

OSCARS Open Calls for Open Science Projects and Services through a cascading grant mechanism

The Horizon Europe OSCARS project¹ brings together European Research Infrastructures (RIs) organised into five "Science Clusters" along the ESFRI thematic research domains². Together with their broader scientific communities, the RIs of the Science Clusters in the OSCARS project have two main objectives:

- (A)** consolidating achievements from the five H2020 INFRA-EOSC-2018-01-04 projects into lasting interdisciplinary services and working practices;
- (B)** leading and fostering the involvement of a broad range of research communities in EOSC via the development of new Open Science projects, that together will drive the uptake of FAIR-data-intensive research throughout the European Research Area (ERA).

The OSCARS project goes beyond the state-of-the art and strengthens the role of the Science Clusters in the ERA.

- OSCARS leverages the H2020 Science Cluster projects' achievements – including the results and the current work in progress within the EOSC Future project – and provides the opportunity for inter-cluster cross-adoption and co-development of services that will be part of the EOSC Exchange portfolio.
- The OSCARS consortium will develop further, and aims at deploying, or fostering adoption of: (i) a FAIR-compliant certification scheme for research data; (ii) community-based science platforms embedded in the EOSC portal, providing access to a range of services, data sources, guidelines and training; (iii) provision of highly composable research-enabling services, data processing and management solutions.
- Through OSCARS the five Science Clusters will deploy the concept of Community-based Competence Centres (CCC), study their organisational and sustainability models. Each Science Cluster establishes a specific domain-oriented CCC by leveraging its own specific achievements and competences, addressing its scientific community's culture and needs. Simultaneously, the CCC implementation objectives encourage and strengthen intra-cluster collaboration, sharing of best practices and strategy development.
- The Science Clusters will foster open science projects, which can be proposed by any researcher or group of researchers, through the cascading grant mechanism.

In the following, the guidelines of the OSCARS open calls for open science projects and/or services through a cascading grant mechanism are explained.

¹ OSCARS is the project in response to the call HORIZON-INFRA-2023-EOSC-01-01 — Build on the science cluster approach to ensure the uptake of EOSC by research infrastructures and research communities.

² The science cluster projects result from the H2020 topic call INFRAEOSC-04-2018: "Connecting ESFRI infrastructures through Cluster projects": ENVRI-FAIR (grant 824068), EOSC-LIFE (grant 824087), ESCAPE (grant 824064), PANOSC (grant 823852), SSHOC (823782).

PROPOSALS' DRAFT GUIDELINES

Open Calls' 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.

Total funding: ~€16.4 million EUR

Funding per project: Between €100,000 to €250,000 (lump sum).

Potential maximum of funded projects: 162

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

Open calls launch: 1st call – March 2024; 2nd call – November 2024. Both calls will stay open for 60 days.

Time for projects' implementation: 12-to-24 months (after signature of a Third-Party Project Agreement – TPPA)

Start of the projects: Within 4 months from TPPA signature (to give organisations time to hire staff if needed)

Selection of proposals to be funded (max. 60 days)

To eliminate any conflict of interest and maintain confidentiality, OSCARS consortium members and affiliated entities will not be involved in the selection procedure of the proposals.

Proposals will be evaluated by an Independent Evaluation Committee – IEC, which will be composed of top scientists, experts in FAIR data science and top representatives of the European research communities. After an initial eligibility assessment, the IEC will evaluate the submitted proposals, create a ranked list and specify which projects should be funded (maximum two months after the Open Call is closed).

The IEC's ranking list and funding recommendation will be forwarded to the Project Management Board – PMB, who will verify and confirm that the evaluation process has been carried out in full transparency and in accordance with EC rules.

Funding is then provided after successful conclusion of a Third-Party Project Agreement.

Project monitoring

The consortia will request a periodic "formal communication" via the OSCARS Grants Platform (area reserved to proposing Organisations) and monitoring of progress will be performed by the Consortium.

End of project

Two months after the end of the funded projects, each project will be asked to present its results and an "Open Science direct or indirect impact assessment" in a document. They will also need to present their outcomes at the Final OSCARS Assessment Conference at M46, to enable the EC, scientific communities, as well as the EOSC Association, to discover and select high impact projects, or projects with a high potential for further upscaling, or for inspiring new paths.

