



MINISTÈRE CHARGÉ DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

Liberté

Égalité

Fraternité

Direction Générale de la Recherche et de l'Innovation (DGRI)
Service de la Stratégie de la Recherche et de l'Innovation (SSRI)
Département Services et Infrastructures Numériques (A7)



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Recherche et de l'Innovation

EUROPEAN OPEN SCIENCE CLOUD (EOSC) HORIZON-INFRA-2025-EOSC-01



[Volker Beckmann](#), chargé de mission EOSC au DGRI / SSRI / A7

Le programme IR d'Horizon Europe

Dans le contexte du programme-cadre Horizon Europe (FP 9), la Commission soutient les infrastructures de recherche par le biais de plusieurs *destinations* :

- INFRADEV : Consolidation and evolution of the European Research Infrastructure Landscape
- INFRAEOSC : Enabling an operational, open and FAIR EOSC ecosystem
- INFRASERV : Research infrastructures services to support health research, accelerate the green transition and the digital transformation, and advance frontier knowledge
- INFRATECH : Next generation of scientific instrumentation, tools, methods, and advanced digital solutions of research infrastructures and foster innovation and co-creation with industry
- Other actions not subject to calls for proposals : grants to identified beneficiaries, public procurement (support for EOSC EU Node Service Verification and Validation activities), expert contract action

Destination INFRAEOSC

Impact attendu :

- Enable the definition of **standards**, and the development of **tools and services**, to allow researchers to find, access, reuse and combine results;
- Establish a sustainable and **federated infrastructure** enabling open sharing of scientific results;
- Ensure that Open Science **practices and skills** are rewarded and taught, becoming the norm across the European Research Area.

Conditions communes pour INFRA-EOSC

Each beneficiary must grant royalty-free access to its results to the **EOSC Association** for monitoring and developing policies and strategies for the European Open Science Cloud. Each beneficiary must also provide directly to the EOSC Association the information the beneficiary deems necessary for monitoring and developing policies and strategies for the EOSC.

Each beneficiary must grant **royalty-free access to its intellectual property rights** which are part of the results and are needed for further developing the EOSC to legal entities identified by the granting authority and established in Member States or countries associated to the Horizon Europe Framework Programme. Such access rights are limited to non-commercial use.

Horizon Europe INFRA Work Programme 2025

Opening: 15 May 2025; Deadline: 18 September 2025

Topic HORIZON- INFRA-2025-01-...	Title	Type	Budget total [M€]	#projets
EOSC-01	EOSC Nodes with federating capabilities for the EOSC Federation	RIA	30	4
EOSC-02	Synergies and interplay of EOSC with Common European Data Spaces	RIA	10	1
EOSC-02	FAIR Integration for Enhanced Research Data in the EOSC ecosystem and beyond	RIA	16	2
EOSC-03	Advancing AI-readiness and Machine-Actionability in the EOSC Ecosystem	RIA	15	2
EOSC-04	Data stewards, skills and training for Open Science and FAIR practices	CSA	8	1
EOSC-05	Using Generative AI (GenAI4EU) for Scientific Research via EOSC	RIA	37.5	4
2025-EOSC-01			106.5	13

Horizon Europe INFRA-EOSC 2025

Topic HORIZON-INFRA-2025-01-...	Description non exhaustive
EOSC-01 RIA 30 M€ 4 projets prévu Lien direct vers cet appel sur le portail de l'UE	EOSC Nodes with federating capabilities for the EOSC Federation • Focus is on developing and expanding the EOSC federation through a network of nodes as key elements of the federation model. • They need to have a clearly described identity and offer unique value to EOSC users, for example representing a specific thematic domain (e.g. data or computing) or geographical area amongst the Horizon Europe participating and associated countries • Beneficiaries may provide financial support to third parties (FSTP). The support to third parties can only be provided in the form of grants (with up to 60 k€ per each third party) The call aims to further develop the cross-domain EOSC system of systems, building upon the results of the previous INFRAEOSC calls. The focus is on developing and expanding the EOSC federation through a network of nodes as key elements of the federation model. These EOSC nodes will establish a set of essential federating capabilities, compatible with the EOSC EU Node reference architecture, following the EOSC Federation Handbook and EOSC interoperability framework. They should have a clearly described identity and offer unique value to EOSC users, for example representing a specific thematic domain (e.g. data or computing) or geographical area amongst the Horizon Europe participating and associated countries.

