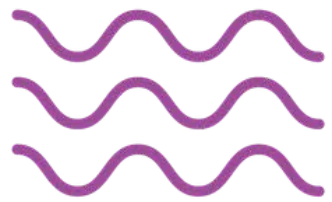


Science Clusters' Hubs & Nodes



ENVRI
Environmental Sciences



Strong community of **27 environmental RIs** with long-standing commitment to Open Science – across atmospheric, marine, ecosystem, and solid Earth domains.

ENVRI Hub acts as the sustainable collaboration platform and exposure layer for FAIR environmental services within EOSC.

Service & Data Catalogues, Training Portal + Knowledge Base for onboarding, capacity-building, and cross-domain discoverability.

Environmental AI Expert – LLM-powered assistant to help researchers find relevant services and project outputs.

Virtual Research Environments embed notebooks and workflows, so outputs are visible and immediately usable.

ENVRI Hub acting as EOSC
thematic node



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ESCAPE
Astronomy, Nuclear and Particle
Physics

Science Clusters' Hubs & Nodes



Major RIs in astronomy & particle physics – CERN operates a thematic EOSC node ensuring federation alignment

ESCAPE OSSR (Zenodo-based) – open repository for FAIR software, datasets, publications, and digital libraries

Virtual Research Environment (**VRE**) at **CERN**: federated AAI, Data Lake (Rucio), REANA compute, CVMFS, JupyterHub

Virtual Observatory working group enables access to large astronomy catalogues via interoperability frameworks

Competence Centre supports OSCARS projects on FAIR software, containerisation, and reproducible open science

CERN as thematic EOSC Node
ESCAPE CCC for support on
FAIR data and Open Science



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Science Clusters' Hubs & Nodes

LS RI
Life Sciences



Life Science Connect EOSC Node — FAIR integration of omics & imaging data, federated AAI, Galaxy/Jupyter workflows.

BBMRI EOSC Node — GDPR-compliant federated access to biosamples, genomics & clinical data across 500+ biobanks in 25 countries.

European Health Data Space (EHDS) aligned — building secure, AI-ready ecosystems for sensitive biomedical data.

Fragalysis Cloud example — drug discovery data integrated into FAIR, standardised platforms within EOSC.

Shifting from project-based funding to sustainable service uptake across the health and food domains.

2 EOSC Nodes:
Life Science Connect · BBMRI



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Science Clusters' Hubs & Nodes



PaNOSC
Photon and Neutron Science



First-wave EOSC Federation node (2025) — 11 partner photon & neutron facilities, 19 registered services.

VISA VRE — browser-based graphical desktop & Jupyter environments for advanced data visualisation and analysis

PaN-Finder — AI-driven discovery across open (meta)data at photon and neutron facilities using generative AI.

PaN Training Platform — skills development and community building for Open Science in PaN research and beyond.

Welcoming new services with clear onboarding criteria: FAIR principles, TRL7 maturity, EOSC AAI compliance, GDPR alignment.

**OSCARS funded projects
PaN-Finder & m-TeSS-X are
already part of the PaNOSC
Node portfolio of services**



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Science Clusters' Hubs & Nodes



SSHOC
Social Sciences and Humanities



7 ERICs and 4 ESFRI Projects in the Governing Board + 9
Member of the Cluster Assembly (20 partners with signed MoUs)

SSHOC Marketplace — service catalogue being realigned for
future EOSC federation integration.

All SSH | OSCARS-funded projects show **strong onboarding
potential** via their "mother" RIs, the Marketplace, or directly into
EOSC.

Distributed node strategy in SSH — CLARIN/DARIAH
(governance arm via EOSC Mesh), OPERAS (scholarly comms),
CESSDA (technical arm - EOSC Beyond pilot node).

**Potentially different thematic nodes in SSH under the SSHOC
label expected 2027–2029**, covering social sciences,
humanities and potentially scholarly communication.

**Multiple EOSC Nodes in
2027–2029 Roadmap**



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