EOSC FUTURE
EUROPEAN OPEN
SCIENCE CLOUD

EOSC Evolution
Activities and Participation

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NI4OS National Capacity Building Training in North Macedonia, 15.10.2021

EUROPEAN OPEN SCIENCE CLOUD

What is the European Open Science Cloud - EOSC? - https://www.eosc.eu/about-eosc

- Vision: "**Web of FAIR Data and services**" for science in Europe

- Multi-disciplinary environment where researchers can
  - publish,
  - find and
  - re-use
- data, tools and services

EUROPEAN OPEN SCIENCE CLOUD

- Builds on existing infrastructure and services
  - federated 'system of systems'

Researchers

Researchers are the first and ultimate target group of EOSC.

Their role within the EOSC is two-fold:

- primarily users of the EOSC services
- offer their assets (research output: data, software and other tools) to the EOSC

Not formed in homogeneous networks

Many individual researchers may not (yet) be aware about the EOSC or may be skeptical about it

Need to reach out to mediate target groups

EOSC provides researchers with

Seamless access to content and services via common AAI

Access to data from various sources which is FAIR and ideally open

Access to services for storage, computation, analysis, preservation and more

Adoption of standards so data and services can be combined

Helpdesk, training and support to improve use of EOSC

EOSC Association

Focal point of the EOSC Partnership with the European Commission

- Established in July 2020 as a not-for-profit international association
- crucial role in gathering EOSC stakeholders such as research funders, policy makers, research-performing organisations and operators of research infrastructures to contribute to and monitor the future EOSC developments

Aims to serve the EOSC community, promote EOSC, and enable Open Science in Europe

- SRIA sets out the elements needed to implement the EOSC Partnership

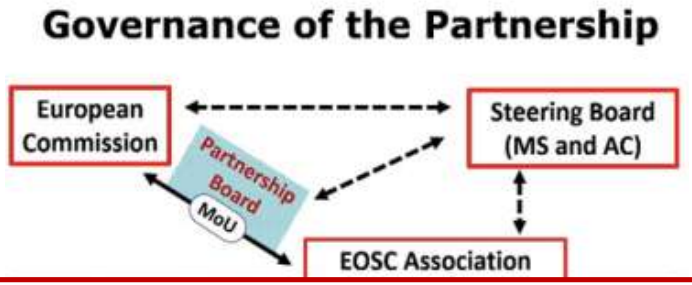
The EOSC Partnership aims to:

- create a growing ecosystem, bringing together relevant European initiatives around the FAIR data economy
- fostering collaboration among those initiatives towards the objective of open research
- attracting small and medium-sized enterprises (SMEs) and start-ups to use and benefit from the federated services and data sources,
- and raising awareness in society about the benefits of FAIR-data-driven innovation

EOSC Governance

Current EOSC Governance 2021 and beyond

- 1st constitutional GA on 17th Dec 2020
- Board of Directors (9) and 2021 budget
- Official webpage: https://www.eosc.eu/
- Statutes published | Link
- Ongoing work:
  - ✓MoU with the European Commission
  - ✓Secretary General
  - ✓Operational and Advisory bodies
  - ✓Bylaws



General Assembly (GA)	Board of Directors	Secretary General	Operational & Advisory Bodies
• Is the supreme authority of the Association.	• The President is the Chair of the Board. • The Board is appointed by Delegates of the GA	• The Secretary General is entrusted with the day-to-day management of the Association, leads the Secretariat.	• Working groups and task forces to address issues or concerns relating to the mission and operations of the Association.

