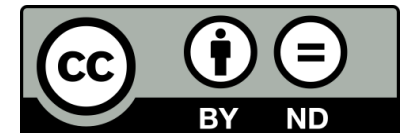


# New Capabilities in the EOSC Platform

Diego Scardaci (EGI Foundation)  
Mark Dietrich (EGI Foundation)

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



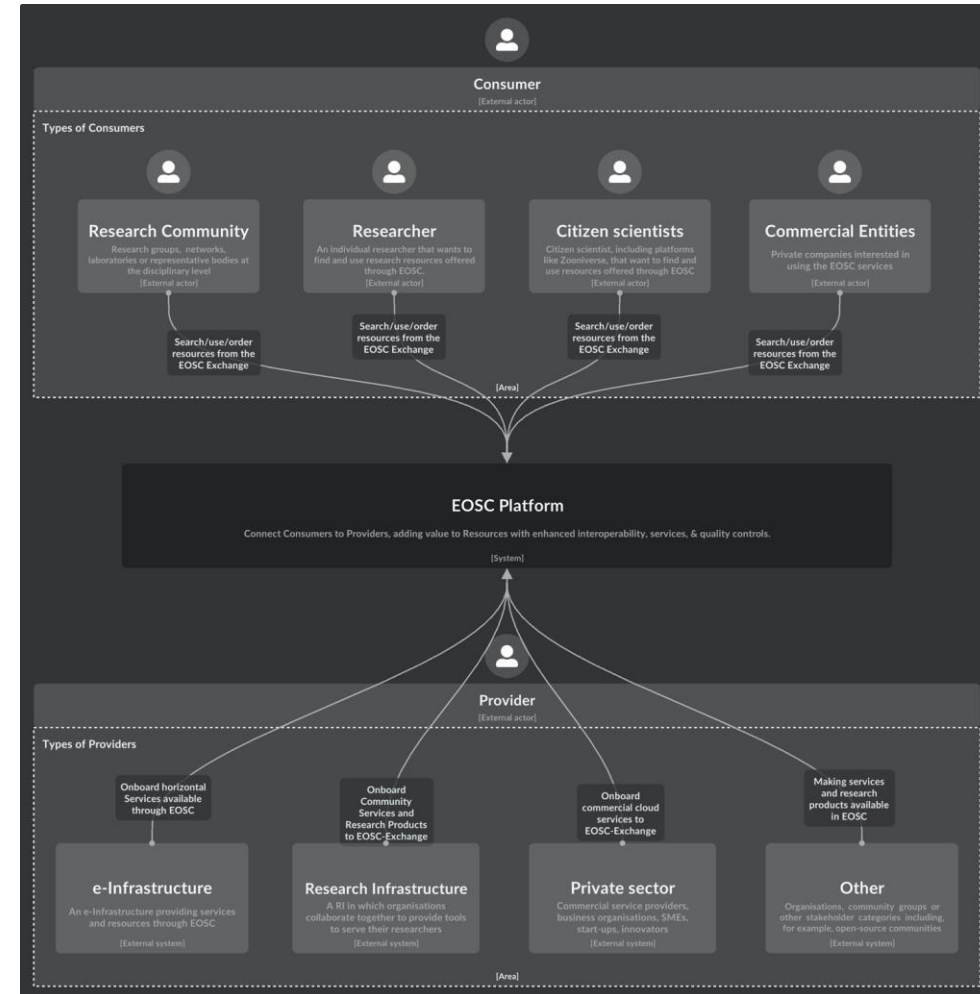
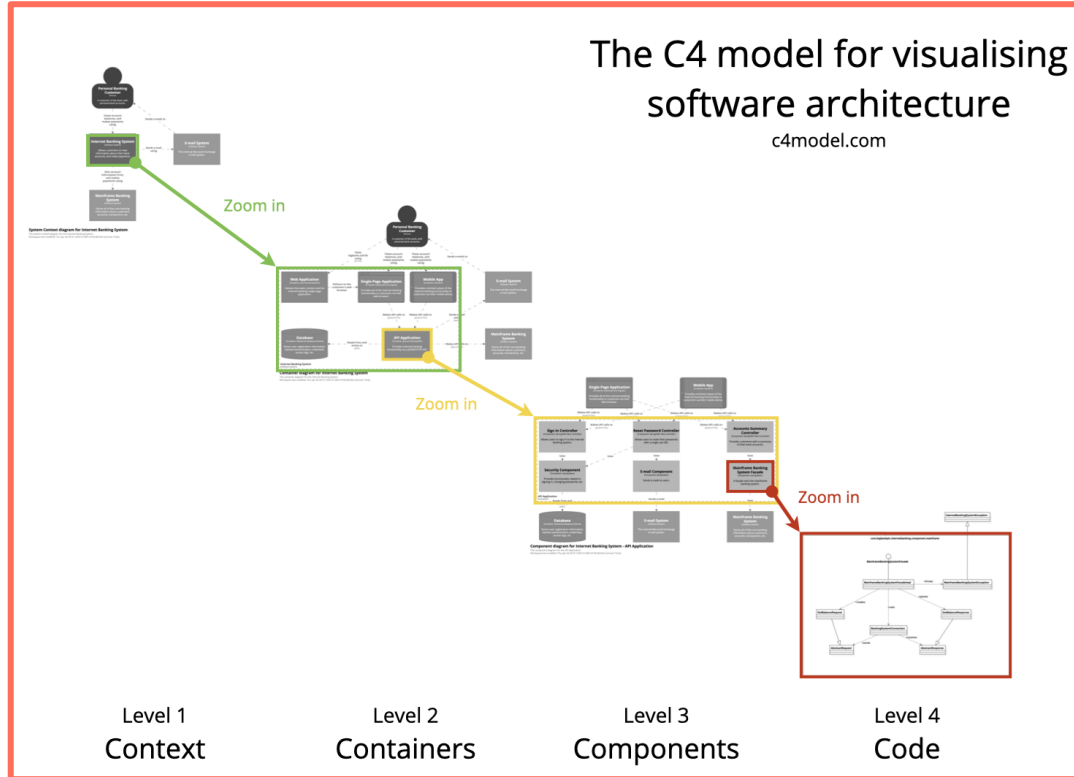


