

EOSC-Future - What's new for users and providers

Sara Garavelli, CSC-IT Center for Science & EOSC Association BoD

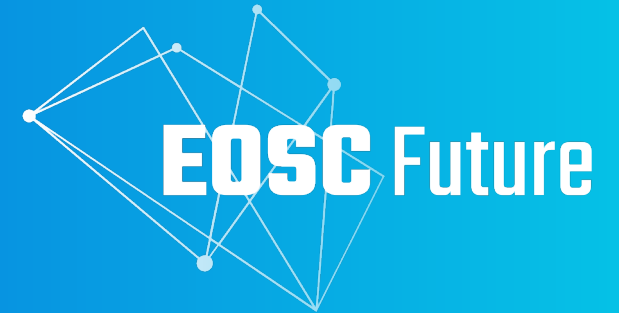
The EOSC Future project is co-funded by the European Union Horizon Programme call INFRAEOSC-03-2020, Grant Agreement 101017536





Outline

1. What's new with the EOSC Portal & Marketplace
2. Early Adopter Programme
3. EOSC Future User Group
4. RDA Open Calls
5. EOSC Symposium 2022



EOOSC-Future - What's new with the EOOSC Portal & Marketplace

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





EOOSC Portal

Contact us [Portal Home](#) Catalogue & Marketplace Providers Dashboard Providers Documentation Login

EUROPEAN OPEN SCIENCE CLOUD

About Services & Resources Policy Use Cases Media For providers Using the Portal







EOOSC Portal - A gateway to information and resources in EOOSC

Promote your resources

[Submit an article now!](#)

Access the EOOSC Portal Catalogue & Marketplace

Scientific Domains Categories

 Medical & Health Sciences	 Engineering & Technology	 Natural Sciences
 Chemistry	 Biology	 Plant Sciences

Primary resource for navigating EOOSC

<https://eosc-portal.eu>

Includes a virtual tour for new users

Catalogue and marketplace is how you discover, access and compose resources





Accessing EOSC

EUROPEAN OPEN SCIENCE CLOUD English

CHOOSE YOUR ACADEMIC/SOCIAL ACCOUNT

ina DARIAH eduTEAMS esi Check-in

B2ACCESS Google IGTF OpenAIRE

ID ORCID

or

Search...

- GÉANT Staff Identity Provider
- 29 Mayis University
- A'SHARQIYAH UNIVERSITY
- A*STAR - Agency for Science, Technology and Research
- A. T. Still University
- AAF Virtual Home
- aai.lab.maeen.sa
- AAI@EduHr Single Sign-On Service
- Aalborg University
- Aalto University

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EOSC offers multiple login options:

- Institutional credentials (eduGAIN)
- Google
- ORCID
- OpenAIRE
- EGI check-in
- ...



EOSC authentication with research communities

Also collaborating with research clusters to enable login via them. They have compatible AAls, which are being brought under an AAI Federation













Navigating resources

Search by scientific domains or categories of services







Access the EOSC Portal Catalogue & Marketplace

Scientific Domains | Categories

 Medical & Health Sciences	 Engineering & Technology	 Natural Sciences
 Generic	 Humanities	 Agricultural Sciences
 Social Sciences	 Other	

Access the EOSC Portal Catalogue & Marketplace

Scientific Domains | Categories

 Access physical & eInfrastructures	 Aggregators & Integrators	 Process & Analysis
 Security & Operations	 Sharing & Discovery	 Training & Support



New User experience (October 2022)



WHAT WOULD YOU LIKE TO DO TODAY? I WANT TO...



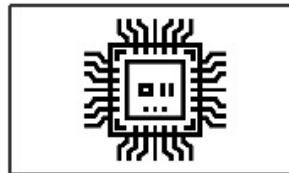
DISCOVER RESEARCH OUTPUTS
Find datasets, scientific publications, software



PUBLISH RESEARCH OUTPUTS
Store, backup, archive your data, publications, software



PROCESS and ANALYSE
Verify, organize, transform, integrate, and extract data in an appropriate output format software services



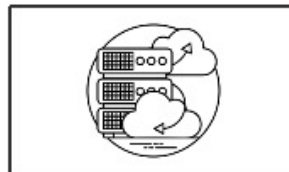
ACCESS COMPUTING RESOURCES
Find HPC, IT centres for science, cloud compute, cloud container compute, online storage