The EOSC Association for regional and national communities: interviews with the Board

"In my dream, 20 years from now, EOSC has become a system (a commons) similar to what is now the World Wide Web where the Internet is the backbone. In this vision, something like 50% of the relevant research data would be available through these commons, this federated network to be created through the protocols and standards. And by relevant data I mean those data that are seen as relevant by the researchers themselves because someone else cannot determine what data are relevant." **Karel Luyben**, EOSC Association President

EOSC Governance

Current EOSC Governance 2021 and beyond

✓ Membership Categories

Members	Observers	Mandated Organisations
• Must be a legal entity. • Cannot be a department of national goverments and ministries. • **Should have a presence in an EU MS or AC, or any other country associated with the EU Framework Programme for Research and Innovation.** • **So far around 150 Members.**	• Must be a legal entity. • Cannot be a department of national goverments and ministries. • **May be established outside this area.** • **So far around 50 Observers.**	• Each MS or AC that has one or more organisations that are Members of the Association may appoint one (1) Member to act as its Mandated Organisation, to represent national interests. • **So far around 20 Mandated Organisations**

Members and Observers categories

- Research funding organisation
- Research performing organisation
- Service providing organisation
- Other organisation

EOSC Advisory Groups / Task Forces

Help steer the implementation of EOSC

Groups should liaise with EOSC projects and offer feedback and advice

Identify strategic gaps and areas for investment to input to SRIA

Each working group focuses on a set of topics, covered by a Task Force

EOSC Advisory Groups / Task Forces

Implementation of EOSC	Technical challenges on EOSC	Metadata and data quality	Research careers and curricula	Sustaining EOSC
• Rules of Participation compliance monitoring • PID policy and implementation • Researcher engagement and adoption	• Technical interoperability of data and services • Infrastructure for quality research software • AAI Architecture	• Semantic interoperability • FAIR metrics and data quality	• Data stewardship curricula and career paths • Research careers, recognition and credit • Upskilling countries to engage in EOSC	• Defining funding models for EOSC • Long-term data preservation

- TF draft charters
- TF kick-off meetings during October 2021

Implementing EOSC together

- [the EOSC Symposium 2021 report is out]

EOSC Incentives for Researchers and Organisations

Brings together key stakeholders in the European research environment.

Mandated organisations are able to express views that represent the specificities of their national research system.

The **federation of infrastructures and interlinking of data sets** stimulate collaboration between institutions and researchers **-**not only across research projects- but also across professional sectors and countries.

Countries that are already **advanced in FAIR data and Open Science policies** can **share their best practices** and lead in developing EOSC.

EOSC Incentives for Researchers and Organisations

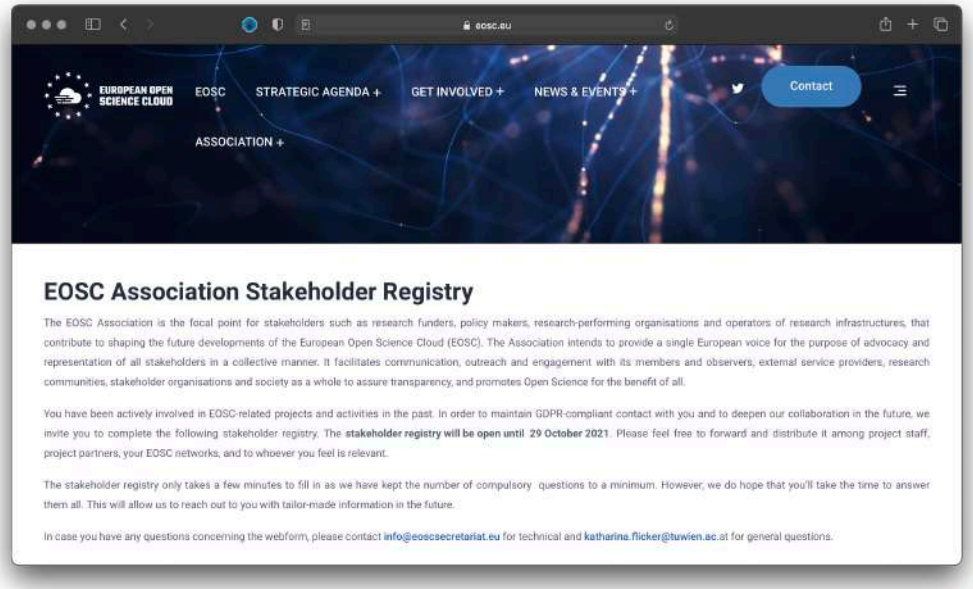
Access to data and services at European level, EOSC will facilitate and widen the opportunities of researchers for collaboration, and will enable them to start new research activities.

