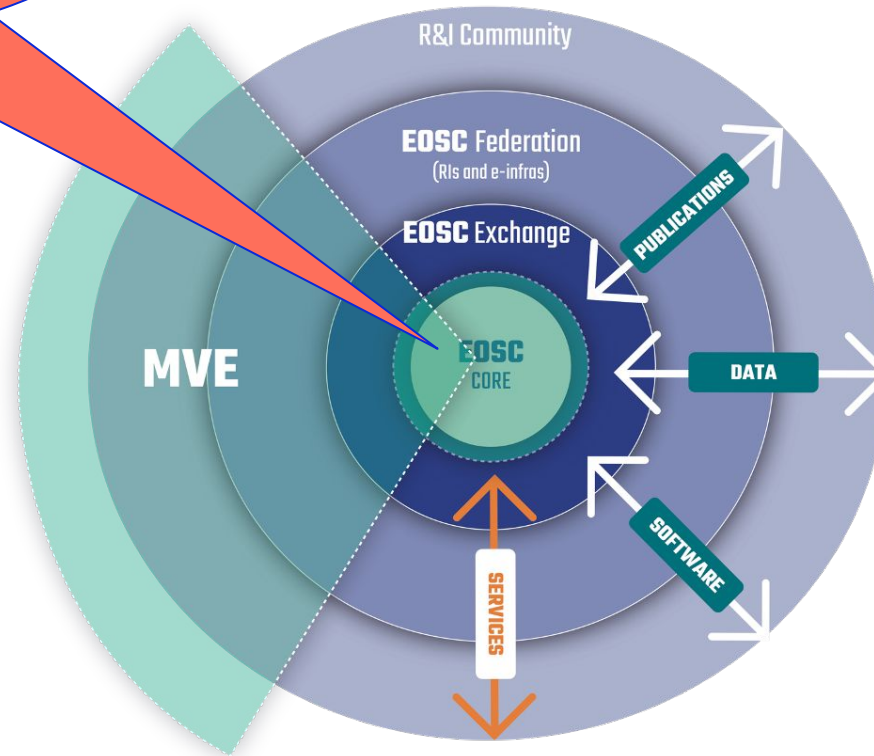
Logical view EOSC Platform Architecture - Component View



How the EOSC Platform delivers the MVE

EOSC Core is in production!

Professionally operated via the EOSC SMS



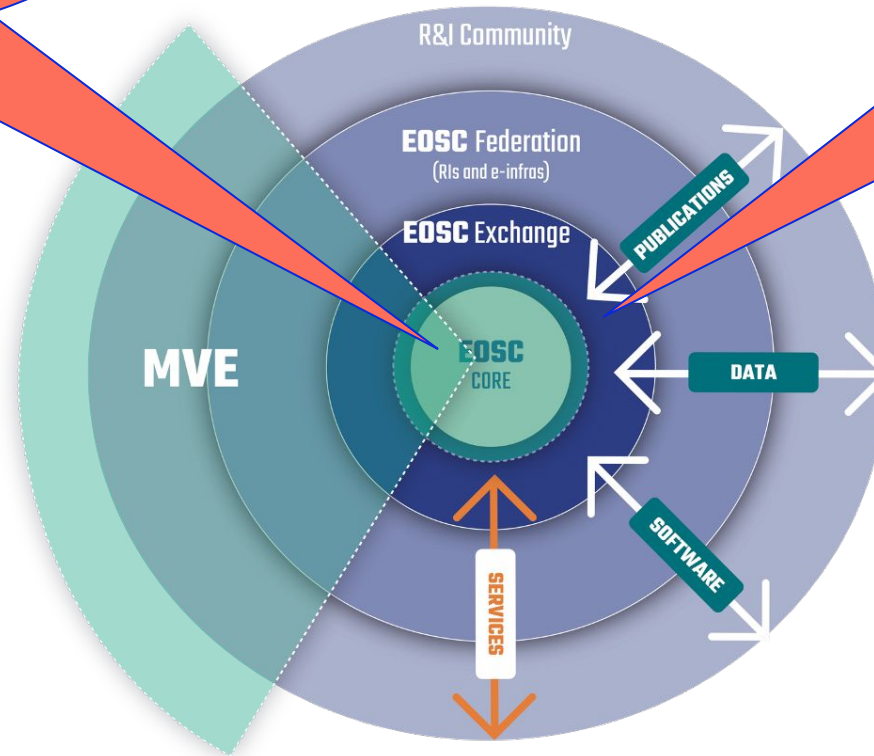
How the EOSC Platform delivers the MVE

EOSC Core is in production!