Horizon Europe INFRA-EOSC 2025

Topic HORIZON-INFRA-2025-01-...	EOSC Nodes with federating capabilities for the EOSC Federation Description non exhaustive (2)
EOSC-01 RIA 30 M€ 4 projets prévu	The proposals shall focus on all following aspects : • Satisfy the minimal node requirements as defined by the EOSC tripartite governance: • Compliance with the requirements on the legal status of the organisation • Compliance with the requirements aiming at large-scale, quality service provisioning • Capacity to onboard third-party services • Capacity to contribute to and/or take-over the EOSC federating capabilities • Adoption and integration of the EOSC federation rules and policies [...] * • Support to effectively monitor and report the activities of the services provided • Integrate and offer EOSC core federating capabilities pioneered by the EOSC EU Node • Contribute to a robust and coordinated strategy for evolving and sustaining the federated governance model for EOSC by fostering effective collaboration and coordination among the other node operators offering federating capabilities. • Enrich the existing guidelines and best practices for the onboarding and enrolment processes. • Designate and train the EOSC node operators for high level of responsibilities within the EOSC Federation • Develop and run community engagement and support programmes around the EOSC node and the surrounding ecosystem.

Preliminary !

Horizon Europe INFRA-EOSC 2025

Topic	Description non exhaustive
HORIZON-INFRA-2025-01-...	
EOSC-02	Synergies and interplay of EOSC with Common European Data Spaces
RIA	EOSC stakeholders can systematically investigate and understand the architecture, capabilities and software elements of Simpl-Open to propose mapping of EOSC Interoperability Framework elements and particular software/protocol candidates for Simpl-Open from the EOSC data space. By enhancing content integration from data spaces, industry and beyond, EOSC will enable the reuse of science data in various sectors that will ease access to real-life data from other data spaces
10 M€	
1 projet prévu	

Cet appel a été reporté !

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic HORIZON-INFRA-2025-01-...	Description non exhaustive
EOSC-02 RIA 16 M€ 2 projets prévu Lien direct vers cet appel sur le portail de l'UE	FAIR Integration for Enhanced Research Data in the EOSC ecosystem and beyond • Improved FAIRness of research data and other digital research outputs • Wider uptake of and compliance with FAIR principles, operationalisation of the FAIR concept • Enhanced and mainstreamed technical specifications for FAIR digital objects Scope: The scope of this call topic is centred on advancing the interoperability and integration of research data within EOSC The proposals shall focus on all following aspects : • FAIR-by-Design digital objects creation, • Automated standardisation and data quality assessment, • Operational data services specification, • Interoperability and training to promote the uptake for open standards, • Collaboration and alignment with Common European Data Spaces, • Interoperability demonstration and content integration, • Cross-Sector data utilization Expected synergies/partners: EOSC Beyond, INFRA-EOSC-2025-01-EOSC-01, Build upon results from: FAIR-IMPACT, FAIRCORE4EOSC

HORIZON-INFRA-2025-01-EOSC-02 : Scope

- FAIR-by-Design digital objects creation: the development of tools that enable the creation of digital objects adhering to the FAIR (Findable, Accessible, Interoperable, Reusable) principles both from the “source” or as a result of an analysis.
- Automated standardisation and data quality assessment: development and provision of automated tools and procedures for standardisation and data quality assessment. This will ensure that data across different domains adhere to common standards, fostering greater compatibility and enhancing overall data quality.
- Operational data services specification: delivering technical specifications for operational data services that support the transformation of digital objects into FAIR entities. Such services may include the integration of AI-based tools capable of autonomously operating on data repositories, contributing to the automatic establishment of FAIR practices throughout the research ecosystem.
- Interoperability and training to promote the uptake of open standards: the action should make substantial contributions to the development, upkeep and widespread adoption of open standards for metadata, formats, vocabularies, semantics and APIs. Activities should foster compatibility among digital objects across different domains, facilitating seamless data exchange and integration. Training and dissemination activities will facilitate the uptake of these standards, fostering collaboration and compatibility.
- Collaboration and alignment with Common European Data Spaces: harmonisation of EOSC technical specifications with those of other [Common European Data Spaces](#).
- Interoperability demonstration and content integration: demonstrating the tangible outcomes of applying FAIR tools, standards, and specifications will showcase the achieved interoperability and integration, strengthening the case for data sharing and reuse across disciplines and sectors.
- Cross-Sector data utilization: by enhancing content integration from data spaces, industry, and beyond, the reuse of science data in various sectors is to be encouraged. This will ease access to real-life data from other data spaces, fostering its utilization in research and expanding its impact