# EOSC Future - three key tenets

- 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

# From an abstract design to the EOSC Platform

## C4 model design principles

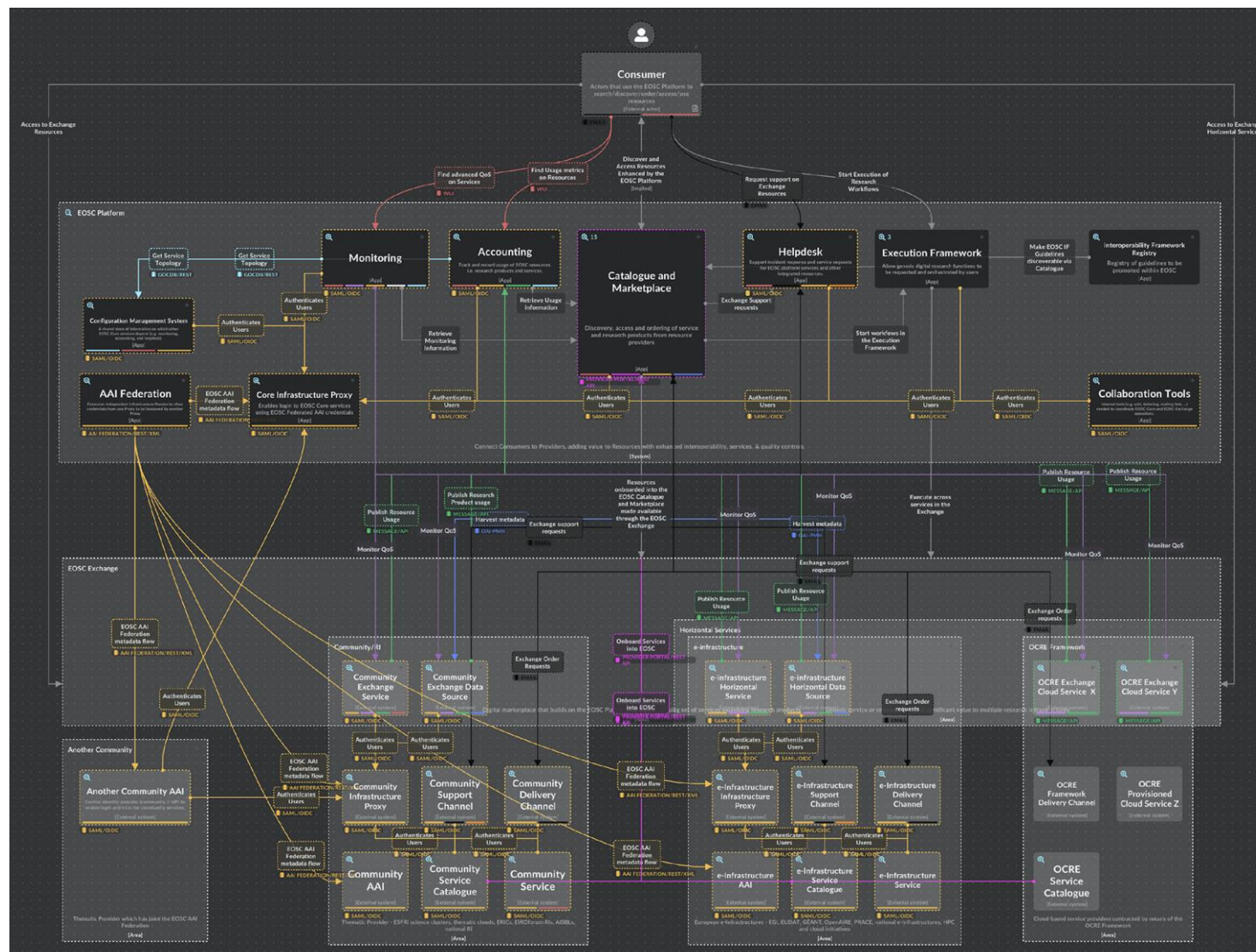


- Architecture Logical View
- Description of the components
- Description of the interfaces (standards/APIs)
- Process views to describe main use cases