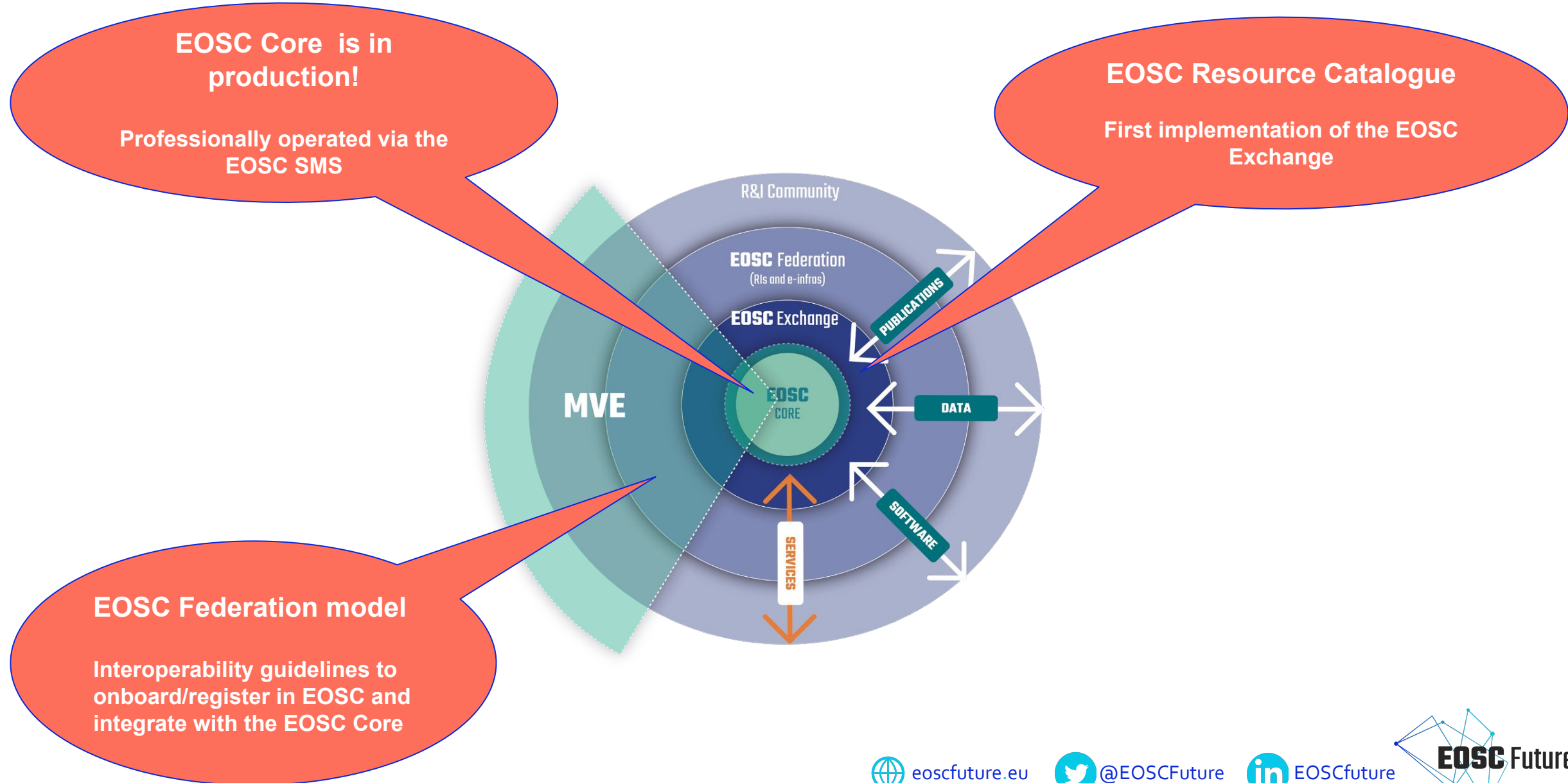
Professionally operated via the EOSC SMS