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic	Description non exhaustive
HORIZON-INFRA-2025-01-...	
EOSC-03	Advancing AI-readiness and Machine-Actionability in the EOSC Ecosystem
RIA	Scope: Today, the sustainable FAIRification of data can be a bottleneck towards the goal of a European web of FAIR data and services. The use of AI/ML can significantly help in the process of FAIRification, data curation and data quality assurance, close to the source of the data.
15 M€	
2 projets prévu	Grants awarded under this topic will be linked, through collaboration agreements, to the grants from following action: HORIZON-INFRA-2025-01-EOSC-05
Lien direct vers cet appel sur le portail de l'UE	<u>Expected Outcome</u> : Project results are expected to contribute to the following outcomes: • EOSC will be advancing AI-readiness and Machine-Actionability (MA) in the ecosystem by offering AI-ready federated infrastructure and easy-to-use platform services for EOSC, in order to respond to one of the main challenges of research infrastructures for AI in science, namely the lack of interoperability between AI/ML solutions. • EOSC will focus on integrating machine-actionable repositories within the ecosystem and demonstrating their reliability and effectiveness by collaborating with repository owners and service providers to implement MA tools/protocols, ensuring seamless integration in the EOSC EU Node.

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic HORIZON-INFRA-2025-01-...	Advancing AI-readiness and Machine-Actionability in the EOSC Ecosystem Description non exhaustive (2)
EOSC-03 RIA 15 M€ 2 projets prévu	The proposals shall focus on all following aspects: • Develop and prototype tools to drive machine-actionability in repositories, data, and services, establishing a network of trusted repositories linked to the EOSC EU Node • formulate open protocols and policies to facilitate effortless data access, transfer, processing, and provenance updates within EOSC's repository and service network • deliver AI-based capabilities to make interoperable AI/ML solutions and facilitate the setup of custom workflows for research data processing; • offer tools/services for automatic quality measures of inputs and outputs of the AI/ML models. • Provide federated infrastructure services for serving AI models integrating horizontal and thematic EOSC nodes • ensure capacities for AI model retraining and inference; • take into account the whole research data life cycle, including raw data retention before AI modelling. • Provide access to an easy-to-use technology platform offering reference implementations and recipes to quickly get started working with AI/ML with limited engineering overhead • promote and apply state-of-the-art AI/ML operational best practices; • validate reference implementations and share commonly used recipes within EOSC.

Horizon Europe INFRA-EOSC 2025

Topic HORIZON-INFRA-2025-01-...	Advancing AI-readiness and Machine-Actionability in the EOSC Ecosystem Description non exhaustive (3)
EOSC-03 RIA 15 M€ 2 projets prévu	• Establish and/or provide access to existing AI/ML model repositories and services to serve models for retraining of generic models for specific needs for future predictions and reproducibility • create AI/ML model repository and enhance FAIRness of existing AI/ML models; • offer services for utilisation of these models, including fine-tuning and inference, thus providing the foundational building blocks for the development of AI applications in EOSC. • Establish an EOSC AI/ML competency centre for the pooling of expertise and coordinated support on AI/ML use of data, compute infrastructure and AI/ML models The proposers should take into account and leverage on the results of relevant projects in the field, including EOSC Data Commons, and the other initiatives and projects contributing to the development of EOSC, especially in the area of machine-actionability and data FAIRification.

Preliminary !