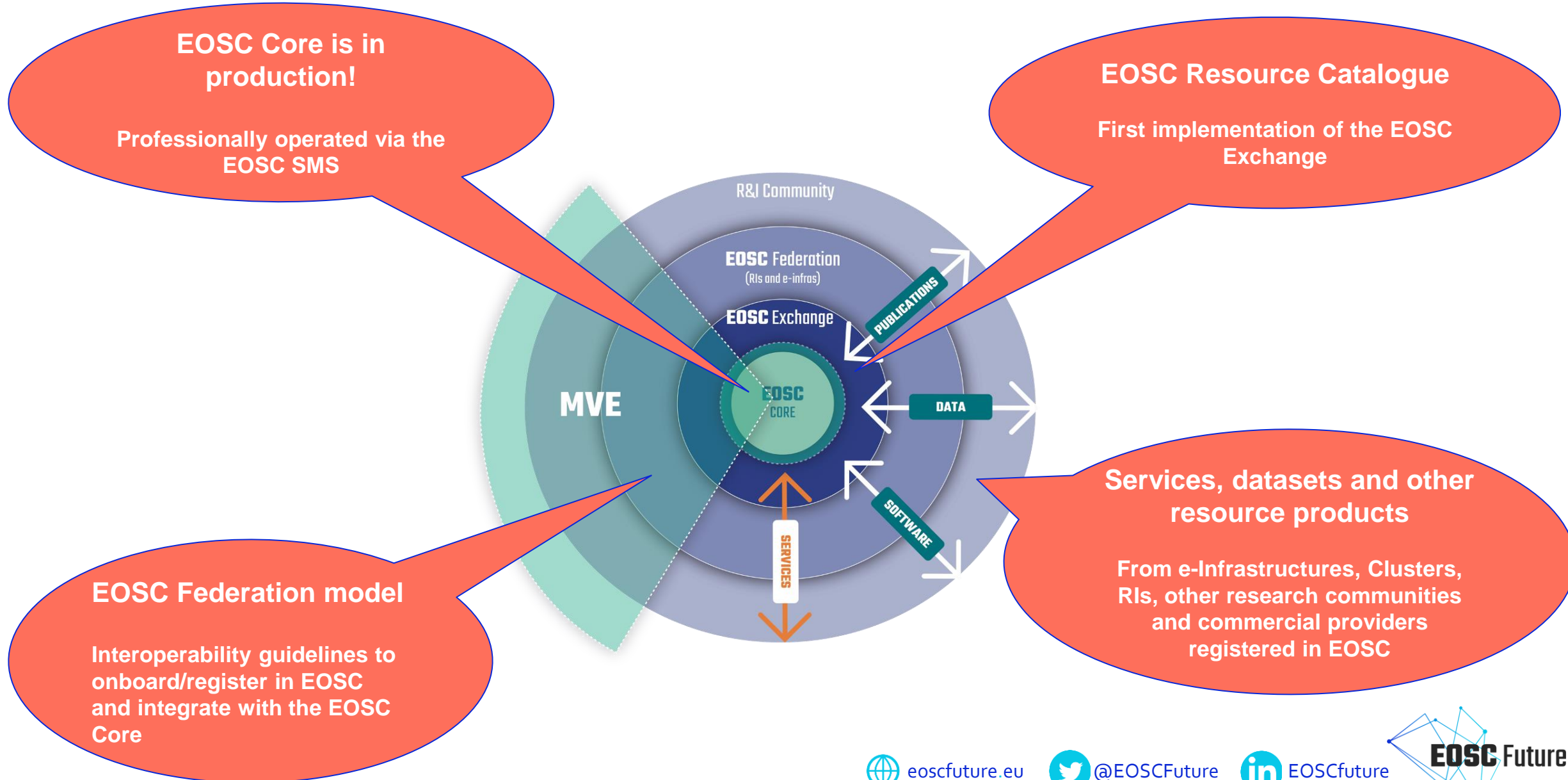


# Logical view

# EOSC Platform Architecture - Component