EOSC Resource Catalogue

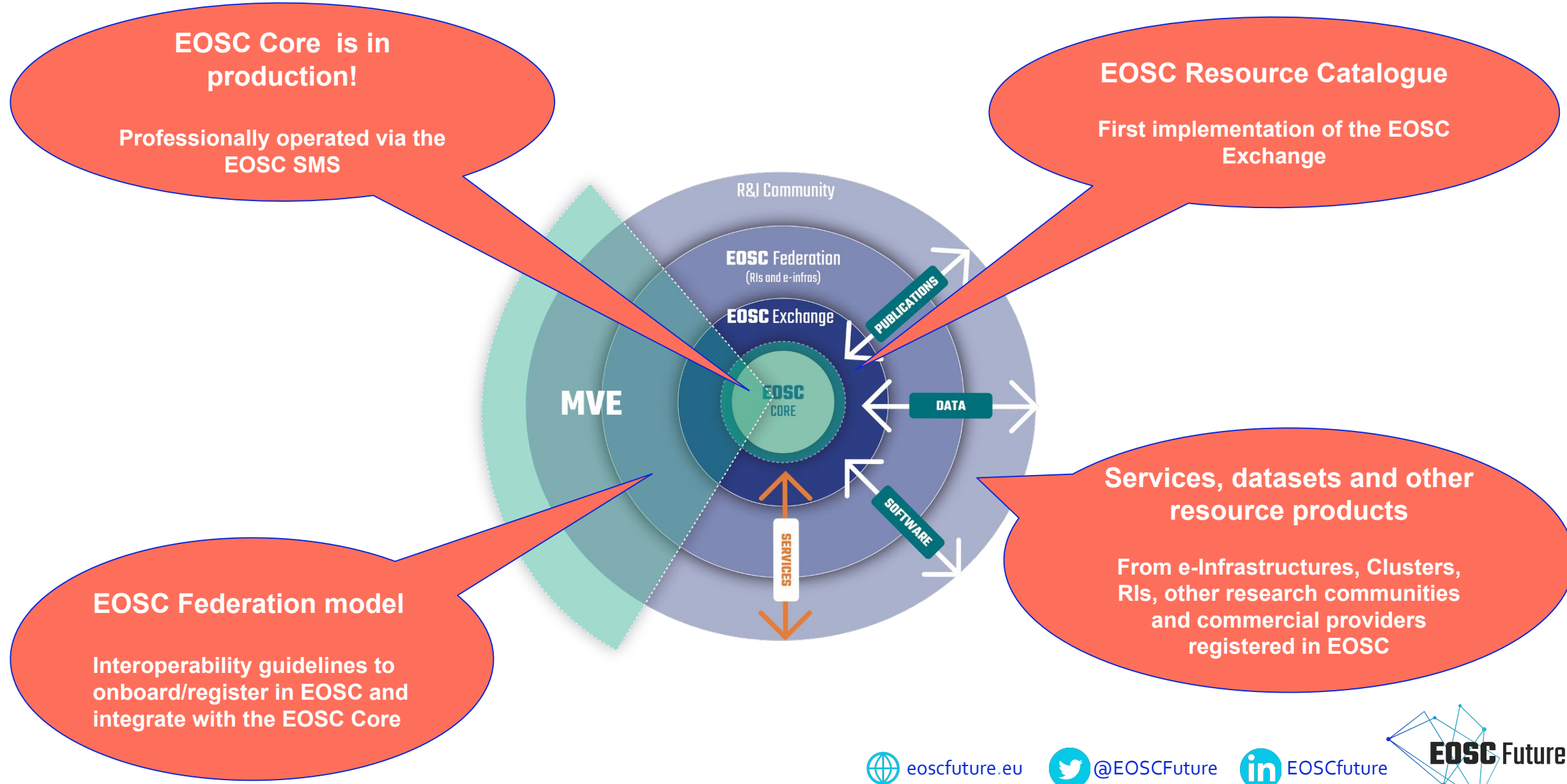
First implementation of the EOSC Exchange