Researchers and innovators will be able to jointly create innovative new technologies and services, which in turn will lead to the **creation of new jobs and markets**.

Agree together on **strategies for the advancement of Open Science and Open Innovation** to benefit European society such as the **SRIA** → A roadmap for realising EOSC and support EC next work programme **Horizon Europe (2021-2027)**.

Join the Stakeholders Registry

- The Association intends to provide a single European voice for the purpose of advocacy and representation of all stakeholders in a collective manner.
- **Open until 29 October 2021**.



Ongoing EOSC related projects

Project Acronym	Project Name	Start Date	End Date	Website
NI4OS-Europe	National Initiatives for Open Science in Europe	09/2019	08/2022	ni4os-europe.eu
EOSC-Nordic	EOSC-Nordic	09/2019	08/2022	www.eosc-nordic.eu
EOSC-Pillar	Coordination and Harmonisation of National Initiatives, Infrastructures and Data services in Central and Western Europe	06/2019	06/2022	www.eosc-pillar.eu
FAIRsFAIR	Fostering Fair Data Practices in Europe	03/2019	02/2022	fairsfair.eu
EOSC-Life	Providing an open collaborative space for digital biology in Europe	03/2019	02/2023	www.eosc-life.eu
ESCAPE	European Science Cluster of Astronomy & Particle physics ESFRI research infrastructures	02/2019	07/2022	www.projectescape.eu
CINECA	Common Infrastructure for National Cohorts in Europe, Canada, and Africa	01/2019	12/2022	www.cineca-project.eu

Ongoing EOSC related projects

Project Acronym	Project Name	Start Date	End Date	Website
C-SCALE	Copernicus - eoSC AnaLytics Engine	01/2021	06/2023	c-scale.eu
DICE	Data Infrastructure Capacity for EOSC	01/2021	06/2023	www.dice-eosc.eu
EGI-ACE	EGI Advanced Computing for EOSC	01/2021	06/2023	www.egi.eu
OpenAIRE Nexus	OpenAIRE-Nexus Scholarly Communication Services for EOSC users	01/2021	06/2023	www.openaire.eu
RELIANCE	REsearch LIfecycle mAnagemeNt for Earth Science Communities and CopErnicus users in EOSC	01/2021	12/2022	www.reliance-project.eu
CS3MESH4EOSC	Interactive and agile/responsive sharing mesh of storage, data and applications for EOSC	01/2020	12/2022	cs3mesh4eosc.eu
EOSC Enhance	Enhancing the EOSC portal and connecting thematic clouds	12/2019	11/2021	www.eosc-portal.eu
INODE	Intelligent Open Data Exploration	11/2019	10/2022	www.inode-project.eu

Ongoing EOSC related projects

Project Acronym	Project Name	Start Date	End Date	Website
NEANIAS	Novel EOSC services for Emerging Atmosphere, Underwater and Space Challenges	11/2019	10/2022	www.neanias.eu
TRIPLE	Transforming Research through Innovative Practices for Linked interdisciplinary Exploration	10/2019	10/2023	cordis.europa.eu
FNS-Cloud	Food Nutrition Security Cloud	10/2019	09/2023	www.fns-cloud.eu
Blue-Cloud	Piloting innovative services for Marine Research & the Blue Economy	10/2019	09/2022	www.blue-cloud.org
EOSC-Synergy	European Open Science Cloud - Expanding Capacities by building Capabilities	09/2019	02/2022	www.eosc-synergy.eu
ExPaNDS	EOSC Photon and Neutron Data Services	09/2019	08/2022	expands.eu

