INFRA-EOSC-01-01: OSCARS proposal

Horizon Europe call to consolidate ExPaNDS and PaNOSC actions

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HELMHOLTZ

DESY.

What are we talking about?

A future EU project on EOSC

- Building on the **science cluster approach**
- to ensure the **uptake of EOSC by research communities**

2-fold

- Consolidation: 7 M€
- Open calls: 18 M€

Timeline

- Proposal submission: 2023-03-09
- Starting date: 2024-01-01

All science clusters together

➜ Astronomy and HEP
➜ Photon and Neutron
➜ Life science
➜ Environment
➜ Social science and humanities

Strategic European research infrastructures shaping the EOSC.

All science clusters together

Clusters working towards FAIR in Horizon 2020

PaNOSC (photon and neutron)
Start date: 1 December 2018 — 12M€ (ESRF) — End date: 30 November 2022 + 6M€ (DESY)

SSHOC (social sciences & humanities open cloud)
Start date: 1 January 2019 — 14M€ (CESSDA) — End date: 30 April 2022

ENVRI FAIR
Start date: 1 January 2019 — 19M€ (FZJ) — End date: 30 June 2023

ESCAPE (European Science Cluster of Astronomy & Particle physics ESFRI research infrastructures)
Start date: 1 February 2019 — 16M€ (CNRS-LAPP) — End date: 31 January 2023

EOSC-Life
Start date: 1 March 2019 — 26M€ (EMBL) — End date: 31 August 2023

ExPaNDS
European Open Science Cloud Photon and Neutron Data Services

Consolidating the science cluster approach

Intra and cross-cluster opportunities

Data management

Data curation

Open science workflows

…

Category	EOSC-Life	ENVRI-FAIR	ESCAPE	PaNOSC	SSHOC
AAI	LS-AAI		IAM & existing X509 infrastructure	UmbrellaId	AARC BPA implementations
Data Repositories	Covid portal FAIRsharing catalog	Certified data centers at RI level ENVRI-Hub	HEP Open Data Portal Virtual observatory Software catalogues	ICAT + Scicat Federated search, Human Organ Atlas Software catalogue,	> 40 certified data centres (CTS)
Metadata standards	Fairsharing.org Bioschemas.org	DCAT-AP	FITS	Nexus/HDF5	CMDI, DDI
Data transfer	Globus, http, rsync	https	FTS (http, gridftp), EUDAT solutions	Globus, http, rsync	http, smtp
Training platforms	TESS	ENVRI Training Catalogue	Summer schools, training material in OSSR	Moodle + TESS	SSH Training Toolkit
Tools used / developed	DS-Wizard Galaxy WorkflowHub.eu	FIP, KB, ENVRI-Hub, Jupyter, VRE	Data Lake, OSSR, VO tools, VRE, Jupyter, etc. Citizen Science platforms	DS-Wizard, Jupyter, H5Web, VISA, VINYL,	SSH Open Marketplace; Virtual Collection Registry; Jupyter

Open calls for the wider community

Ensuring the uptake of EOSC by research communities

How to be inclusive and manageable

- 2-3 partners per cluster only

- 18 M€ for open calls

- ~100 projects
  - €100,000 to €250,000
  - 12 to 24 months

- Cross-disciplinary use cases whenever possible

- User-oriented EOSC, reaching out to the long tail of science

⅙ for PaN
➔ ~20 projects
➔ Chance to consolidate and widen what was done in ExPaNDS and PaNOSC
➔ Chance to benefit from other clusters experience
➔ Chance to onboard universities and RIs which weren't in ExPaNDS

The PaN cluster in OSCARS

What DESY and ESRF will do

Representing the PaN community

- ESRF as PaNOSC coordinator
- DESY as ExPaNDS coordinator

are the PaN partners in OSCARS.

Consolidation activity

- organising the "competence centre" around FAIR practices in PaN for the community via LEAPS/LENS
- representing PaN in cross-cluster collaborations and strategy developments
- further developing FAIR data management in PaN
    - open data portal
    - VISA
    - PaN data lake

Open calls

- Advertising the calls in PaN
- Mentoring potential applicants
    - FAIR know-how and PaN toolkit
    - identify potential cross-cluster partners ("match-making")
    - link to EOSC services
- Mentoring funded projects
    - Resources (computing, storage)
    - Maximising impact

The PaN cluster in OSCARS

What the PaN community will do

Applying to the open calls

- 2 calls: one in spring 2024, one in early 2025
- demonstrate the use of EOSC (i.e. ExPaNDS/PaNOSC) services
- bring new data sources or services to EOSC
- enhance the involvement of researchers in open science

Being a reviewer for PaN

- Independent Evaluation Committee composed of:
    - top-level researchers from the domain of the five science clusters,
    - specialists from potential new user-communities,
    - FAIR-data ambassadors.
- Evaluation of the applications to the open calls

The PaN cluster in OSCARS

Possible open call projects

- ML training on PaN open data
- Workflowhub.eu for PaN
- Wayforlight in EOSC, adding the missing PID between ROR and instrument PID
- PaNET continuation…
- Handling authorisation across services, to ease composability
- Provide diagnosis information on carbon footprint of data, to encourage reuse
- Ukraine's research reconstruction
- *Any other idea?*

- Develop a curriculum / learning path in the PaN training platform
- Workshop series on active DMPs uptake in PaN or beyond
- Working with publishers on citing data DOIs

Thank you

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