How the EOSC Platform delivers the MVE



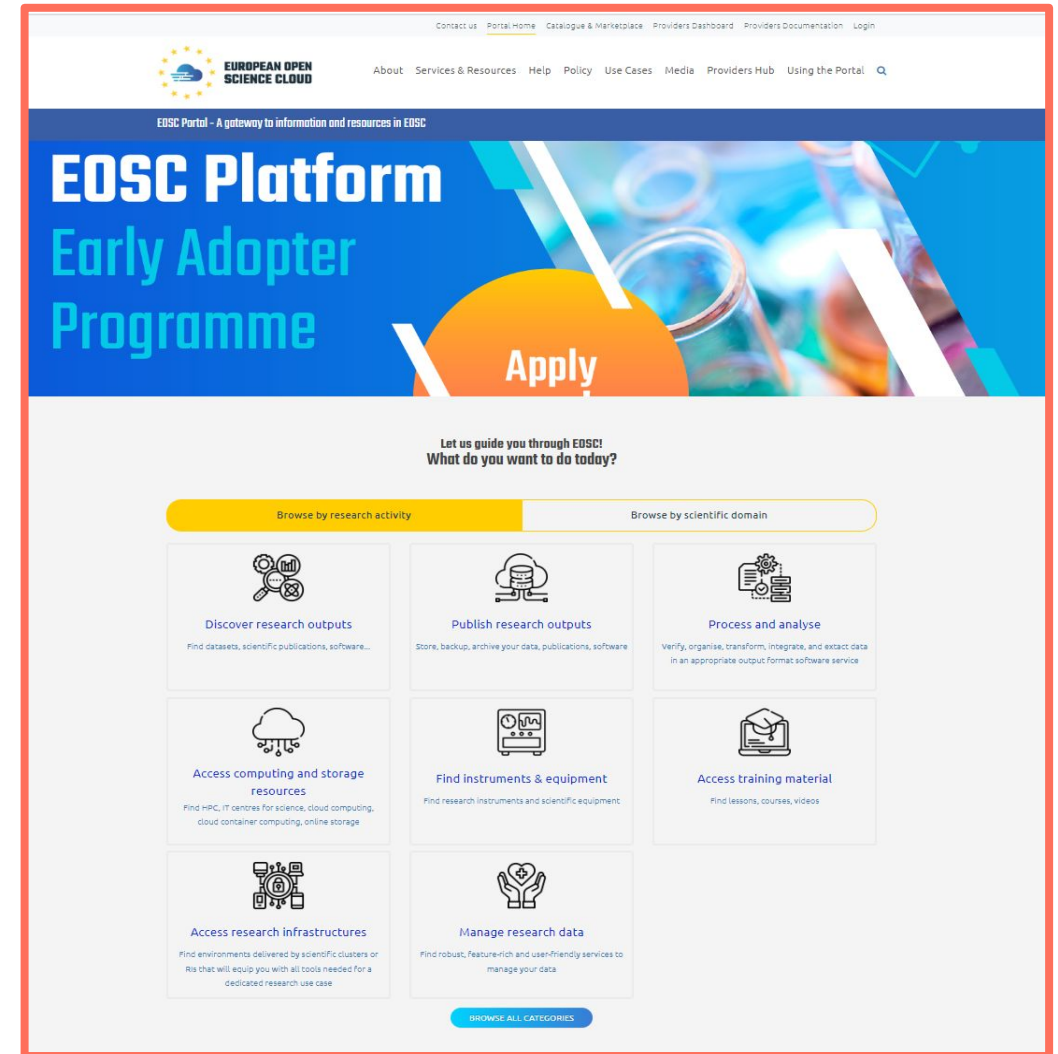
How the EOSC Platform delivers the MVE



The EOSC Platform is open for business!

Main available features

1. Integrated Catalogue of services, datasets and other research products
2. AI-based Advanced Search Engine
3. Access and order services, download research products, create projects with multiple resources
4. Service, Catalogue & Data Source onboarding
5. Integration on-demand with EOSC Core services:
 - AAI Federation (beta)
 - EOSC Helpdesk on demand (Helpdesk aaS)
 - EOSC Monitoring on demand (Monitoring aaS)
 - Order Management
 - Accounting for research products
6. Rich EOSC Exchange:
 - Discover & Access Research Outputs, Access Compute and Storage Resources, Find Instruments, Access Training Material, Access RIs and Manage Research Data



