

MINISTÈRE 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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HORIZON-INFRA-EOSC 2023/2024

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HORIZON-INFRA-EOSC 2023/2024

- HORIZON-INFRA work programme for 2023/2024 (budget EOSC: 130 M€)
- The calls <u>HORIZON-INFRA-2024-01</u> will be open starting December 6, 2023 (deadline foreseen for 12/03/2024)



Opening: 06/12/2022; Deadline: 9 mars 2023

Topic HORIZON- INFRA-2023	Title	Туре	Budget total [M€]	#projets
EOSC-01-01	Build on the science cluster approach to ensure the uptake of EOSC by research infrastructures and research communities	RIA	25	1
EOSC-01-02	Development of community-based approaches for ensuring and improving the quality of scientific software and code	RIA	8	1
EOSC-01-03	Planning, tracking, and assessing scientific knowledge production	RIA	8	1
EOSC-01-04	Next generation services for operational and sustainable EOSC Core Infrastructure	RIA	10	1
EOSC-01-05	EOSC Architecture and Interoperability Framework	<u>CSA</u>	3	1
EOSC-01-06	Trusted environments for sensitive data management in EOSC (expansion to resources provided by public authorities, including national agencies, in highly sensitive areas, like the health sector, governmental statistics or geo-spatial applications)	RIA	15	3
2023-EOSC-01			69	8



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Submission Status – INFRA 2023 (b)

CALLS/ Topics	ТоА	Total call budget	Budget per project	Grants	Submitted/Eligible
HORIZON-INFRA-2023-EOSC-01				9	17/15
HORIZON-INFRA-2023-EOSC-01-01 (Build on science cluster approach/FSTP)	RIA		~ 25 M€	1	1
HORIZON-INFRA-2023-EOSC-01-02 (quality scientific software and code/CC)	RIA		~ 8 M€	1	3/2
IORIZON-INFRA-2023-EOSC-01-03 (Planning inowledge production/CC)	RIA	69 M€	~ 8 M€	1	3/2
IORIZON-INFRA-2023-EOSC-01-04 (Next generation COSC core infrastructure/LUMP SUM)	RIA	oo me	~ 10 M€	1	1
ORIZON-INFRA-2023-EOSC-01-05 nteroperability/LUMP SUM)	CSA		~ 3 M€	1	1
ORIZON-INFRA-2023-EOSC-01-06 (Sensitive data)	RIA		~ 5 M€	3	8



Opening: 06/12/2022; Deadline: 9 mars 2023

Topic HORIZON-INFRA-2023	Short description
EOSC-01-01	Build on the science cluster approach (<u>EOSC-Life, ENVRI-FAIR, ESCAPE, SSHOC, PaNOSC</u>), to ensure the uptake of EOSC by research infrastructures and research communities
RIA	Third party financing: at least 18 M€ , with 100 - 250 k€ per third party grant (duration 12-24 months)
25 M€	 Expected outcome: Support all researcher communities across Europe to contribute to and benefit from a user-oriented EOSC;
1 project foreseen	 Populate EOSC Exchange with FAIR data, horizontal services and thematic services of relevance to users in several scientific domains and beyond;
	 Develop and demonstrate through cascading grants concrete scientific benefits of open science and FAIR practices through cross-disciplinary use cases;
	 Increased alignment of operation of ESFRI and international RIs at the subdomain, domain and interdisciplinary levels in function of the progressive deployment of the EOSC Core, EOSC Exchange and EOSC sustainability models;
	Provide feedback and requirements for the evolution of the EOSC ecosystem.



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25 M€ 1 project foreseen	 Expected Supp EOSC Populusers Deve FAIR Increinter Increinter Exchipter Provi Provi Provi Provi Provi Provi Provi Increinter Expected The open calls under this activity should respect the conditions laid out in Section B of the General Annexes, ser-oriented and conflict of interest and conflicting transparency, equal treatment, conflict of interest and conflicting transparency, equal treatment, conflict of interest and conflicting transparency, equal treatment, conflict of interest and maintain conflicting transparency, equal treatment, conflict of interest and maintain section B of the General Annexes, ser-oriented conditions laid out in Section B of the General Annexes, ser-oriented and conflicting transparency, equal treatment, conflict of interest and conflicting transparency and and