FIND INSTRUMENTS & EQUIPMENT
Find research instruments and scientific equipment



ACCESS TRAINING MATERIAL
Find lessons, courses, videos



ACCESS RESEARCH INFRASTRUCTURES
Find clusters or individual RIs



RESEARCH DATA MANAGEMENT









FIND BUNDLES
Suggested packages of services



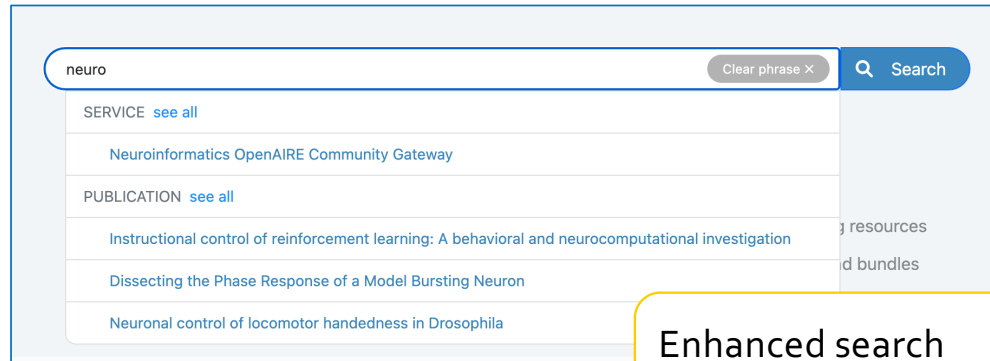
New capabilities from EOSC Future: Search Service



Researcher
Citizen science
Educator

 <p>Discover research outputs</p>	 <p>Publish research outputs</p>
 <p>Process and analyse</p>	 <p>Access computing resources</p>
 <p>Find instruments & equipment</p>	 <p>Access research infrastructures</p>

The user path is correlated with the user types and scientific goals



neuro Clear phrase X Search

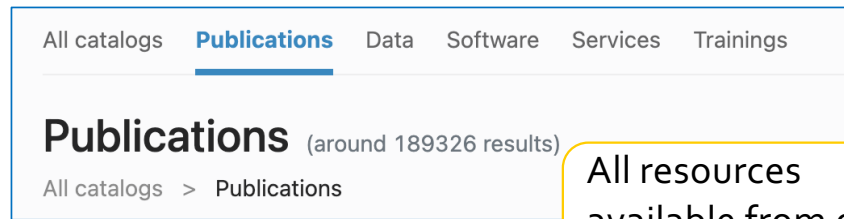
SERVICE [see all](#)

- Neuroinformatics OpenAIRE Community Gateway

PUBLICATION [see all](#)

- Instructional control of reinforcement learning: A behavioral and neurocomputational investigation
- Dissecting the Phase Response of a Model Bursting Neuron
- Neuronal control of locomotor handedness in Drosophila

Enhanced search functions



All catalogs **Publications** Data Software Services Trainings

Publications (around 189326 results)

All catalogs > Publications

All resources available from one place



Selecting / ordering services



Resources

All Resources 58

Looking for: **storage**

1-10 of 58 results Sort by: Best match

SUGGESTED

- Secure File Sharing and Storage**
Online environment to support secure and controlled data sharing.
Organisation: BlueBRIDGE
- Western Central Atlas Fishery Comm...**
Repository application to r spatially referenced resour...
Organisation: BlueBRIDGE

CATEGORIES

- Access physical & infrastructures 29
- Aggregators & Integrators 3
- Processing & Analysis 28
- Security & Operations 2
- Sharing & Discovery 7
- Training & Support 4
- Other 1

FILTERS

Scientific Domains

Find or choose from the list below

- Generic 30
- Natural Sciences 23
- Earth & Related Environmental Sciences 16
- Biological Sciences 4
- Physical Sciences 3
- Chemical Sciences 2
- Computer & Information Sciences 2
- Mathematics 0
- Other Natural Sciences 0
- Engineering & Technology 4
- Other Engineering & Technology Sciences 2
- Environmental Biotechnology 1
- Materials Engineering 1
- Chemical Engineering 0
- Civil Engineering 0
- Electrical, Electronic & Information Engineering 0
- Environmental Engineering 0
- Industrial Biotechnology 0
- Mechanical Engineering 0
- Medical Engineering 0

storage x All resour... Q

My EOSC Marketplace

Comparison		
INFN-Cloud Object Storage... **Object Storage** organizes the way data is written to a storage system so...	CESNET DataCare - Object... Object-based storage offered by CESNET is a simple and reliable service...	
Resource Organisation	Italian National Institute of Nuclear Physics	CESNET
Scientific Domain	Generic	Generic
Categorisation	Data Storage	Data
Target Users	Research Communities	
Resource Access Type	Remote	
Resource Access Mode	Free Conditionally	

INFN-Cloud Object Storage Service for DICE

Access instructions

Final details

Please select a Project and review the summary below. Once you submit the order, your request will be sent to a resource provider. The order status will be visible at your Project space.