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



eoscfuture.eu



@EOSCFuture



EOSCfuture



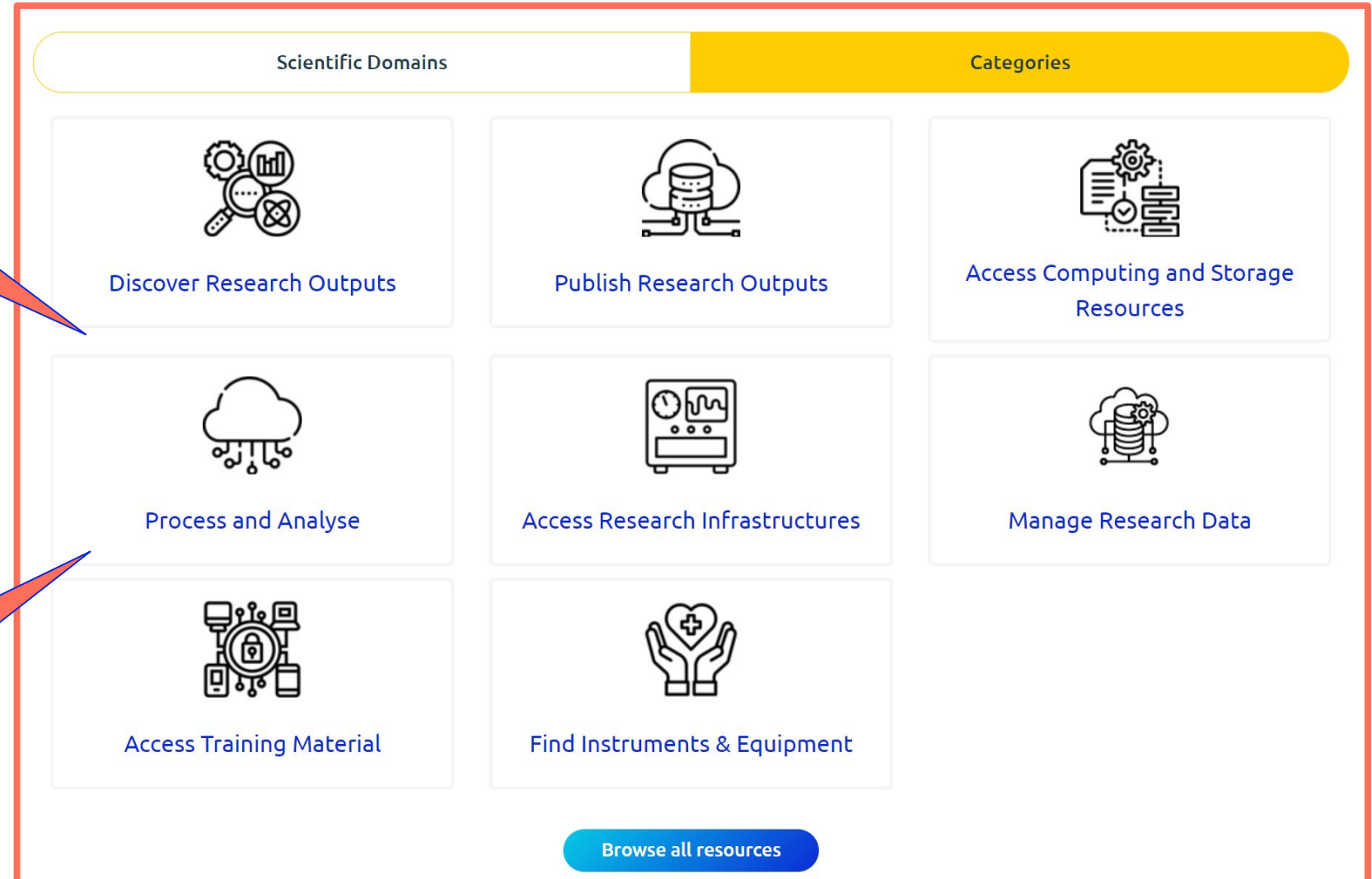
EOSC Platform - Main new features

Browse by research activity

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

New categories reflecting actions relevant to the researchers

Co-design with researchers that suggested the new categorisation





EOSC Platform - Main new features

Integrated catalogue of services and research products

Different types of EOSC Resources

Search engine over all catalogues

Filter per catalogue



Contact us Portal Home Catalogue Dashboard Providers Documentation

Search in catalogs

All catalogs

Search

All catalogs

Publications Data Software Services Data sources Trainings

All catalogs

Publications

Data

Software

Services

Data sources

Trainings

All catalogs (3247553 results)

More than 3 million of Resources

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



EOSC Platform - Main new features

Integrated catalogue of services and research products

Service

22 November 2018

EGI Cloud Compute

Service Ordered Required English

Scientific domain: **Generic**>Generic
Organisation: **EGI Foundation**

Cloud Compute gives you the ability to deploy and scale virtual machines on-demand. It offers guaranteed computational resources in a secure and isolated environment with standard API access without the overhead of managing physical servers. Cloud Comp...

Show more

Dataset

Country averages of Copernicus ERA5 hourly meteorological variables

Dataset Open Access UNKNOWN

Author names: **De Felice, Matteo**
DOI: **10.5281/zenodo.1489915** **10.5281/zenodo.1489914**

460 Downloads 460 Views

Note: a new time-series dataset from ERA5 has been published – this one won't be updated/maintained anymore

Country averages of meteorological variables ge...