Opening: 06/12/2023; Deadline: 12 mars 2024

Topic HORIZON- INFRA-2024	Title	Туре	Budget total [M€]	#projets
EOSC-01-01	FAIR and open data sharing in support of the mission adaptation to climate change	RIA	16	2
EOSC-01-02	Supporting the EOSC Partnership in further consolidating the coordination and sustainability of the EOSC ecosystem	CSA	4	1
EOSC-01-03	Enabling a network of EOSC federated and trustworthy repositories and enhancing the framework of generic and discipline specific services for data and other research digital objects	<u>CSA</u>	5	1
EOSC-01-04	Long-term access and preservation infrastructure development for EOSC, including data quality aspects	RIA	8	1
EOSC-01-05	Innovative and customizable services for EOSC Exchange	RIA	28	4
2024-EOSC-01			61	9



Ouverture: 06/12/2023; Date limite: 12 mars 2024

Topic HORIZON-INFRA-2024	Description non exhaustive
EOSC-01-01	FAIR and open data sharing in support of the mission adaptation to climate change
RIA	Expected outcome: • Seamless interactions between EOSC, operational data spaces or environments (e.g. the DRMKC
16 M€	Risk Data Hub, the European Climate Adaptation Platform (Climate Adapt, relevant Copernicus Services, the GEOSS Portal, the EOSC platform, etc.), researchers and other stakeholders contributing
2 projets prévu	to adaptation to climate change to store, share, access, analyse and process research data and other research digital objects from their own discipline, across research infrastructures, disciplines and national borders;
	 Open and FAIR data is the new norm for research contributing to adaptation to climate change; EU-wide sharing of research data relevant to this area is shown to be a critical mechanism to
	facilitate climate adaptation across Member States and Associated Countries with involvement of the regions and local authorities;
	 EOSC grows into a trusted research and innovation data space and service platform in Europe that articulates with the Green Deal data space and supports the interdisciplinary research community involved in mission climate adaptation
	 Contribute to the Horizon Europe EOSC Partnership and other relevant partnerships related to adaptation to climate change.



Ouverture: 06/12/2023; Date limite: 12 mars 2024

Topic HORIZON-INFRA-2024	Description non exhaustive
EOSC-01-02	Supporting the EOSC Partnership in further consolidating the coordination and sustainability of the EOSC ecosystem
CSA	Expected outcome:
4 M€	• EOSC increases the level of coordination of national and European initiatives, creating mechanisms of mutual learning, replication of best practices and joint activities. This expected outcome will be achieved mainly through financial support to third parties in the form of cascading grants [1 M€ for grants up]
1 projet prévu	to 100 k€];
	 EOSC increases the level of coordination and directionality among EOSC-related initiatives and Horizon Europe funded actions, ensuring a more proactive and impactful approach towards attaining the SRIA objectives. This expected outcome will be achieved through targeted financial support to third parties in the form of cascading grants;
	 Step forward towards a more sustainable EOSC that enables smooth transnational access to data and services, trough the test and implementation of coherent business models; Facilitated access to information to and from all EOSC stakeholders across countries, institutions, networks and initiatives is increasingly enabled.



Ouverture: 06/12/2023; Date limite: 12 mars 2024

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Topic HORIZON-INFRA-2024	Description non exhaustive
EOSC-01-03	Enabling a network of EOSC federated and trustworthy repositories and enhancing the framework of generic and discipline specific services for data and other research digital objects
CSA	Expected outcome:
5 M€	 A European network of trustworthy repositories is established that will enhance the EOSC ecosystem, contribute to the consolidation of Open Science practices and support European
1 projet prévu	 researchers. The concept and requirements of trustworthy repositories are harmonised and therefore support the European funders in better addressing the Open Science provisions in their programmes Data depositing ecosystem in Europe are adequately supported, providing a common voice for research digital repositories to better interact with the research and innovation policy making and to respond in a more coordinated and cohesive manner to the need of the European researchers. Synergies and complementarities should be sought with projects funded under the topics HORIZON-INFRA-2021-EOSC-01-05, and should continue to build on outcomes from the Horizon 2020 project FAIRsFAIR. Close cooperation is also expected with the projects funded under the topics HORIZON-INFRA-2023-EOSC-01-01, and HORIZON-INFRA-2024-EOSC-01-04.

