

# EOSC : European Open Science Cloud

Qu'est-ce que l'EOSC ?

- **Web of FAIR\* research data and services**
- Accès pour tous les chercheurs européens aux données scientifiques, e-infrastructures et services
- Relier les données / services / infrastructures existants
- Pensez à l'EOSC comme une **interface**
- *Free at point of use*
- L'EOSC va répondre à vos **besoins** de services et données ouvertes, équitables et partagées.

“The EOSC is fully aligned with the French strategies on digital transition and on Open Science. EOSC is part of our Open Science strategy, the French National Plan for Open Science, as expressed in 2018 and 2021, which explicitly encourages the structuration of the French research landscape along with the EOSC. We also underline the importance of the EOSC infrastructure to support Open Science in the context of our national strategy on data, algorithms and source codes. Open Science needs services and infrastructures it can be build upon, it needs skills and knowledge to facilitate the whole research data lifecycle, it needs capacity to host services and data.”  
Cyril Moulin, Adjoint à la Directrice Générale de la Recherche et de l'Innovation au MESR

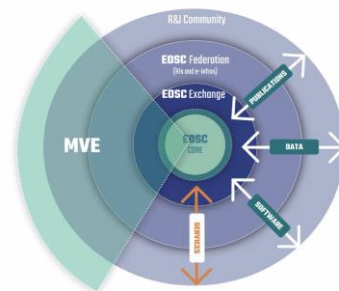
\*FAIR : Findable, Accessible, Interoperable, Reusable

# EOSC Procurement Action 2022

- [Tous les documents pertinents pour l'EOSC procurement 2022](#)
- [Rapport](#) sur *preliminary market consultation*
- appel était prévu pour être ouvert fin septembre
- DG-CNECT (13/10/2022): “in a few weeks”
- “The date of publication of the EOSC Procurement’s contract notice has been delayed. The procurement is still expected to be launched **before the end of 2022** and submission deadlines will be adjusted accordingly.”



## Minimum Viable EOSC to be Procured by EC



### MVE includes:

- EOSC Core and subsets of EOSC Exchange, Federation
- EOSC resources (services, research products) required to “market” the EOSC
- Subset of the R&I community

# Horizon Europe EOSC Work Program **2023**

Opened: 06/12/2022 - Date limite : **9 mars 2023**

Topic HORIZON-INFRA- 2023-...	Titre	Type	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	<a href="#">RIA</a>	25	1
EOSC-01-02	Development of community-based approaches for ensuring and improving the quality of scientific software and code	<a href="#">RIA</a>	8	1
EOSC-01-03	Planning, tracking, and assessing scientific knowledge production	<a href="#">RIA</a>	8	1
EOSC-01-04	Next generation services for operational and sustainable EOSC Core Infrastructure	<a href="#">RIA</a>	10	1
EOSC-01-05	EOSC Architecture and Interoperability Framework	<a href="#">CSA</a>	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)	<a href="#">RIA</a>	15	3
2023-EOSC-01			69	8

# Horizon Europe EOSC Work Program 2023

Opening: 06/12/2022 - Date limite : 9 mars 2023

Topic HORIZON-INFRA-2023-...	Description non exhaustive
EOSC-01-01  <a href="#">RIA</a>  <b>25 M€</b>  1 projet prévu	<p>Build on the science cluster approach (<a href="#">EOSC-Life</a>, <a href="#">ENVRI-FAIR</a>, <a href="#">ESCAPE</a>, <a href="#">SSHOC</a>, <a href="#">PaNOSC</a>), to ensure the uptake of EOSC by research infrastructures and research communities</p> <p>Third party financing: <b>at least 18 M€</b>, with <b>100 - 250 k€</b> per third party grant (duration <b>12-24</b> months)</p> <p>Expected outcome:</p> <ul style="list-style-type: none"><li>• Support all researcher communities across Europe to contribute to and benefit from a user-oriented EOSC;</li><li>• Populate EOSC Exchange with FAIR data, horizontal services and thematic services of relevance to users in several scientific domains and beyond;</li><li>• Develop and demonstrate through cascading grants concrete scientific benefits of open science and FAIR practices through cross-disciplinary use cases;</li><li>• 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;</li><li>• Provide feedback and requirements for the evolution of the EOSC ecosystem.</li></ul>

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Topic HORIZON-INFRA-2023-...	Description non exhaustive
<p>EOSC-01-01</p> <p><a href="#">RIA</a></p> <p>25 M€</p> <p>1 projet prévu</p>	<p>Build on the science cluster approach (<a href="#">EOSC-Life</a>, <a href="#">ENVRI-FAIR</a>, <a href="#">ESCAPE</a>, <a href="#">SSHOC</a>, <a href="#">PaNOSC</a>), to ensure the uptake of EOSC by research infrastructures and research communities</p> <p>Third party financing: <b>at least 18 M€</b>, with <b>100 - 250 k€</b> per third party grant (duration <b>12-24</b> months)</p> <p>Expected</p> <ul style="list-style-type: none"> <li>• Support EOSC user-oriented</li> <li>• Popularise EOSC among researchers and users of research infrastructures which are relevant to</li> <li>• Develop FAIR EOSC services and infrastructure which are awarded may exceptionally also be recipients of science and</li> <li>• Increase EOSC visibility and impact in the domain and C Exchange</li> <li>• Provide feedback and requirements for the evolution of the EOSC ecosystem.</li> </ul> <div style="border: 2px solid green; padding: 10px; margin: 10px 0;"> <p>"The open calls under this activity should respect the conditions laid out in Section B of the General Annexes, including transparency, equal treatment, conflict of interest and confidentiality.</p> <p><b>Research infrastructures which are beneficiaries/affiliated entities of the consortium awarded may exceptionally also be recipients of financial support to third parties.</b></p> <p>Proposals must explain how they will ensure that such beneficiaries/affiliated entities are not involved in the selection procedure of the calls, in order to avoid conflicts of interest and maintain confidentiality."</p> </div>