Show more

Marketplace



EUROPEAN OPEN SCIENCE CLOUD

Find resource... All services Q My EOSC Marketplace

Resources > Access physical & infrastructures > Compute > Virtual Machine Management > EGI Cloud Compute

EGI Cloud Compute
EGI Cloud Compute
Run virtual machines on-demand with complete control over computing resources
Organisation: **EGI Foundation**
Provided by: CESNET, 100 Percent IT, Institute of Physics of Cantabria (IFCA), Italian National Institute of Nuclear Physics, Deutsches Elektronen-Synchrotron, National Distributed Computing Infrastructure, The SCIGNE Platform, Fraunhofer SCAI, Institute of Informatics - Slovak Academy of Sciences, GSI Helmholtzzentrum für Schwerionenforschung GmbH, Institute of Information and Communication Technologies, Turkish Academic Network and Information Center, Institute of Accelerating Systems and Applications, Fundación Centro Tecnológico de Supercomputación de Galicia

Access the resource

ORDER REQUIRED

0.0 / 5 0 reviews Add to comparison Add to favourites

[Webpage](#) [Helpdesk](#) [Helpdesk e-mail](#) [Manual](#) [Training information](#)

Ask a question about this resource?

ABOUT DETAILS REVIEWS (0)

Explore



EUROPEAN OPEN SCIENCE CLOUD

Home Search

881
 4

View all 2 versions
Research Data . Dataset . 2018
Country averages of Copernicus ERA5 hourly meteorological variables

De Felice, Matteo;
OPEN ACCESS

DOI: 10.5281/zenodo.1489915 10.5281/zenodo.1489914
Published: 16 Nov 2018
Publisher: Zenodo

ACTIONS

Powered by **OpenAIRE Research Graph**. Last update of records in OpenAIRE: Sep 19, 2022