11



Ouverture: 06/12/2023; Date limite: 12 mars 2024

Topic HORIZON-INFRA-2024	Description non exhaustive
EOSC-01-04	Long-term access and preservation infrastructure development for EOSC, including data quality aspects
RIA	Expected outcome: • Practices, standards and tools for long-term preservation are mainstreamed in the EOSC
8 M€	 ecosystem. The emergence of a European distributed infrastructure for long-term preservation and access is adequately supported.
1 projet prévu	 The sustainability of long-term preservation among the European scientific community is significantly enhanced
	Align with the EOSC Partnership and coordinate and collaborate with the projects funded under the topic HORIZON-INFRA-2024-EOSC-01-03 with regards to the interconnection of repositories and other archiving infrastructure, and with the projects funder the topic HORIZON-INFRA-2023-EOSC-01-02, especially with regards to the quality dimension explored under that topic

Work programme for 2023/2024

12



Ouverture: 06/12/2023; Date limite: 12 mars 2024

Topic HORIZON-INFRA-2024	Description non exhaustive
EOSC-01-05	Innovative and customizable services for EOSC Exchange
RIA	 Expected outcome: Next generation EOSC provides researchers with the means to easily access complete datasets and analysis platforms and provide services that support reproducibility, as well as ensuring long-term
28 M€	preservation and long-term availability of these research data and tools.
4 projets prévu	 Ecosystem of novel tools and services, as many new FAIR-by-design datasets as possible, whereby researchers are able to deliver much more rapidly the outputs of each part of the research lifecycle, including data and software, with the same level of precision as they deliver publications today Enhanced services and tools for researchers to lower the bar and underpin the initial research planning and preparation phase (i.e. entry phase) of the research lifecycle.
	Participation of the private sector, in particular SMEs, is recommended for both the development and further exploitation of the project result

Work programme for 2023/2024



EOSC: how to find cascading grants opportunities?

- A certain number of EOSC projects offer cascading grants
 - EOSC-Future, <u>INFRA-2023-EOSC-01-01</u>, <u>INFRA-2024-EOSC-01-02</u>
- Relatively light application procedure, often good chances for a successful proposal
- https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/ opportunities/competitive-calls





European Open Science Cloud



- EOSC development can be financed through the Horizon Europe programme on research infrastructures (HORIZON-INFRA-EOSC)
- Next wave of calls to be open December 6, 2023
- Cascading grants offer funding options (typically <250 k€) for specific activities

More information? Subscribe to the EOSC-France mailing list:

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





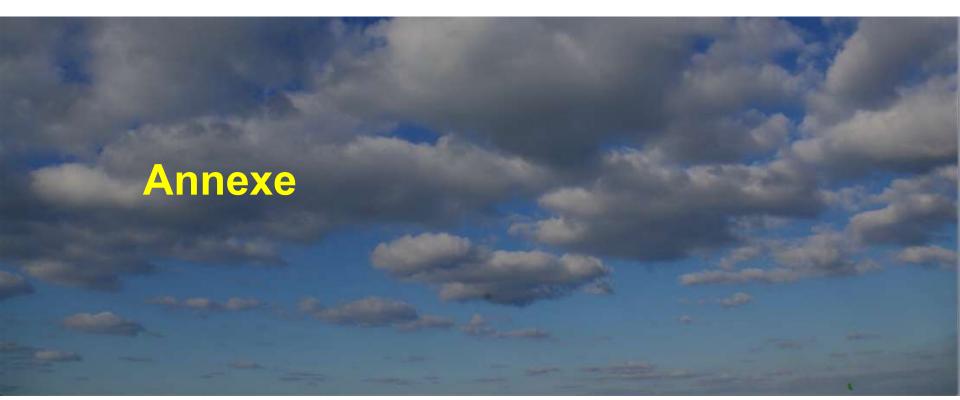
volker.beckmann@recherche.gouv.fr

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









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)



Topic HORIZON- INFRA-2023	Description non exhaustive
EOSC-01-02	Development of community-based approaches for ensuring and improving the quality of scientific software and code
RIA	Outcomes:
8 M€	 A framework of community curation is established and promoted that ensures quality of software and code across the different disciplines.
1 projet prévu	• Infrastructure, tools and services are deployed that allow researchers to properly develop, describe with proper metadata, version, archive, share and reuse research software.
	 The notion of software quality is defined in the context of EOSC and builds upon established practices by the FAIR and other communities.
	 Baseline quality indicators along the notion of "minimum quality" are defined for the different types of digital objects targeted (software, code, etc), taking into account the concept of "fit for purpose".
	 The quality of research software, both from the technical and organizational point of view for research software is improved, both in general (e.g. software for data analysis) and in particular for software used in the services offered through EOSC.
	Software is developed in a sustainable way and its reuse is maximised.