Horizon Europe INFRA-EOSC 2025

Topic HORIZON-INFRA-2025-01-...	Description non exhaustive
EOSC-04 CSA 8 M€ 1 projet prévu Lien direct vers cet appel sur le portail de l'UE	Data stewards, skills and training for Open Science and FAIR practices Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is 60 000 € <u>Scope</u>: The uptake of Open Science practices and of the EOSC requires dedicated, professional profiles for data curation and data management, as well as equipping researchers with adequate skills and supporting them for the sharing and re-use of FAIR research digital objects. However, at present, data stewards and related profiles lack well-defined career paths, and data sharing and other open science practices are not fully mainstreamed within the research community and are often not recognised in research assessment practices. The objective of this topic is to foster a stronger culture of Open Science and to address gaps related to the professionalisation of data stewards and to the acquisition and recognition of open science and data management skills at all career levels. This requires the identification of consistent core curricula for data stewards, together with the further development and coordination of competence centres at the European level.

Preliminary !

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic

HORIZON-INFRA-2025-01-...

Data stewards, skills and training for Open Science and FAIR practices
Description non exhaustive (2)

EOSC-04

[CSA](#)

8 M€

1 projet prévu

Expected Outcome:

- Definition of **consistent core curricula for data stewards** throughout Europe
- **Enhanced data steward skills**, enhancing their ability to manage and interpret complex data
- Advancement of **Open Science education** throughout all research career stages
- Expansion and strengthening of existing **competence networks** broadening their scope across countries and disciplines and improving their readiness to support the uptake of OS and of EOSC. Development of a sustainable coordination network model to support synergies and continued growth.
- Mainstreaming transparent, aligned, and interoperable Open Science practices and promoting efficiency and trustworthiness in the management of FAIR digital objects.

Proposals are expected to cover the following activities:

- Coordinating European-level actions to make data steward curricula management consistent
- Enhancing data steward and researcher curricula with Open Science and FAIR practices,
- Addressing diverse data steward levels, including support staff and researchers
- Collaborating with existing competence centres
- Leveraging national networks and related institutional initiatives for European-level coordination.
- Launching outreach programs targeting early-career researchers and less-structured communities.
- Offering support to countries and institutions that are underrepresented

Take account results of [Skills4EOSC](#) and [FAIR-IMPACT](#), align with [CoARA](#), [EOSC Partnership](#) / [EOSC Federation](#)

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic

HORIZON-INFRA-2025-01-...

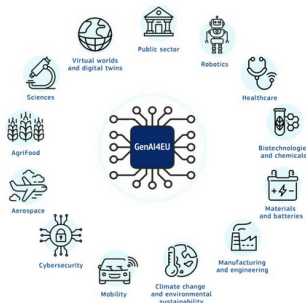
Using **Generative AI** (GenAI4EU) for Scientific Research via EOSC Description non exhaustive

EOSC-05

RIA

37.5 M€

4 projets prévu



[Lien direct vers
cet appel sur le
portail de l'UE](#)

Scope: Demonstrate and foster the use of Generative AI for Scientific Research, in line with [GenAI4EU](#) and other key EU initiatives, throughout the research data lifecycle supported by EOSC. Generative AI can be used for activities such as writing, data generation and analysis, reporting and many others, for **improving productivity**. This enables lifting science beyond the human scale by facilitating the **deployment and use of smart algorithms, machine learning and AI services** onto the Web of FAIR Data. The awareness and readiness of using Generative AI for scientific research must be raised by training activities.

AI-powered natural language interfaces can transform the way researchers interact with open science infrastructures, how they discover and combine relevant data, software and application assets. EOSC should evolve towards offering such capabilities in ways that ensure unbiased and trustworthy responses. This includes adopting **FAIR practices for AI-trained models** as well, to address challenges ranging from reproducibility to trustworthiness.

Open Data and Open Research Software are essential for reliable, trustworthy, and transparent GenAI. They ensure that datasets and algorithms are well-documented, accessible, and reproducible, enabling others to validate and understand GenAI algorithms. This transparency fosters trust, supports ethical standards, and ensures compliance with regulations, particularly important in the field of GenAI

Grants awarded under this topic will be linked through collaboration agreements to the grants from [HORIZON-INFRA-2025-01-EOSC-03](#) (Advancing AI-readiness and Machine-Actionability in the EOSC Ecosystem)

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic

HORIZON-INFRA-2025-01-...