EOSC Platform - Main features

Catalogue Onboarding

<https://eosc-portal.eu/eosc-providers-hub>

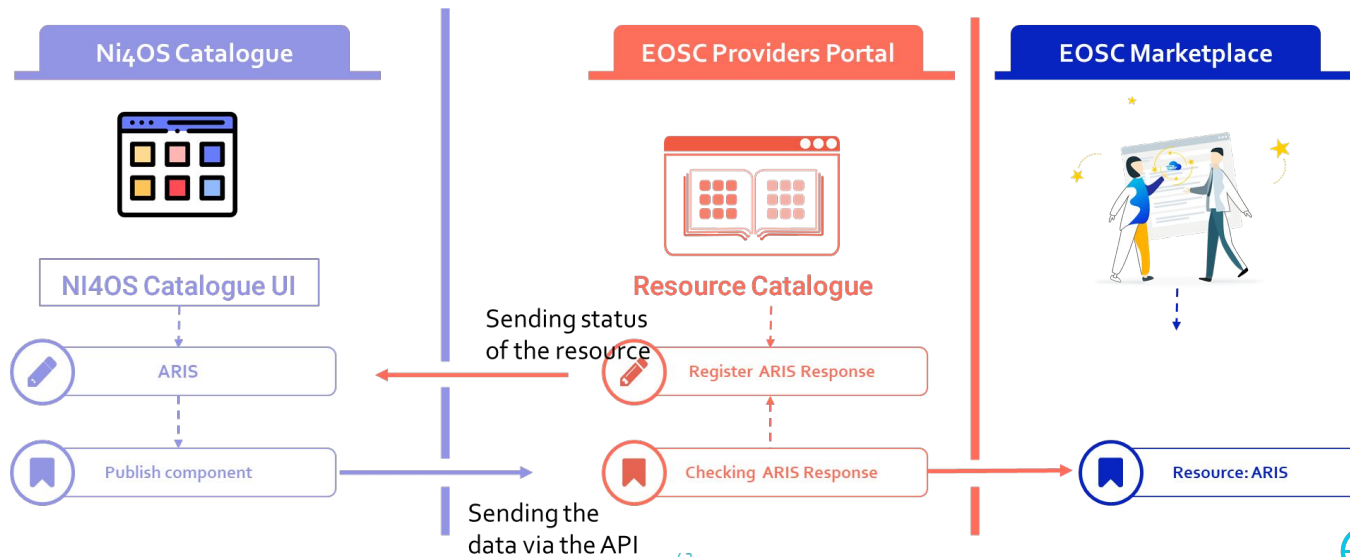
Connect your catalogue to EOSC

1. Publish community services in the EOSC Catalogue using the Providers Portal/API

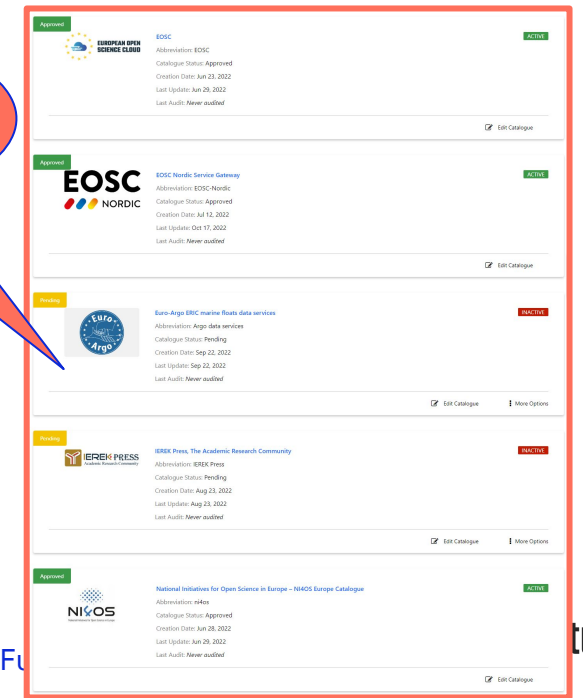
- Reach new users publishing services in the EOSC Marketplace
- Automated synchronisation possible with API

2. Pull EOSC services into your catalogue

- Enrich your catalogues with other EOSC services



Community catalogues connected to EOSC



EOSC Platform - Main features

Data Source Onboarding

1. Onboard/Register a Data Source in EOSC
 - Published as a service in the EOSC Marketplace
2. Publish your datasets and other research products in EOSC
 - Make them available in the EOSC Explore

**EOSC Provider Portal form
to onboard a Data Source**

The screenshot shows the 'Add New Data Source' form in the EOSC Provider Portal. The form is titled 'Data Source Name' and includes a progress bar on the left indicating 4% completion (0 of 8 steps). The steps listed are: 1. Basic (*), 2. Marketing (*), 3. Classification (*), 4. Availability (*), 5. Location, 6. Contact (*), 7. Maturity (*), 8. Dependencies, 9. Attribution, 10. Management, 11. Order (*), 12. Financial, 13. Data Source Policies, 14. Data Source Content, 15. Research Product Policies, and 16. Research Product Metadata. The 'Basic' step is currently active. The form fields include: 'Name (*)' with a description 'Brief and descriptive name of the Resource as assigned by the Provider.' and a suggested length of 80 characters; 'Abbreviation (*)' with a description 'Abbreviation or short name of the Resource.' and a suggested length of 20 characters; 'Resource Organisation (*)' with a description 'The name of the organisation that manages or delivers the resource, or that coordinates the Resource delivery in a federated scenario.' and a dropdown menu showing 'XtremeScience Provider'; and 'Resource Providers' with a description 'The name(s) of (all) the Provider(s) that manage or deliver the Resource in federated scenarios.' and a text input field. The top navigation bar includes links for 'Statistics', 'For Providers', and 'For Catalogues'. A 'Do you need help?' link and a 'Download as PDF/Excel' button are also present.

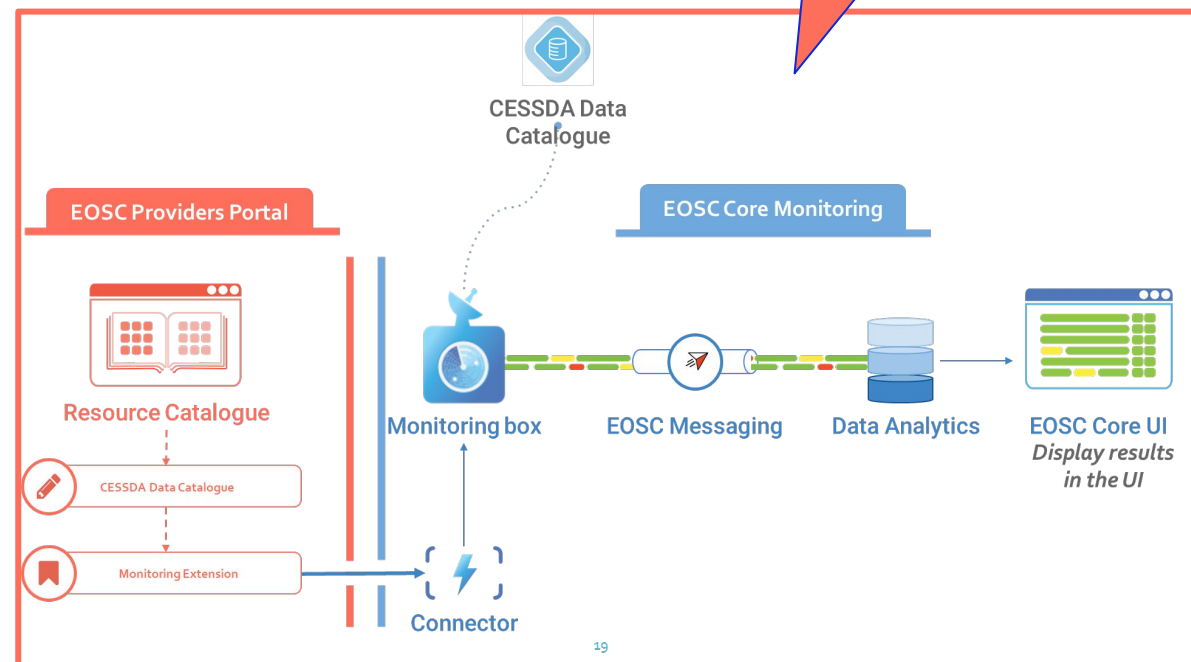
<https://eosc-portal.eu/eosc-providers-hub>

