Project's overview

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EOSC Winter School 2024

In response to the EU call on EOSC HORIZON-INFRA-2023-EOSC-01-01

- Building on the **Science Cluster approach**
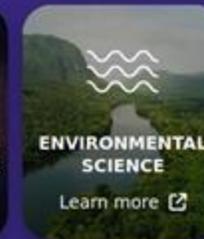- to ensure the **uptake of EOSC by research communities**

Partners

- Coordinator: Giovanni Lamanna (**CNRS**)
- **15** partners, **2-3** representing each Science Cluster community

Budget and timeline

- Starting date: **1 January 2024**
- Duration: **4 years**
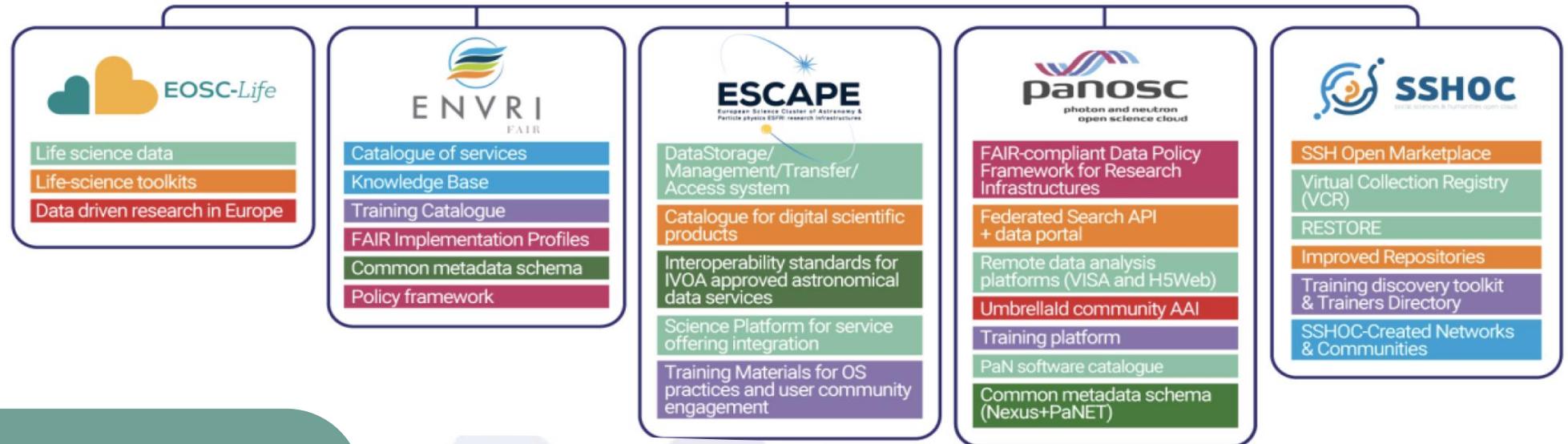- EC funding: **25 M€** (100%)

Research Infrastructures and Communities

The science clusters have grown out of five collaborative projects funded by the European Union in 2019 to link ESFRI and other world-class Research Infrastructures (RIs) to the European Open Science Cloud (EOSC). The services developed by the clusters and other outcomes of the projects are cornerstones of the emerging EOSC fabric and support both disciplinary communities and multidisciplinary initiatives with harmonised models for access to data, tools, workflows and training. Each cluster unites multiple RIs in their specific scientific domain.

ASTRONOMY AND PARTICLE PHYSICS | ENVIRONMENTAL SCIENCE | LIFE SCIENCE | PHOTON AND NEUTRON SCIENCE | SOCIAL SCIENCES AND HUMANITIES

Learn more

https://science-clusters.eu/

Science Clusters fostering the uptake of Open Science in Europe

OSCARS

EOSC-Life
- Life science data
- Life-science toolkits
- Data driven research in Europe

ENVRI FAIR
- Catalogue of services
- Knowledge Base
- Training Catalogue
- FAIR Implementation Profiles
- Common metadata schema
- Policy framework

ESCAPE
European Science Cluster of Astronomy & Particle physics ESFRI research infrastructures
- DataStorage/Management/Transfer/Access system
- Catalogue for digital scientific products
- Interoperability standards for IVOA approved astronomical data services
- Science Platform for service offering integration
- Training Materials for OS practices and user community engagement

panosc
photon and neutron open science cloud
- FAIR-compliant Data Policy Framework for Research Infrastructures
- Federated Search API + data portal
- Remote data analysis platforms (VISA and H5Web)
- UmbrellaId community AAI
- Training platform
- PaN software catalogue
- Common metadata schema (Nexus+PaNET)

SSHOC
- SSH Open Marketplace
- Virtual Collection Registry (VCR)
- RESTORE
- Improved Repositories
- Training discovery toolkit & Trainers Directory
- SSHOC-Created Networks & Communities

A) Consolidating achievements from the five H2020 INFRA-EOSC-2018-01-04 projects into **lasting interdisciplinary services and working practices** towards:

- More cohesion;
- Leveraging **cross-domain approach** and **cooperation with e-infrastructures**;
- **Cross-fertilization** for shared solutions of key services for researchers in all domains;
- Cooperating and supporting the **EOSC partnership**.