MY PROJECTS

You can organize your resources in projects. Add this resource to a specific project or create a new one.

Project *

Add new project

ADDITIONAL INFORMATION

Additional comment

I'm not a robot



1. Search for the type of service you need
2. Compare options
3. Place order (where needed)



Access to free storage, compute and support services



C-SCALE will federate compute and data resources from the Copernicus DIAS, the national Collaborative Ground Segments and the European Open Science Cloud (EOSC) towards a European open source Big (Copernicus) Data Analytics platform:

- Storage services: up to 12 PB
- Cloud services: up to 17,728,500 CPU hours
- HPC/HTC services: up to 3,100,000 CPU hours
- GPU services: up to 6,000 GPU hours



Provides three core services for Research Lifecycle Management:

- ROHub: tool to facilitate the exchange of information across the scientific community.
- Text Enrichment and Mining: service which automatically extracts valuable information and metadata from bibliographic sources and other text documents
- Datacube technology for Earth Observation (EO) data management: efficient access to extensive collections of multi-temporal and multi-dimensional EO imagery, also allowing interoperability among the different information layers.



DICE makes available a set of data management services (and associated resources) for researchers and research communities from any scientific domain including:

- Data archives (up to 25 PB)
- Policies based data archives (up to 17 PB)
- Personal and project workspaces (up to 5 PB)
- Data repository services for data sharing (up to 8 PB)
- Data discovery services (with PID and DOI services and metadata harvesting)



EGI-ACE will deliver the EOSC Compute Platform and will contribute to the EOSC Data Commons. Services offered include: compute and storage resources, compute platform services, data management services and related user support and training.

The total **capacity** that EGI-ACE makes available through the call between 2021-2023 is:

- 80,000,000 CPU hours
- 250,000 GPU hours
- 20 PB storage



support to Argos DMP service by drafting discipline specific DMPs, Horizon Europe DMP support

set your own community research gateway (connect.openaire.eu) and Zenodo communities

access open science metrics for your projects, institution, community

service to anonymise your data and comply with GDPR

support and mentoring on Horizon Europe open access mandates

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





Improved cross-catalogue discovery (mock-up)

The screenshot displays the EOSC search results page for the query "gpu forest poland". At the top left is the EOSC logo. The search bar contains the query, and a "Navigation" button is visible. Below the search bar, it indicates "SEARCH RESULTS FOR: gpu forest poland" and provides a "switch to recommended results only" button. The results are categorized into Marketplace (148 results), Research Outcomes (2053 results), Content Providers (12243 results), Organizations (338 results), and Knowledge Hub (188 results). On the left, there are filters for "Categories" (e.g., Access physical & infrastructures: 3) and "Filter by SCIENTIFIC DOMAINS" (e.g., Generic: 147). The main content area shows two identical result cards for "100 Percent IT Trusted Cloud" by Centro Nacional de Biotecnología, each with a 5-star rating and 3 reviews. Below these, a "Recommended for you" section features three cards for "Regional Database for Fishery Stock ..." by BlueBRIDGE, each with a 5-star rating and 3 reviews.

As more community catalogues are integrated into EOSC, greater search and discovery functionality will be provided



NEW ! Enhanced user experience with AI technologies: User Dashboard & Recommender system

Recommender System

Provide advice to users navigating over the EOSC Portal (Sept 22). Recommendations based on:

- Viewing history
- Order history
- General popularity
- Popularity among users with a similar background/interests

User Dashboard

Space where researchers can find, for example, services or research products tailored to their needs (Sept 22)

User dashboard

Recommended services for you

11 projects

16 services

New services

Publications

add

exit

save



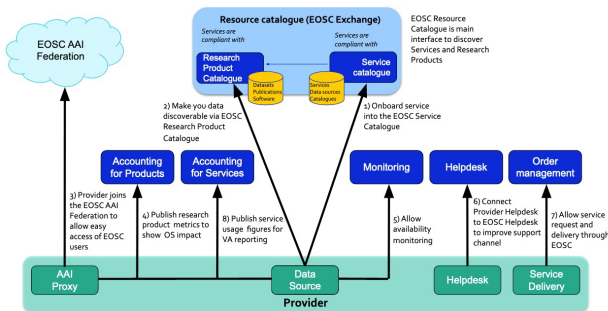
Work in progress

- Flexible and intuitive way to discover all EOSC resources
 - Data, publications and software available for EOSC researchers
 - Search based on different approaches towards the discovery
- Personalised EOSC for the users
- A big step towards a unified user environment in EOSC
 - Resources discovered and checked by the users easily accessible from the user dashboard
 - Order management notifications visible from the user dashboard
 - News from the user community available from the user dashboard
 - Etc...