Upcoming EOSC Calls

Upcoming EOSC Calls

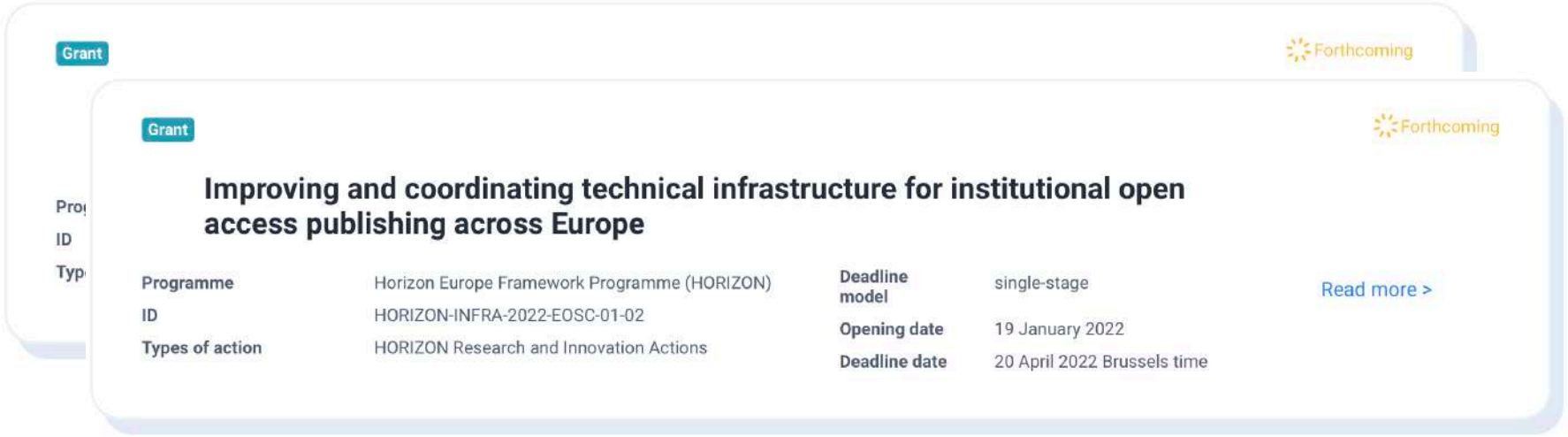
Grant

Forthcoming

Services and tools to underpin a research assessment system that incentivises open science practices

Programme	Horizon Europe Framework Programme (HORIZON)	**Deadline model**	single-stage	Read more >
ID	HORIZON-INFRA-2022-EOSC-01-01	**Opening date**	19 January 2022	
Types of action	HORIZON Research and Innovation Actions	**Deadline date**	20 April 2022 Brussels time	

Upcoming EOSC Calls



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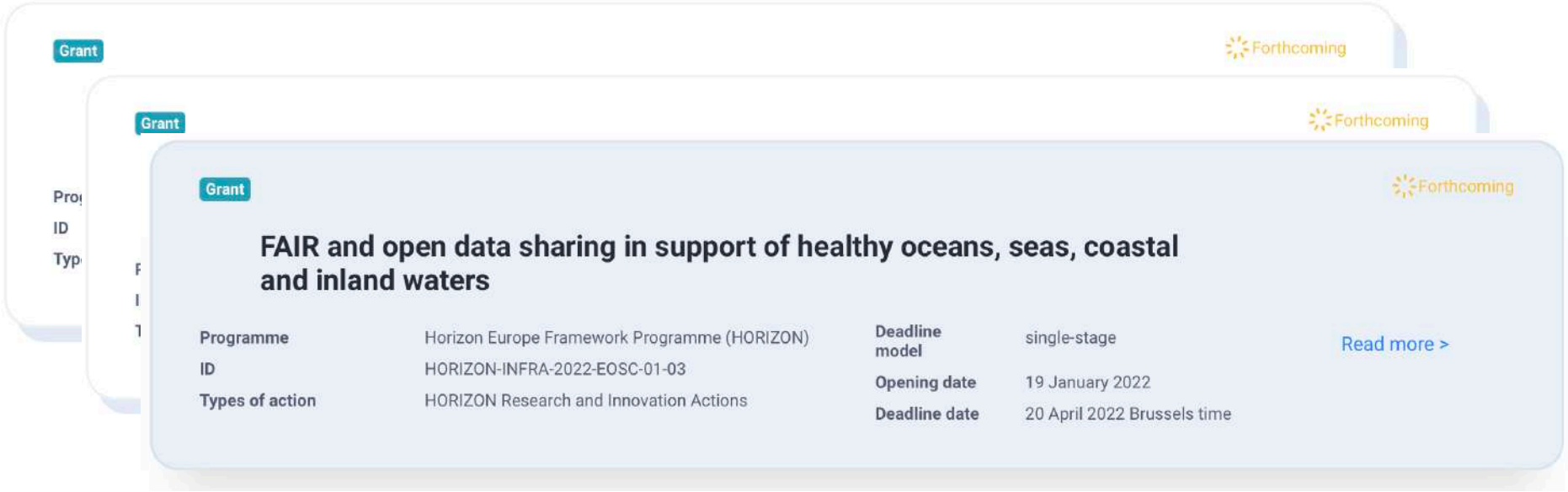