View



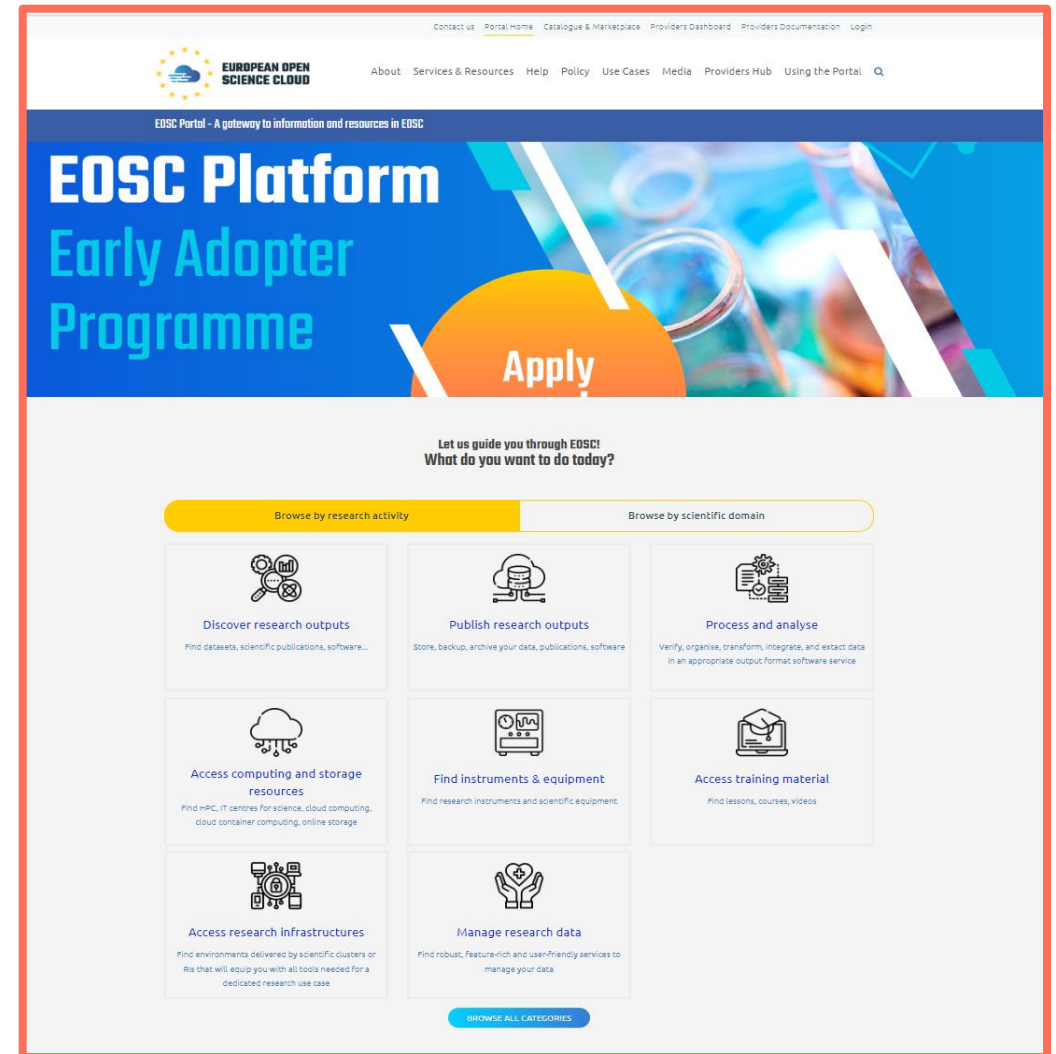
# How the EOSC Platform delivers the MVE