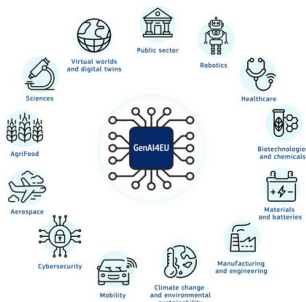
Using Generative AI (GenAI4EU) for Scientific Research via EOSC Description non exhaustive (2)

EOSC-05

RIA

37.5 M€

4 projets prévu



The proposals shall focus on all following aspects:

- Enrich the EOSC federation with Generative AI tools for evaluating research data quality, ensuring trustworthiness across the European network of trusted repositories, accessible by humans, machines, and Generative AI services: formulate protocols and policies to facilitate effortless data access, processing, and provenance updates within EOSC's repository and service network.
- Support European research infrastructures to improve the FAIRness of their data, so that they are ready to be combined with data of infrastructures in scientifically neighbouring domains, in order to provide Generative AI-ready data.
 - conduct pilots to validate the effectiveness and accuracy of the Generative AI-driven data quality evaluation methods, iteratively improving and refining them based on feedback and real-world use cases, and removing the potential biases inherited from the training data.
- Run community engagement and support programmes for implementing Generative AI in scientific workflows via EOSC
 - promote a sound training programme to facilitate the uptake and the use of Generative AI as a means to facilitate the FAIRification of data and data curation;
 - demonstrate how Generative AI can facilitate quality assessment of FAIR data;
 - advance the realization of machine-actionable (MA) research data and services, including AI-based systems;
 - propose protocols and policies to govern automatic data workflows within the network of repositories and services

Horizon Europe INFRA-EOSC 2025

Preliminary !

Topic

HORIZON-INFRA-2025-01-...

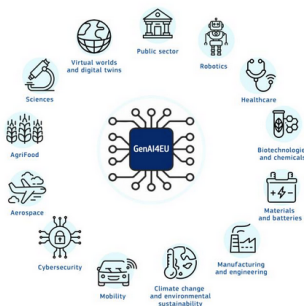
Using **Generative AI** (GenAI4EU) for Scientific Research via EOSC Description non exhaustive (3)

EOSC-05

RIA

37.5 M€

4 projets prévu



The proposals are expected to **deliver on one or more** of the following:

Develop, promote and support **real-life use cases for Generative AI models in scientific research** domains, in line with the GenAI4EU initiative, such as:

- augment datasets in scientific fields that rely on image analysis, such as biology, astronomy, and materials science: by generating synthetic images that closely resemble real data, researchers can expand their datasets, improve model robustness share anonymized version of sensitive data, and generalize better to unseen scenarios
- learn the underlying patterns of complex time-series data, such as sensor readings in environmental monitoring or physiological signals in healthcare
- accelerate materials design and discovery by predicting the properties of new materials,
- advance drug design and molecular modelling by generating novel molecular structures with desired pharmacological properties,
- simulate complex systems and phenomena in various scientific domains, such as physics, chemistry, and ecology

The proposers should take into account and leverage on the results of relevant projects in the field, including [AI4EOSC](#), [iImagine](#), [EOSC Data Commons](#), [RI-Scale](#) and other developments within the scope of the [GenAI4EU](#) initiative.

OSCARS Open Call

- OSCARS : Fostering the Uptake of Open Science in Europe
- <https://www.oscars-project.eu/>
- Organisé autour des thèmes des 5 EOSC Science Clusters (ENVRI, Life Sciences RI, ESCAPE, PaNOSC, SSHOC).