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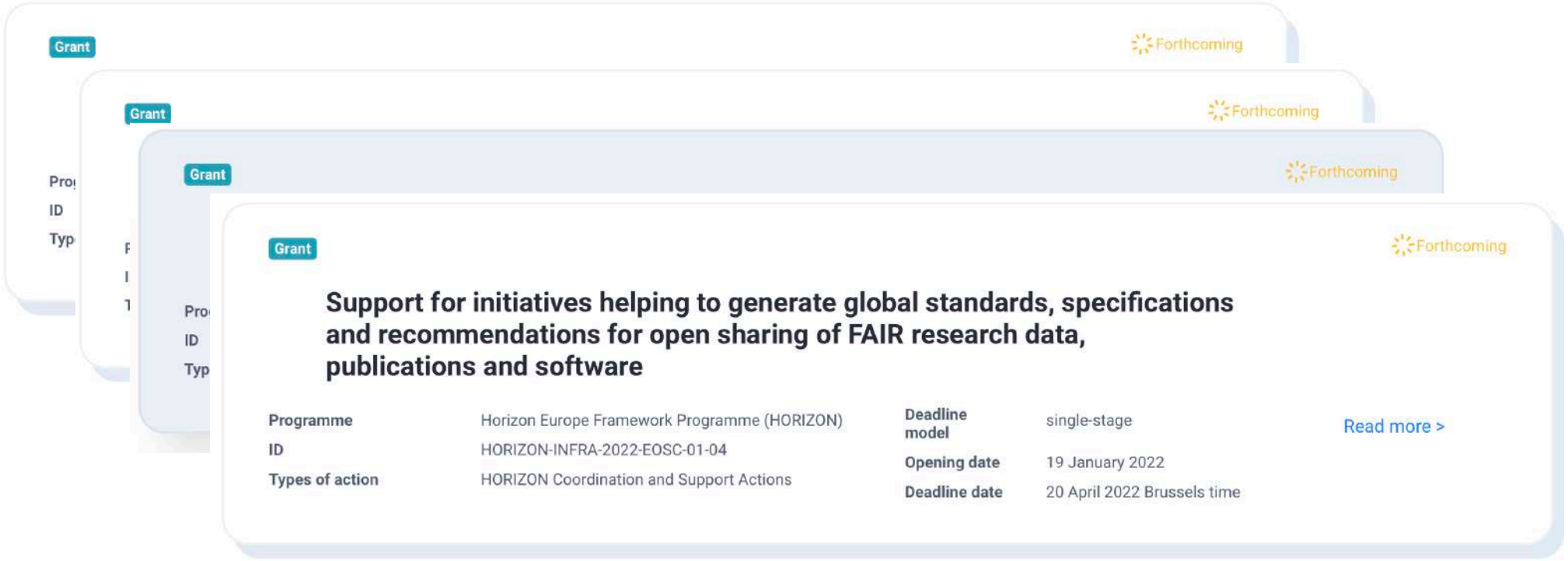


EOSC Future launches the first of its RDA Open Calls

- **Optimising (RDA) Open Science Frameworks and Guidelines in the context of EOSC**
- targets small projects to show implementation and uptake of RDA recommendations
- aims to support and encourage applicants that adopt existing recommendations and outputs to **promote examples and lessons learnt** within the broader EOSC community
- open to a wide variety of applicants
- criteria and conditions are detailed on the EOSC Future Grants Platform.