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Opening: 06/12/2022 - Date limite : 9 mars 2023

Topic HORIZON-INFRA- 2023-...	Description non exhaustive
EOSC-01-02  <a href="#">RIA</a>  8 M€  1 projet prévu	<p>Development of community-based approaches for ensuring and improving the quality of scientific software and code</p> <p>Outcomes:</p> <ul style="list-style-type: none"><li>• A framework of community curation is established and promoted that ensures quality of software and code across the different disciplines.</li><li>• Infrastructure, tools and services are deployed that allow researchers to properly develop, describe with proper metadata, version, archive, share and reuse research software.</li><li>• The notion of software quality is defined in the context of EOSC and builds upon established practices by the FAIR and other communities.</li><li>• 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”.</li><li>• 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.</li><li>• Software is developed in a sustainable way and its reuse is maximized</li></ul>

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Opening: 06/12/2022 - Date limite : 9 mars 2023

Topic HORIZON-INFRA- 2023-...	Description non exhaustive
EOSC-01-03  <a href="#">RIA</a>  8 M€  1 projet prévu	<p>Planning, tracking, and assessing scientific knowledge production</p> <p>Proposals should address all the following activities, aimed at improving (list not complete!) :</p> <ul style="list-style-type: none"><li>• Contribute to the standardisation and homogenisation of domain-agnostic elements in Data Management Plans (DMP)</li><li>• Ensure the pervasive and comprehensive use of PIDs for preprints, publications, open peer-reviews, data, software, workflows, etc., and their interconnection with DMP standards;</li><li>• Develop use cases and proof of concept instances of machine-actionability of DMPs, in alignment with developments of Scientific Knowledge Graphs (SKGs)</li><li>• 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);</li><li>• Develop and implement comprehensive interoperable SKGs and enhance the interoperability across SKG</li><li>• Extend FAIR metrics guidance, tools, and models</li><li>• Define a trusted governance to measure successful compliance with metrics/tests</li><li>• Define minimum levels of FAIRness for a wide spectrum of digital objects</li></ul>

# Horizon Europe EOSC Work Program 2023

Opening: 06/12/2022 - Date limite : 9 mars 2023

Topic HORIZON-INFRA- 2023-...	Description non exhaustive
EOSC-01-04  <a href="#">RIA</a>  10 M€  1 projet prévu	<p>Next generation services for operational and sustainable EOSC Core Infrastructure</p> <ul style="list-style-type: none"><li>• Improve the EOSC Core execution framework by enhanced composability and interoperability of cross-domain data, services, tools and other research objects and resources</li><li>• Design and develop components of a comprehensive EOSC Integration Service suite as part of the next-generation EOSC Core</li><li>• Provide open Application Programming Interface (API) registry, management, development and testing workflow, platform and tools for EOSC Core service users.</li><li>• Support custom-made front-end portal development environment for various scientific communities, utilizing the EOSC Core portal back-end functions via integration services.</li><li>• Facilitate an independent EOSC service incubator and technology development environment that can serve as an open experimentation “testbed” for the EOSC</li><li>• Ensure financial sustainability assurance and readiness assessment processes, tools, workflows and services applied for the next-generation of EOSC Core</li></ul>



# Horizon Europe EOSC Work Program **2023**

Opening: 06/12/2022 - Date limite : 9 mars 2023

Topic HORIZON-INFRA- 2023-...	Description non exhaustive
EOSC-01-05  <a href="#">RIA</a>  3 M€  1 projet prévu	EOSC Architecture and Interoperability Framework <ul style="list-style-type: none"><li>• Provide structure to manage, update, circulate and promote the EOSC Interoperability Framework and guidelines to support and enable interoperability within EOSC.</li><li>• Coordinate the establishment of IFs and the making of existing IFs available through a library/repository, support the dialogue on establishing IFs.</li><li>• Support communities in making their IFs available through EOSC IF library</li><li>• 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.</li><li>• 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</li></ul>

# Horizon Europe EOSC Work Program 2023

Opening: 06/12/2022 - Date limite : 9 mars 2023

Topic HORIZON-INFRA- 2023-...	Description non exhaustive
EOSC-01-06  <a href="#">RIA</a>  15 M€  3 projets prévu	<p>Trusted environments for sensitive data management in EOSC</p> <p>(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.”)</p> <p>The proposed work should include:</p> <ul style="list-style-type: none"><li>• 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;</li><li>• support for publishing anonymised data into repositories that are compliant with the EOSC Interoperability Framework;</li><li>• exploration and demonstration of possible solutions and approaches for data anonymization;</li><li>• 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;</li><li>• data processing workflows that keep sensitive data encrypted on disk and memory, including assessment of the cost of the encryption;</li><li>• 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;</li><li>• explore and demonstrate compliance with federated architecture solutions.</li></ul>

# Horizon Europe EOSC Work Program **2024**

Opening: 06/12/2023 - Date limite : 12 mars 2024

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

# European Open Science Cloud

## *Web of FAIR\* research data and services*

- vision, portail, communauté, partenariat
- programme de financement Horizon Europe
- [Qu'est-ce que l'European Open Science Cloud](#) (2 pages)
- <https://eosc-portal.eu>

Plus d'informations? Inscrivez-vous sous

[https://groupes.renater.fr/sympa/info/eosc\\_france\\_info](https://groupes.renater.fr/sympa/info/eosc_france_info)



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