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Topic HORIZON- INFRA-2023	Description non exhaustive
EOSC-01-03	Planning, tracking, and assessing scientific knowledge production
RIA	Proposals should address all the following activities, aimed at improving (list not complete!):
8 M€	• Contribute to the standardisation and homogenisation of domain-agnostic elements in Data Management Plans (DMP)
1 projet prévu	 Ensure the pervasive and comprehensive use of PIDs for preprints, publications, open peer-reviews, data, software, workflows, etc., and their interconnection with DMP standards; Develop use cases and proof of concept instances of machine-actionability of DMPs, in alignment with developments of Scientific Knowledge Graphs (SKGs) Automate the evaluation of DMPs (assessing their completeness and adequacy) through, e.g., semantic web technologies, building on new and existing DMP evaluation metrics (e.g., Science Europe evaluation rubric); Develop and implement comprehensive interoperable SKGs and enhance the interoperability across SKG Extend FAIR metrics guidance, tools, and models Define a trusted governance to measure successful compliance with metrics/tests Define minimum levels of FAIRness for a wide spectrum of digital objects

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Topic HORIZON- INFRA-2023	Description non exhaustive
EOSC-01-04	Next generation services for operational and sustainable EOSC Core Infrastructure
RIA	 Improve the EOSC Core execution framework by enhanced composability and interoperability of cross- domain data, services, tools and other research objects and resources
10 M€	 Design and develop components of a comprehensive EOSC Integration Service suite as part of the next- generation EOSC Core
1 projet prévu	 Provide open Application Programming Interface (API) registry, management, development and testing workflow, platform and tools for EOSC Core service users.
	 Support custom-made front-end portal development environment for various scientific communities, utilizing the EOSC Core portal back-end functions via integration services.
	 Facilitate an independent EOSC service incubator and technology development environment that can serve as an open experimentation "testbed" for the EOSC
	 Ensure financial sustainability assurance and readiness assessment processes, tools, workflows and services applied for the next-generation of EOSC Core



Topic HORIZON- INFRA-2023	Description non exhaustive
EOSC-01-05	EOSC Architecture and Interoperability Framework
RIA	 Provide structure to manage, update, circulate and promote the EOSC Interoperability Framework and guidelines to support and enable interoperability within EOSC.
3 M€ 1 projet	 Coordinate the establishment of IFs and the making of existing IFs available through a library/repository, support the dialogue on establishing IFs.
prévu	Support communities in making their IFs available through EOSC IF library
	 Provide organizational framework for establishing an independent, multi-stakeholder Architecture Board that can collect feedback and recommendations from the stakeholders, oversee and advice the EOSC MVE deployment and operation.
	 Define processes and guidelines to enable EOSC Core delivery and to ensure openness of EOSC so that it can adapt with the evolving requirements of the EOSC stakeholders



Topic HORIZON- INFRA-2023	Description non exhaustive
EOSC-01-06	Trusted environments for sensitive data management in EOSC
RIA	(expansion to resources provided by public authorities, including national agencies, in highly sensitive areas, like the health sector, governmental statistics or geo-spatial applications). Link with HORIZON-HLTH-2022-IND-13-02 ("Scaling up multi-party computation, data anonymisation techniques, and synthetic data generation.")
15 M€	The proposed work should include:
3 projets prévu	 exploring possible solutions to move all or parts of a workflow on sensitive data to a secure data storage and to allow users to receive only aggregated and desensitised results; support for publishing anonymised data into repositories that are compliant with the EOSC Interoperability Framework;
	 exploration and demonstration of possible solutions and approaches for data anonymization; exploration and demonstration of possible solutions and approaches, such as blockchain, for access control management and maintenance of a secure and decentralized record of transactions of trusted and non-trusted parties;
	• data processing workflows that keep sensitive data encrypted on disk and memory, including assessment of the cost of the encryption;
	• investigation on data protection legislations on national and European level on the impact of using sensitive data in cloud hosted workflows across computer centres in different countries/regions;
	explore and demonstrate compliance with federated architecture solutions.