EOSC Portal

https://eosc-portal.eu/services-resources

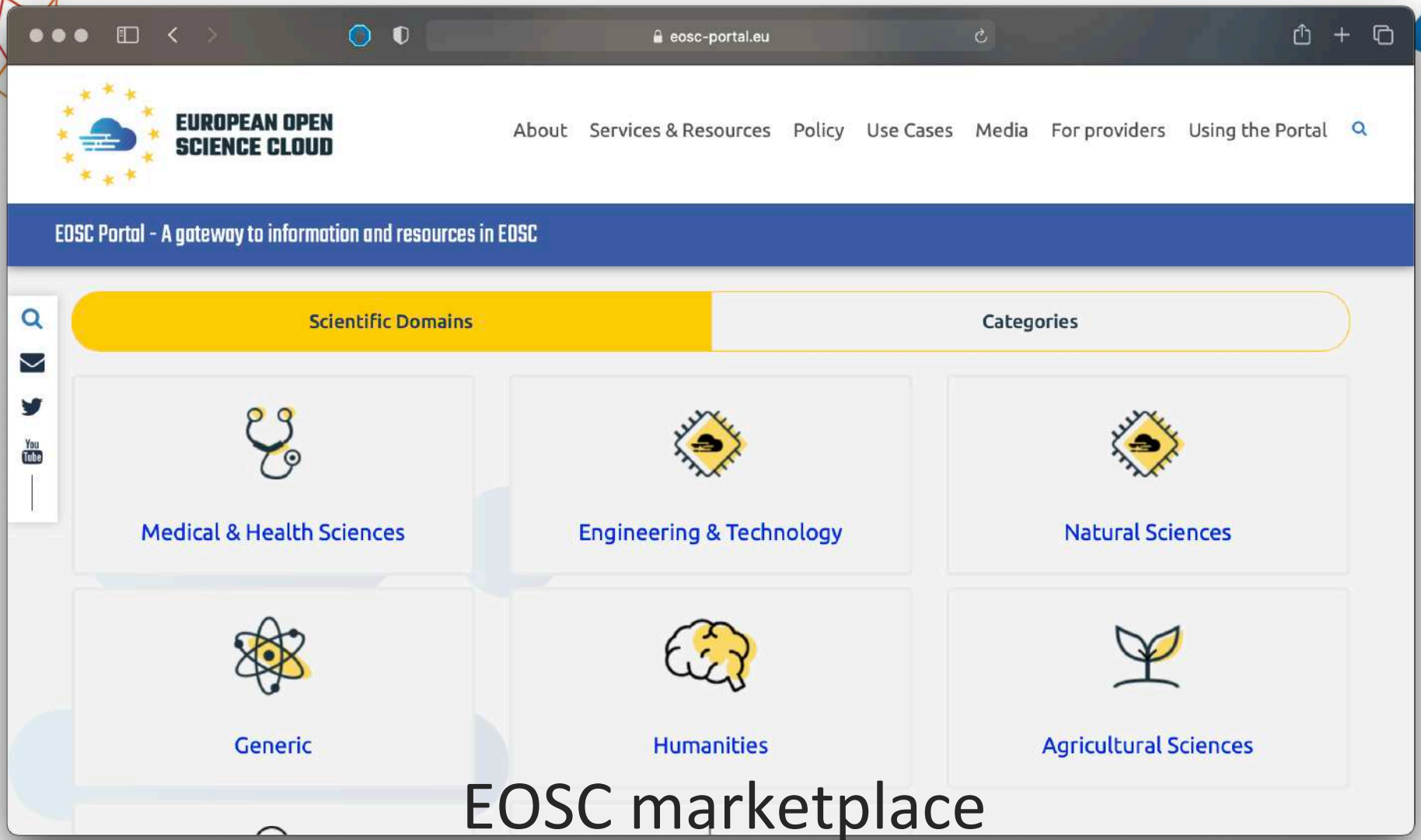
Access EOSC regional and thematic projects

Five regional EOSC-related Horizon 2020 projects, supported within INFRAEOSC-05-2018-2019, are collaborating on a wide range of topics, in order to enhance synergies in all mutual activities related to the EOSC. Specific areas for cooperation have been identified in order to develop a common strategy to synchronise activities within the wider EOSC ecosystem. Find out more about EOSC regional projects using the link below.