# 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 PIs 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 reflect activities relevant to researchers

Co-design with researchers that suggested the new categorisation

The screenshot displays the EOSC Platform interface with a grid of research activity categories. The interface is divided into two main sections: 'Scientific Domains' and 'Categories'. The 'Categories' section is highlighted in yellow. The grid contains the following categories:

- Discover Research Outputs
- Publish Research Outputs
- Access Computing and Storage Resources
- Process and Analyse
- Access Research Infrastructures
- Manage Research Data
- Access Training Material
- Find Instruments & Equipment

A 'Browse all resources' button is located at the bottom right of the grid.

# 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/>



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# 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 &mdash; this one won't be updated/maintained anymore <p>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, Fundacion Centro Tecnológico de Supercomputacion de Galicia

Access the resource ORDER REQUIRED

0.0 / 5 0 reviews Add to comparison Add to favourites

Webpage Helpdesk Helpdesk e-mail Manual Ask a question about this resource?

ABOUT DETAILS REVIEWS (0)

### Explore



EUROPEAN OPEN SCIENCE CLOUD Home Search

881 4

#### Country averages of Copernicus ERA5 hourly meteorological variables

View all 2 versions  
Research Data . Dataset . 2018

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>

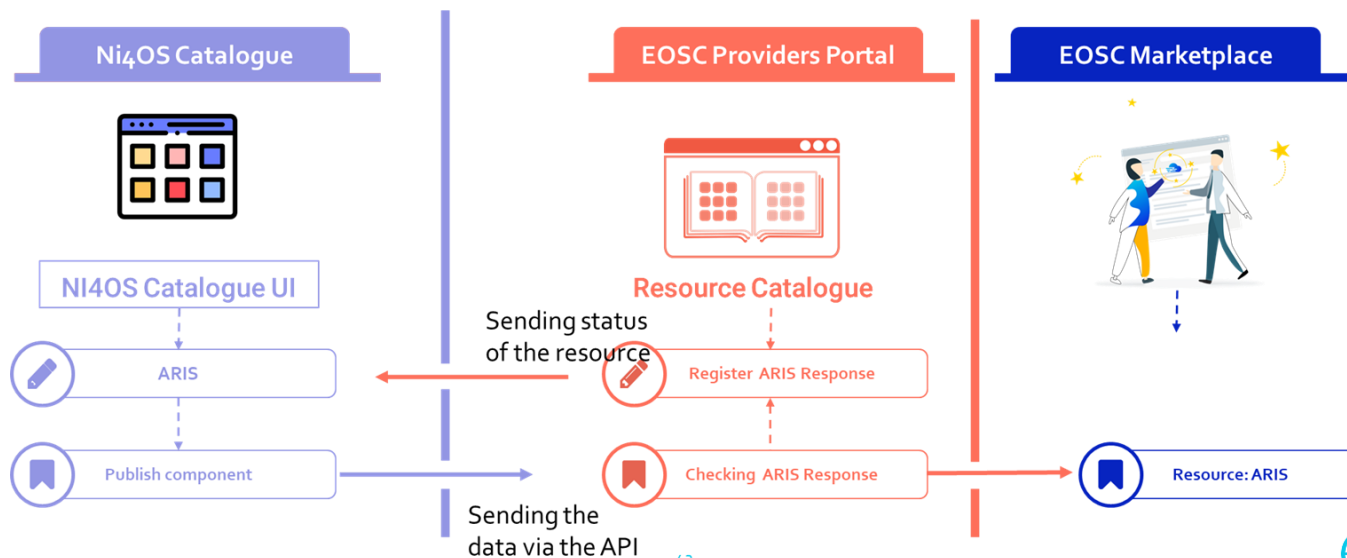
### Connect your catalogue to EOSC

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

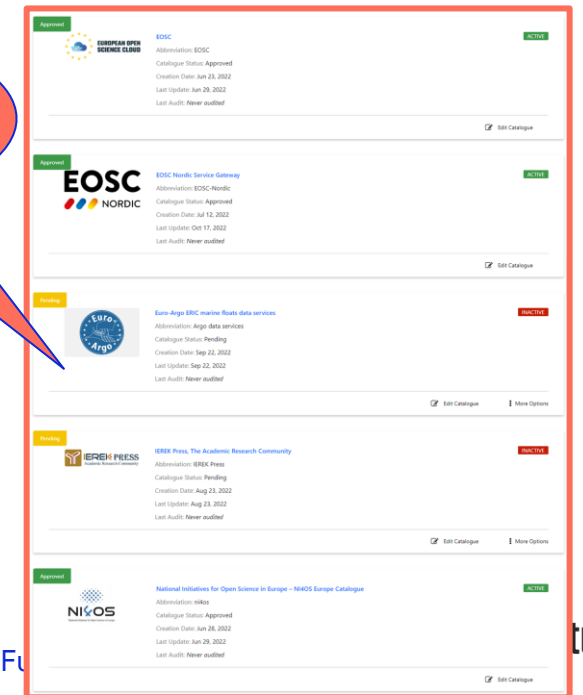
- o Reach new users by publishing services in the EOSC Marketplace
- o Automated synchronisation possible with API

#### 2. Pull EOSC services into your catalogue through the API

- o 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
- Linked to related Research Products already in EOSC Explore