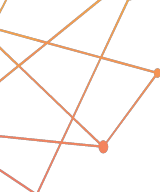
EOSC Platform - Main features

Connect your services to EOSC Core

Helpdesk	<ul style="list-style-type: none"> ○ Adopt EOSC Helpdesk as your helpdesk ○ Connect your helpdesk to the EOSC one
Monitoring	<ul style="list-style-type: none"> ○ Adopt EOSC Monitoring as your monitoring system ○ Connect your monitoring system to the EOSC one
Order Management	<ul style="list-style-type: none"> ○ Define Offers for your services in the Marketplace ○ Manage orders via SOMBO ○ Connect your order mgmt system with the EOSC
Accounting	<ul style="list-style-type: none"> ○ Benefit from the EOSC Accounting for research product
AAI	<ul style="list-style-type: none"> ○ Register your AARC compliant AAI proxy to the AAI Federation ○ Connect your services to an AAI proxy of the federation

Example of integration with EOSC Monitoring





The EOSC Platform

Upcoming Features @ January 2023

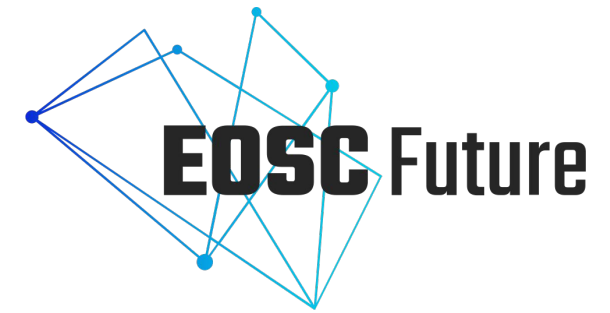
User dashboard	<ul style="list-style-type: none">○ AI-based user personalised environment to navigate the EOSC Catalogue
Solutions	<ul style="list-style-type: none">○ EOSC Resource sets to solve common problems for researchers (e.g. set of compatible resources to access, move and analyse a dataset)
File transfer service	<ul style="list-style-type: none">○ Find datasets in EOSC and move them with the integrated transfer service
Accounting for services	<ul style="list-style-type: none">○ Publish your accounting data in EOSC
Interoperability Framework registry	<ul style="list-style-type: none">○ Register EOSC Interoperability Guidelines○ Declare your services compliant with EOSC Interoperability Guidelines○ Discover services compliant with EOSC Interoperability Guidelines



Powered by EOSC Future

EOSC Platform Sessions @ the Symposium

- Wed 9.00-10.30
 - The EOSC Platform (Nadir)
- Wed 14.30-16.00
 - EOSC AAI Implementation (Nadir)
 - Onboarding and Integration of services and resources in the EOSC Platform (Kepler)
 - Enabling Resource Composability in the EOSC Future Platform – Use cases from the scientific world (Aquarius)
- Wed 16.30-18.00
 - Implementing the EOSC Interoperability Framework: the EOSC Future contribution (Kepler)
- Thu 9.00-10.30
 - From discovery to execution: the execution framework of the EOSC platform (Zenit)
- Thu 11.00-12.30
 - EOSC Service Management System (SMS) (Tycho)
- Thu 13:30-15.00
 - EOSC Portal – new value for researchers (Nadir)

A network diagram with orange lines and dots, partially visible on the left side of the slide.

Thank you for your attention!

Diego Scardaci (EGI Foundation) <diego.scardaci@egi.eu>

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