EOSC REGIONAL PROJECTS

The European Strategy Forum on Research Infrastructures (ESFRI) was established to shape collaboration in five thematic areas to pave the way for Open Access data for the EOSC. Through its cluster projects, supported by INFRAEOSC-04-2018, ESFRI steers the integration and consolidation of thematic e-infrastructure platforms in preparation for connecting them to EOSC. The ESFRI cluster projects implement interfaces to integrate computer and data management solutions to create cross-border, interdisciplinary and open cooperation spaces for European researchers. Find out more about ESFRI thematic cluster projects using the link below.

ESFRI THEMATIC CLUSTER PROJECTS

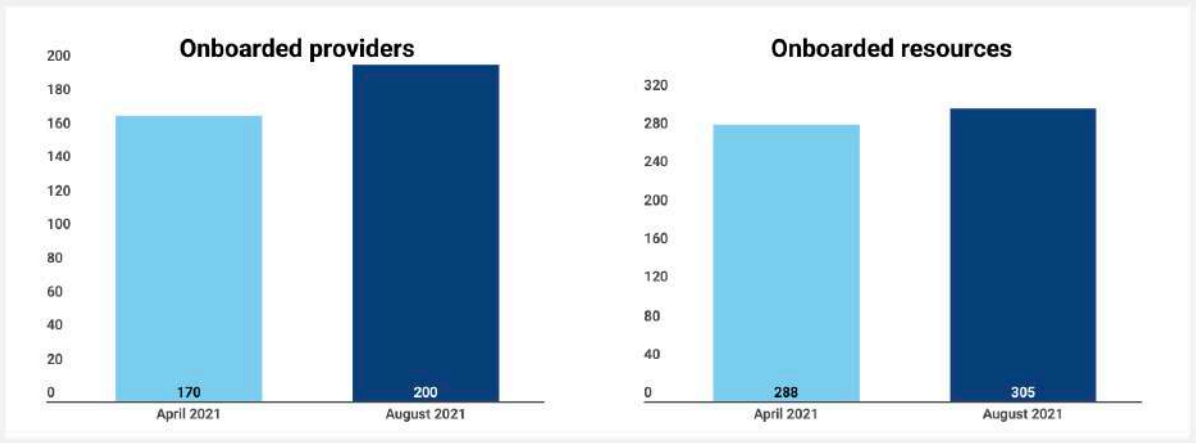


EOSC marketplace

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

Expanding the EOSC Portal

- EOSC Enhance completed the main part of its requirements gathering activity
- EOSC Future has started to set up its teams so as to allow the two projects to align and interact towards the final part of the year
  - EOSC Future is expected to take over all the tasks related to the development of the EOSC-Core and EOSC-Exchange



Integrating national and thematic catalogues into the EOSC Portal: the NI4OS-Europe pilot

2021 SEE User Forum

- 3-4 Nov. 2021: NRENs and researchers share their experience in Open Science
- Jointly hosted by GÉANT with NI4OS-Europe and EOSC Future projects
- Enabling regional service providers, NRENs and project partners to showcase services available to the regional research community and any end-user in the open science field, where connectivity and security are very important.
- The Programme is now available online
- Registration is open until the 2nd of November at 12.00pm CET
- Fully online and free of charge to all participants

EOSC is here to stay!

- EOSC aims at creating a virtual research environment to access and interoperate research data and other research outputs in Europe across the different disciplines.

Links & contact

- **Useful links:**
  - https://www.eosc-portal.eu/
  - https://marketplace.eosc-portal.eu/
  - SRIA - https://www.eosc.eu/sites/default/files/EOSC-SRIA-V1.0_15Feb2021.pdf
- **Get in touch with EOSC:**
  - https://www.eosc.eu
  - https://eosc-portal.eu/contact-us
  - info@eosc.eu
  - info@eoscsecretariat.eu
  - www.eoscsecretariat.eu
  - https://www.youtube.com/watch?v=3HgnIe1Xu8I

THANK YOU

Any Questions ?

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