What's in for providers?

1. Sharing resources beyond community boundaries
2. EOSC interoperability framework to facilitate resource integration and composability
3. Integrating with EOSC Core functionality



EOSC PROVIDERS: Who they are & what they provide



1. Providers can offer:
 - a. Services (compute, DM, VREs, etc)
 - b. Research products (datasets, software, publications) (Sep 2022)
2. Basic RoP (legal entities, TRL=>8, Completed profile & agreement to keep it updated)



EOSC Provider toolkit

- eosc-portal.eu/eosc-provider-toolkit

EOSC Provider Toolkit

Are you looking to provide services or resources through EOSC? Or are you already doing so, but could you use a refresher on the ins and outs of EOSC for providers? Then the EOSC Providers Toolkit provided here is just the information package for you.

EOSC PROVIDER - Who they are & what they provide

e-Infrastructures

Research Infrastructures

Higher Education Institutes (HEIs)

Research Institutes

Archive & Repositories

Computing & Data Centers

Publisher & Journals

Libraries

Commercial Providers



e-Infrastructures

E.g. EUDAT, EGI, national e-Infrastructures (e.g. national research clouds), OpenAIRE, PRACE, FENIX, D4Science

- ✓ Software & other research products
- ✓ Storage
- ✓ Computing
- ✓ Services
- ✓ Training

- **EOSC providers: Who they are, what they can provide** (by Diego Scardaci, EGI Foundation & EOSC Future Technical Coordination Board, [recording](#))
- **Why become an EOSC provider** (by Paolo Manghi, OpenAIRE, [recording](#))

Download here the whole [Presentation](#)

EOSC - Core

- **Introducing the EOSC Core** (by Mark van de Sanden, SURF - [recording](#))
- **EOSC AAI, scenarios & roadmaps** (by Christos Kanellopoulos, GÉANT - [recording](#))
- **Monitoring** (by Kostas Koumantaros, GRNET - [recording](#))
- **Accounting** (by Andreas Czerniak, GRNET - [recording](#))
- **Order management** (by Roksana Wilk, Cyfronet - [recording](#))
- **EOSC helpdesk** (by Pavel Weber; Karlsruhe Institute of Technology - [recording](#))

Download here the whole [Presentation](#)

EOSC portal

- **EOSC portal functionalities, catalogue & marketplace** (by Mark Dietrich, EGI Foundation - [recording](#))
- **Resource catalogue options & onboarding** (by Paolo Manghi, OpenAIRE - [recording](#))



Early Adopter Programme



Who is it for?

- **Providers looking to integrate their services into the EOSC-Core** to make them available to the research community at large.
- **Research communities aiming to address cross-disciplinary, societal or complex research challenges** by using EOSC resources from different disciplines or e-infrastructures.

What is in it for you?

- you will be able to **access a number of services and resources that will support your community or institution/organisation throughout the entire research life cycle**. You will also receive **constant support from our experts**
- If you are operating services, our experts will support you **with 'onboarding'** them into EOSC. This will allow you to not only offer your services to the broader EOSC community but also benefit from EOSC-Core services (i.e. AAI, Helpdesk, Monitoring, Accounting, etc.), a series of capabilities that can simplify access to your services and reduce operational costs.