B) Leading and fostering the involvement of a broad range of research communities in EOSC via the development of new **Open Science projects** to drive the uptake of FAIR-data-intensive research throughout the ERA by:

- Contributing to a **data space for science, research and innovation**, integrated into the other data spaces described in the European Strategy for Data.

- Pursuing the creation of **pan-European research-enabling value-added services**;

- Fostering the **coordination** of national activities, European RIs and the scientific community at large, including the long tail of science;

- Fostering **interdisciplinarity** for achieving challenging new science pathways

OSCARS

- **Open Science practice**: increased scientific impacts via the support of Open Science projects;

- **Community-based Competence Centres (CCC)**, contributing to the sustainability of the Science Cluster actions, fostering their impacts, supporting and aligning operations of ESFRI and other RIs and involving the long tail of science.

- **Composable Open Data and Analysis Services (CODAS)** onboarded into the EOSC Exchange platform, fostering the alignments of practices in scientific data analysis and enhancing researchers' participation in Open Science.

- An **established inter-cluster web-based "scientific social network"** in Europe. Training, mentoring, cross-disciplinary events and cross-cluster developments.

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- **Operational Competence Centres**

- Uptake of **web-based highly composable platforms for Open Science data analysis**;

- **Stronger involvement of scientific communities in Open Science** and the shaping of EOSC;

- Enhancing and further structuring of the successful **cross-fertilisation** work built by the Science Clusters;

- **Economy of scale** of (cross-cluster) services;

- Enable a **largely participative research ecosystem**, promoting provenance tracking to research outputs and contributing to the evolution of research assessment methodologies.

OSCARS

GOAL:

Build on the science cluster approach to ensure the uptake of EOSC, i.e., consolidate FAIR services of the five Science Clusters and, more broadly, perform excellent science and pursue societal benefits by leveraging an Open Research approach.

TARGET USER COMMUNITIES:

Science Clusters and wider community (RIs, Universities, Institutes, either consortia, or individual researchers)

Submission process

- Opens: ~ **March 2024 / Nov. 2024**
- 10 pages max
- Submission within **60 days**
- Project start: **Sept-Dec. 2024 / Aug-Oct. 2025**

Limits

- Budget: **100 - 250 k€** / project
- Duration: **1 - 2 years**

Evaluation criteria for the independent expert panel

- Project description: clear objectives, towards **FAIR** and **open**
- Scientific impacts: **multiple RIs / cross-cluster**
- Digital resources: use of **EOSC** services / new **EOSC** service
- Implementation: **realistic** within budget

OSCARS

- 10 pages max
- Language: English

PROPOSAL STRUCTURE
- Proposal Title and Acronym
- Open Science/Data FAIRNESS challenge(s)
- Domain
- Consortium composition
- Duration and financial support
- Summary
- Project description
- Scientific impacts
- Digital resources
- Project Implementation, Budget Breakdown and Final Deliverables
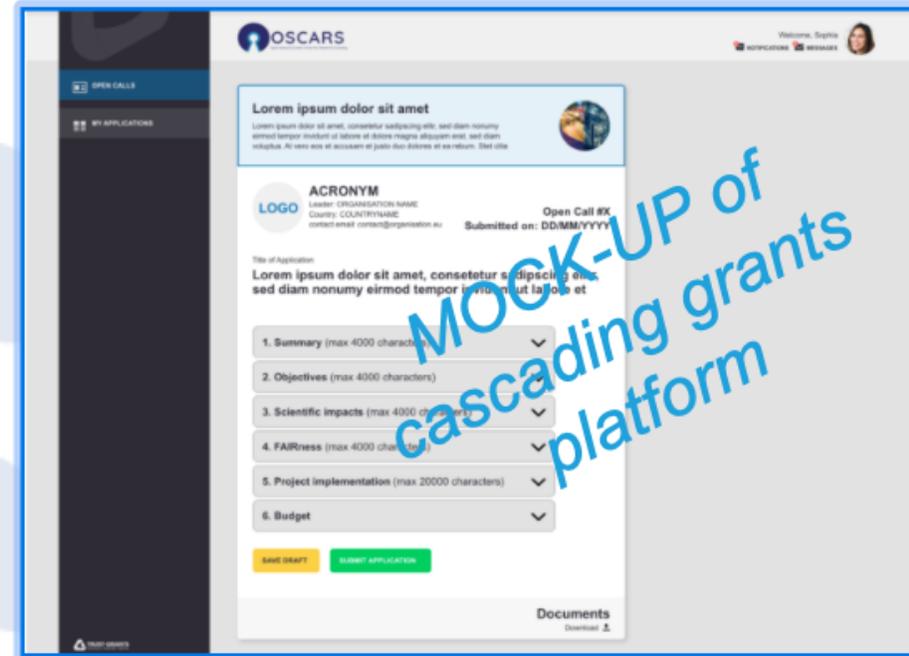
MOCK-UP of cascading grants platform