Proposals' guidelines

- **Length:** max 10 pages, to be submitted online via a web-form on the OSCARS website
- **Language of the proposal:** English

Proposals' structure

- **Proposal Title and Acronym**
- **Open Science/Data FAIRNESS challenge(s):** Open science project / open science service / industry cooperation / citizen science / main RI concerned / cross-domain / cross-RI / cross-domain / other (specify)
- **Domain:** 1. Astrophysics, cosmology, particle or nuclear physics, 2. Social sciences and humanities, 3. Photon/neutron sources-based experimental research, 4. Life sciences, 5. Earth and environmental sciences, 6. Other (specify)

- **Consortium composition:** Coordinator and partners (organisation name, short name and PIC number, organisation type, contact person name and email).
- **Duration and Financial support:** Number of PMs requested, personnel costs requested, other costs (consumables, travel), total.
- **Project Public Summary** (max. 5000 characters incl. spaces): It should contain the main objectives, as well as a brief explanation of the breakthrough character of the project as compared to the state of the art.

- **Project description** (max. 4000 characters incl. spaces): Scientific and innovation objectives. Where applicable, specify whether the proposed Open Science project and/or service will leverage, or expect to integrate, the services and the Open Science environments built by the Science Clusters³, for a specific ESFRI or another RI. Explain if the project is in support of scientific objectives or implementation plans of an ESFRI or other world-class RI (in that case, provide an acknowledgement / endorsement from the management of the concerned RI).

Describe also how the envisioned results could benefit the scientific community at large, European society and/or the European Research Area. Explain which questions of high societal relevance and/or excellence research will be addressed or facilitated by it.

Evaluation questions:

1. Is the “FAIRness” or “openness” character of the proposed scientific project or service adequately and clearly explained?
2. Are the project proposal aims and objectives adequately and clearly defined and explained?
3. Is the contribution to or the leverage of the Science Cluster work programme clearly explained?
4. Is the relevance to ESFRI and other RIs of the proposed scientific project or service adequately addressed?

- **Scientific impacts** (max. 4000 characters incl. spaces): Describe how the project objectives will extend the scientific knowledge in the concerned domain compared to the current situation. Explain how the project engages or would potentially engage, thanks to its results, with a large scientific community or multiple research communities (academic and industry, as well as citizen scientists and the “long-tail” of science). If applicable explain the capacity to support an ESFRI RI and/or extend beyond the RI communities involved in the H2020 science clusters.

Evaluation questions:

1. Is the scientific project and/or the service development proposed clearly going beyond the state of the art?
2. Is the potential large scientific impact adequately explained?
3. Is the expected impact of the proposed project on an ESFRI RI or on multiple RIs, or its capacity to engage through the Science Clusters with multiple RIs clearly illustrated?

- **Digital resources** (max. 4000 characters incl. spaces): Describe how the project pilots the use of data and services already on-boarded to the Science Clusters Open Science platforms and/or to the EOSC platform and/or bring new research digital objects and RI services to the EOSC Exchange. Illustrate, if applicable, the technological innovation potential of the proposed project and the capacity to strengthen the multi-

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domain/multi-competences cross-fertilization and/or training. Describe in detail the expected needs in terms of computing resources.

Evaluation questions:

1. Is the proposed project adequately referencing the Science Clusters' platforms?
2. Are the digital resources required, and/or the connection to EOSC services envisaged, clearly identified?

- **Project Implementation, Budget Breakdown and Final Deliverables** (max. 20000 characters incl. spaces): Describe how the project will be implemented (steps) within the course of its duration. Also provide an indicative budget breakdown (personnel costs, travel, equipment, other...) for the requested funding. Include a table of expected results at mid-term and at the end of the project. Please pay special attention to include deliverables that guarantee a sufficient open dissemination of the project results, as well as ensure that the project will contribute to accelerate the uptake of RI and EOSC resources (data, services, policies, interoperability framework, etc.).

All digital research data generated by the project will be deposited in a trusted repository federated in the EOSC in compliance with EOSC requirements.

The applicants must commit to provide, for public dissemination, at the OSCARS final (or dedicated) event in Brussels the following deliverables:

- 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.

Evaluation questions:

1. Are the project implementation steps concrete and well explained?
2. Are the anticipated results achievable with the implementation steps put in place and in the suggested timeframe?
3. Does the budget breakdown correspond to the presented implementation steps and is it reasonable?
4. Does the proposal adequately commit to EOSC compliance and openness of its results?