EOSC Future and partner offers

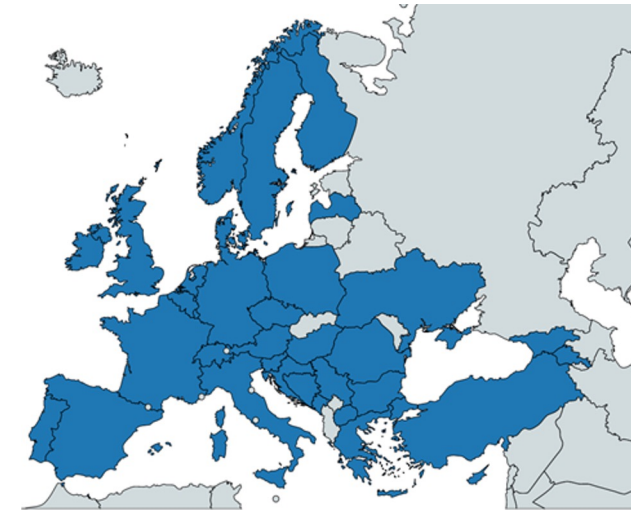
Projects	Offer
EOSC Future	Operates the EOSC-Core, the set of internal services that facilitates EOSC operations upon which researcher services can rely and integrate with as appropriate: Resource Catalogue, Marketplace, AAI Federation, Order Management, Helpdesk, Monitoring, Accounting
C-SCALE	Services for the discovery, access and processing of EO/Copernicus data in EOSC.
DICE	Cutting-edge data management services (data archive, policies-based data storage, personal and project workspaces, data repository and data discovery services) with a significant amount of storage resources for EOSC users. https://marketplace.eosc-portal.eu/services?related_platforms=53
EGI-ACE	Delivers the EOSC Compute Platform and contributes to the EOSC Data Commons through a federation of cloud compute and storage facilities, Platform as a Service (PaaS), and data spaces with analytics tools and federated access services. https://marketplace.eosc-portal.eu/services?related_platforms=52
OpenAIRE Nexus	A framework of services for EOSC that can greatly assist in publishing research, monitoring its impact and helping to promote its discovery.
Reliance	Services to boost the discovery of and access to research data (including Copernicus data), improve the extraction of relevant information and manage the research lifecycle via research objects.
ARCHIVER	ARCHIVER (Archiving and Preservation for Research Environments) has spent over 3 years designing, prototyping and piloting innovative new services for the Long Term Digital Preservation (LTDP) of scientific datasets. During the project, multiple data intensive organizations representing several research domains (CERN, DESY, PIC and EMBL-EBI) have worked closely and collaboratively with suppliers (Arkivum and LIBNOVA) on the research and development of new services and solutions for scientific data preservation relevant for the European Open Science Cloud (EOSC). https://archiver-project.eu/

EOSC Future User Group

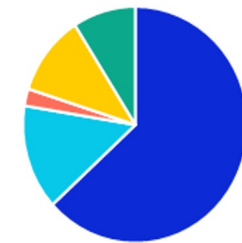
- 300 members, 38 countries
- Balanced representation of EU countries

Awareness of EOSC	Amount
Well aware	57
Aware	124
Not fully aware	95
I do not know about EOSC	23
Have you used EOSC Portal before?	
Yes	86
No	209
Are you involved in any EOSC-related projects?	
Yes	49
No	245

- Contributed to **researcher engagement, user benefits, added value** in ESFRI-EOSC Workshop on 25 Jan 2022 (56)
- Provided their insights by responding on the surveys such as **Interoperability Framework (WP3)** and **additional commercial services (WP8)** (44)
- Contributed in forms of focus groups such as on following themes:
 - EOSC Portal revamp via Usability Study (WP10, WP4, WP5) to provide **insights about the difficulties that users face** during the full user journey in the Portal
 - Training (Wp9) allowed the WP to finalise the **draft training programme and to move onto the design and delivery phases.**



Roles



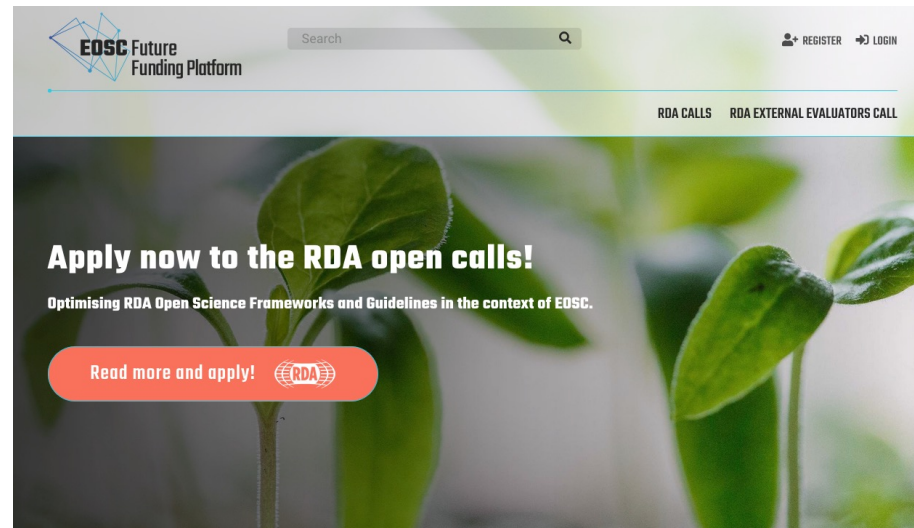
- Full time researcher
- Part-time researcher
- Data steward
- Working on research support
- Other