DELIVERABLES FOR PUBLIC DISSEMINATION:
- A final project summary in PDF format of maximum 5000 characters, including spaces.
- A presentation
- A "scientific journal or journal-type" article summarising the main project results and methodology used to achieve them.

OSCARS (EVERSE and others) to support the Science Cluster work plan within Horizon Europe
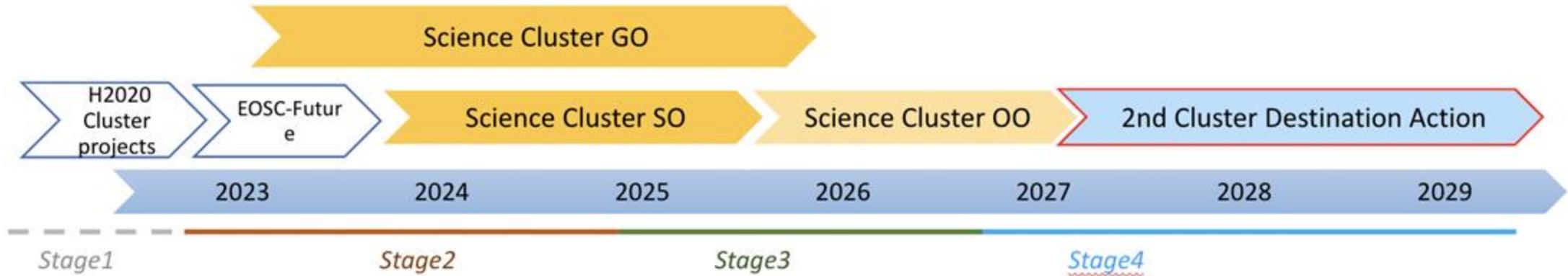
General Objectives (GO):

- Consolidation of thematic data infrastructures (cluster VREs, platforms and a "few core services") as parts of a federation.

Specific Objectives (SO):

- Relevant scientific results from clusters;
- Increased number of RIs;
- Enhance researchers uptake of OS and widening dimension.

Operational Objectives (OO):

- Sustainable operation of the deployed cluster as a "platform infrastructure" (e.g. CCC and VRI);
- Continuous promotion and hosting of inter-domain FAIR Science Projects.
- Domain-based (new RIs') challenges as well as new Open Science Objectives (a new cluster destination action).

- You will work in small groups, each group looking into one of the topics listed below
- Groups have a mixture of people from different projects and task forces
- Chose a rapporteur
- Discussions should be lead by questions & comments from non-OSCARS participants
- There are facilitators around to support the process
- Slides have been prepared for the reporting back
- If questions pop-up during the group work: ask Anca, Romain or Friederike or any other of the OSCARS members

Zeus A Hall
7th Floor
14:00-15:00

Topics:
1.Establishment and Role of Cluster-specific (=thematic) Competence Centres (WP1)
2.Development and Utilisation of Virtual Research Environments (VREs) (WP2)
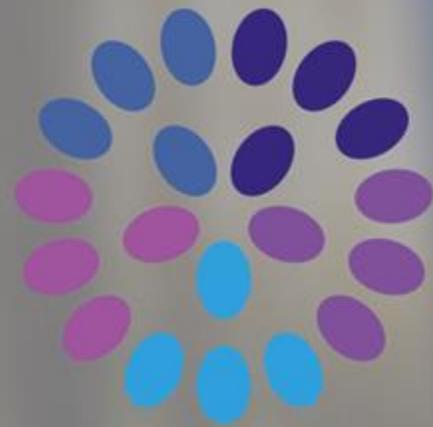3.Organisation and Impact of Open Calls for Research Projects (WP4)

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Input from the wider community to help shape the work in OSCARS and set the tasks for the first 6-12 months:

1.What are the actual needs?
2.What are the challenges?
3.Are there possibly some easy wins?

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