- Voyez ici quels types de projets ont été financés dans le cadre du premier appel OSCARS :
<https://www.oscars-project.eu/projects>

2nd OSCARS Open Call

- Financement disponible dans le cadre du 2ème appel ouvert OSCARS : ~ 3 M€
- Financement par projet : Entre **100 000 € et 250 000 €** (somme forfaitaire)
- Nombre maximum potentiel de projets financés dans le cadre du 2ème appel ouvert OSCARS : ~30, si tous les projets demandent le montant minimum de financement. Si les projets demandent un montant de financement similaire à celui du 1er appel ouvert OSCARS, **environ 13 projets seront financés.**
- Communautés d'utilisateurs cibles : Infrastructures de recherche, universités, instituts, PME et grandes entreprises, qu'il s'agisse de consortiums ou de chercheurs individuels.
- Ouverture du 2ème appel ouvert : 14 mars 2025, 10h CET - l'appel restera ouvert pendant 60 jours.
- Date limite du 2ème appel ouvert : **14 mai 2025**, 17h CEST
- Durée de mise en œuvre du projet : **12 à 24 mois** (après la signature d'un accord de projet avec un tiers - [TPPA](#)).
- Début des projets : Dans les 4 mois suivant la signature de [TPPA](#) (pour donner aux organisations le temps d'embaucher du personnel si nécessaire).
- <https://www.oscars-project.eu/open-calls>

Horizon Europe INFRA Work Programme 2025

Autres appels potentiellement intéressants (une sélection personnelle et partielle !)

Topic HORIZON- INFRA-2025-01-...	Title	Type	Budget total [M€]	#projets
DEV-01	Training and up-skilling of research infrastructures technical staff	CSA	10	8
SERV-02	Research infrastructure services to enable R&I addressing main challenges and EU priorities (involve ESFRIs/ERICs; domains: biotechnology and biomanufacturing, climate change)	RIA	20	4
SERV-03	Research infrastructure services advancing frontier knowledge (research domains: atmospheric chemistry and dynamics, nano science, particle and nuclear physics)	RIA	20	2
Procurement	Support for EOSC EU Node Service Verification and Validation activities	Procurement	1	1

Preliminary !

HORIZON-INFRA-2025 Calendrier (prévu)

- Soumission des propositions du 15 mai 2025 au 18 septembre 2025
- Évaluation des propositions d'octobre 2025 à janvier 2026
- Annonce des résultats au comité de programme et aux candidats -
février/mars 2026
- *Grants* signées (TTG) – mai 2026

Candidature à HORIZON-INFRA-EOSC

- Il y a beaucoup de projets EOSC en cours (environ 30 en ce moment) : <https://eosc.eu/horizon-europe-projects/>
- Veillez à établir un lien avec les projets pertinents pour votre proposition.
- Constituer un consortium pertinent et diversifié (géographiquement, thématiquement, ...)
- L'EOSC est au service des communautés dans tous les domaines : comment votre projet améliore-t-il le paysage de la recherche ? Qu'ajoutez-vous à l'offre de services de l'EOSC ? Quelle est la valeur ajoutée ?
- [Impact](#)
- Si vous n'avez pas d'expérience dans la préparation d'un projet EOSC réussi, vous pouvez envisager de faire appel à un partenaire du secteur privé qui vous aidera à mettre en place le projet et à rédiger la proposition.
- Soutien financier pour la préparation d'une proposition : <http://www.anr.fr/MRSEI-2025>

Contactez-moi (et/ou le [bureau d'Horizon Europe au MESR](#)) si vous souhaitez discuter d'idées de propositions spécifiques.

EOSC en mode accélération



Web of FAIR research data and services

- L'EOSC fait partie de la transition numérique en France et en Europe
- [EOSC Federation](#) : un écosystème tangible pour gérer les flux de recherche
- Le programme de travail HORIZON-INFRA-EOSC-2025 - de nombreuses opportunités pour l'EOSC et l'IA et pour ceux qui se préparent à rejoindre la Fédération de l'EOSC

Plus d'informations? Inscrivez-vous sous

https://groupes.renater.fr/sympa/info/eosc_france_info



Annexe

Calendrier EOSC 2025



Date	Événement
15/05	Horizon Europe Info Day France (10h-12h, en ligne)
19/05	HORIZON-INFRA Info Day Europe (9h-16h, en ligne)
27-28/05	EOSC Association General Assembly (Anvers)
11/06	Skills4EOSC Conference (Campus Condorcet, Aubervilliers)
12/06	FAIR-EASE Final Conference (Paris)
11-12/09	Journées EOSC-France (Paris)
03-05/11	EOSC Symposium (Bruxelles)