RDA Open Calls

RDA is committed to **data sharing, exchange and interoperability on a global scale**. In the context of the EOSC Future project, RDA has launched a **€1 million grant fund** targeting, among other stakeholders, scientific communities, technical experts and early career researchers.

The overarching goal is to improve the technical data frameworks for the European Open Science Cloud (EOSC), in line with RDA out-puts and recommendations.



eoscfuture-grants.eu

Who can apply?

Depending on the thematic scope or target of a specific call, RDA welcomes applications from: i) **individuals or groups committed to FAIR** (Find-able, Accessible, Interoperable, Reusable) **data and other related Open Science principles**; ii) **researchers** (junior or senior; individuals or groups); iii) **data scientists**

part of a **European** research group, organisation or SME and based within an **EU Member State or Associated Country**.

Note: RDA open calls are not open to members of the EOSC Future consortium or projects based outside of an EU Member State or Associated Country.



Apply Now!



Number of grants

4

Grant amount

€50.000

Deadline

11 July 2022

16.00 CEST

NEW CALL! RDA CROSS-DISCIPLINARY ADOPTION IN SUPPORT OF EOSC

As part of the EOSC Future project, RDA will research community projects to encourage **cross-disciplinary research best practices** within the broader EOSC community.

Proposals should be able to demonstrate, among other elements:

- Supporting cross-disciplinary sharing of data in the EOSC environment
- Examine metadata standards for streamlining cross-disciplinary research
- Show specific benefits for research communities using EOSC services (e.g. (e.g. data management & storage, cloud services, etc.)
- Examples or lessons learnt related to open, community-led standards and cross-domain interoperability
- A commitment to the cross-disciplinary implementation of RDA outputs and recommendations.
- FAIR data implementation across domains



Apply Now!



Number of grants

10

Grant amount

£10,000

Deadline

12 August 2022


16.00 CEST

EOSC FUTURE RDA DOMAIN AMBASSADORS

Do you want to represent your field as an Open Science Ambassador? We are looking for individuals to be receptive and responsive to the needs and realities of various domain-specific research communities.

We are creating a **network of experts** to tell us: What are the needs of your community when it comes to sharing research data in EOSC? Become an Ambassador and tell us!

Are you from any of the following communities:
Agriculture, Forestry and Fisheries; Health Ageing Retirement; Astronomy; Librarianship, Archival Science and Information Science; Biodiversity; Linguistics; Bioinformatics; Materials Sciences; Chemical Sciences; Open government data / Sustainable Development Goals; Cultural Heritage; Scholarly Communications; Earth and Related Environmental Sciences; Wind Energy; Health Sciences



EOOSC Symposium

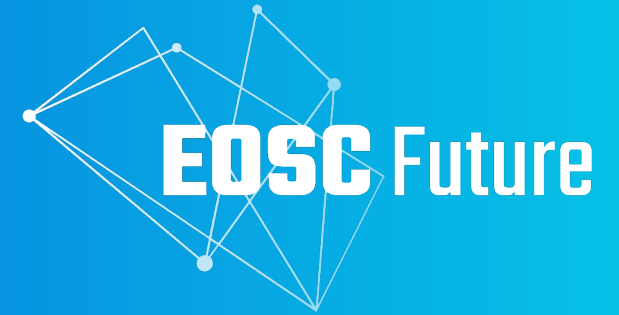
- 14-17 November 2022
- Prague, Czech Republic
- Jointly organised by EOOSC Future, EOOSC-A, EOOSC SB, EC, Czech EU Presidency



The next EOOSC Symposium will be held from 14 to 17 November 2022 as a hybrid event in Prague and online. It will bring updates from across the EOOSC ecosystem. The EOOSC Symposium 2022 will coincide with the Second EOOSC Tripartite Event.

SIGN UP FOR THE SYMPOSIUM'S WAITLIST TO RECEIVE AN INVITATION AS SOON AS REGISTRATION IS OPEN!

<https://events.eoscfuture.eu/Symposium2022>



Thank you!

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