### 2. Publish new datasets and other research products in EOSC

- Make them available in EOSC Explore

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

EOSC Provider Portal form  
to onboard a Data Source

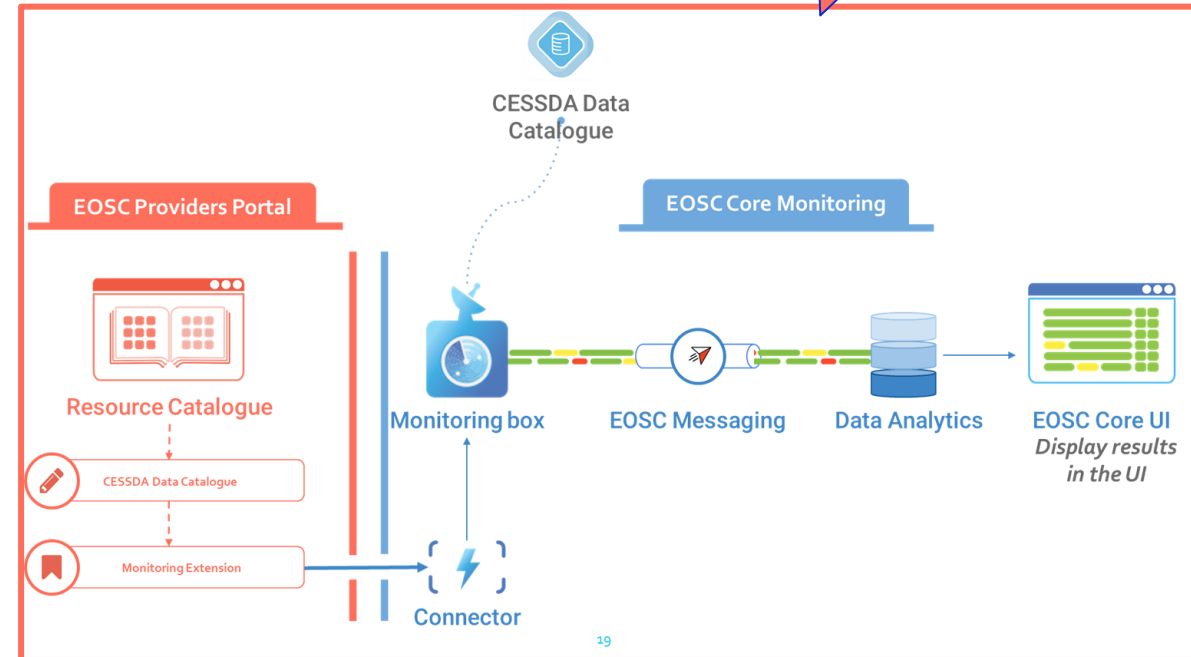
The screenshot shows the 'Add New Data Source' form in the EOSC Provider Portal. The form is titled 'Data Source Name' and includes a progress indicator showing '0 of 8' steps completed, with '4%' progress. The form is divided into sections for 'Data Source Profile Information Blocks' and 'Name (\*)', 'Abbreviation (\*)', 'Resource Organisation (\*)', and 'Resource Providers'. The 'Name (\*)' field is currently empty, with a suggested length of 80 characters. The 'Abbreviation (\*)' field is also empty, with a suggested length of 20 characters. The 'Resource Organisation (\*)' field contains 'XtremeScience Provider'. The 'Resource Providers' field is empty. The form includes a 'Do you need help?' link and a 'Download as PDF/Excel' button. The EOSC logo and navigation links are visible at the top of the page.

# EOSC Platform - Main features

## Connect your services to EOSC Core Services

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

Example of integration with EOSC Monitoring





# The EOSC Platform

## New Features by January 2023

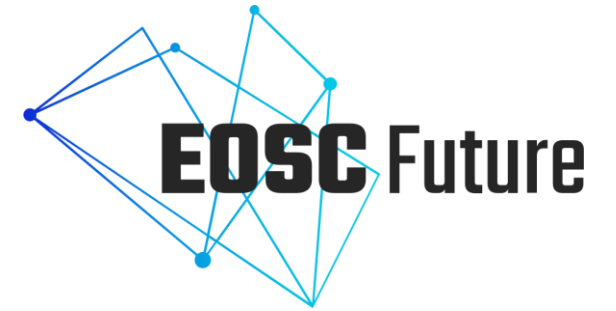
<b>User dashboard</b>	<ul style="list-style-type: none"><li>○ AI-based user personalised environment to navigate the EOSC Catalogue</li></ul>
<b>Solutions</b>	<ul style="list-style-type: none"><li>○ EOSC Resource sets to solve common problems for researchers (e.g. set of compatible resources to access,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



Powered by EOSC Future

# EOSC Platform Sessions @ the Symposium

- 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 decorative orange network diagram consisting of several interconnected nodes and lines, partially visible on the left side of the slide.

# Thank you for your attention!

Diego Scardaci (EGI Foundation) <[diego.scardaci@egi.eu](mailto:diego.scardaci@egi.eu)>

Mark Dietrich (EGI Foundation) <[mark.dietrich@egi.eu](mailto:mark.dietrich@egi.eu)>