

GÉANT Association response to the Managed Services for the European Open Science Cloud Platform PIN

*Written in response to Prior Information Notice: [CNECT/LUX/2022/CD/0023-PIN](https://ec.europa.eu/digital-single-market/en/cnect-lux-2022-cd-0023-pin)
Submitted to DG-CNECT on 29th July 2022*

The GÉANT Association deeply appreciates the continuous effort and political willingness of the European Commission to transform scientific processes by opening up access to services, resources, and datasets through the implementation of EOSC. We understand the tender as a tentative step towards a sustainable, production quality EOSC using specific funding. The willingness to secure core EOSC infrastructure by assigning Intellectual Property to the EC is considered key, avoiding ownership by commercial companies. We also praise the clear indication for all lots to be based on users' requirements, Free and Open Source Software (FOSS), and standards endorsed by the Research and Education community, since interoperability of data and services is fundamental to a flourishing and operational EOSC.

The GÉANT Association is committed to serve the community with federated services tailored to the Research and Education context, as noted in our Strategy 2021-26.¹ The importance of accessibility for Open Science and the FAIR principles is paramount, and we will continue to collaborate to define an appropriate technical, scalable and distributed architecture that best supports EOSC services. We also have significant experience in international and European procurement and have secured cloud service provision for the research community via EOSC.

GÉANT and its Members play an essential role in EOSC through many EOSC projects, research clusters, regional and disciplinary infrastructure projects and national initiatives. As a community, we fully support Open Science and the FAIR principles and will continue to partner with the European Commission to support their implementation. However, since the tender is in the form of a public procurement, this is likely to legally prohibit the participation of relevant service providers in Research & Education, especially when publicly-funded. In any case, we confirm our willingness to collaborate with the winning suppliers to share relevant standards and federation capabilities.

One of the key areas where the GÉANT community already contributes to the improvement of scientific processes in Europe is through the worldwide implementation and operational provision of federated Authorisation and Authentication Infrastructure (AAI) and services. This effort provides a necessary layer for allowing secure and reliable access to services, data and software through the distributed management of identities and group membership. We encourage the EC to avoid any duplication of effort and promote strong synergies with existing AAI activities e.g. eduGAIN. We therefore recommend that the solutions proposed in each lot should guarantee complete interoperability with the EOSC AAI, which is being developed within the EOSC Future project.

We therefore suggest that the implementation in each lot identifies and reuses where possible those elements that are already developed and provided via existing projects and partnerships; this would ensure efficiency, full interoperability and would avoid possible duplication of effort. Core infrastructure and services already used in the EOSC context should be considered as elements with which the winning suppliers are required to interoperate. For example, many elements of the EOSC Core are being developed within EOSC Future and forthcoming EC-supported projects. We are subsequently pleased to see that the Horizon Europe Work Programme 2021-2022 notes "the infrastructure should build closely on the outcome of the H2020-INFRAEOSC-03-2020 call"² and suggest that use of EOSC Future results, wherever possible, should be an obligation on the winning suppliers.

¹ GÉANT Association Strategy 2021-2026, available at: <https://about.geant.org/our-organisation/strategy-and-vision>

² [Horizon Europe Work Programme 2021-2022](#), 3. Research Infrastructures, p126

Indeed, it is critical that the EC and winning suppliers work closely with key stakeholders, including active and forthcoming EOSC projects and e-Infrastructures such as GÉANT, via a coordination effort supported by the EOSC Association. The Tripartite Governance structure for EOSC must take responsibility for overseeing the implementation and ensuring the long-term sustainability of the outputs of the procurement call, beyond mere collaboration.

We fully support the position that code-based outputs should be based on Free and Open Source Software (FOSS), but find some statements on ownership a little ambiguous and warrant further clarification.³ From presentations on the EOSC Core procurement PIN, it seems that the EC wishes to own the Intellectual Property (IP) as a way to ensure sustainability of services. Since prior work supported via grants is expected to be built on by the winning suppliers, foreground IP will exist and it may not be possible to transfer ownership. Requiring that a transferable royalty free and RAND (reasonable and non-discriminatory terms) licence is granted to the EC is proposed as a solution.

Whilst the division of the tender into four lots is pragmatic, it also increases the risks of excessive fragmentation of EOSC. We envisage that only early and rapid prototyping within each lot and of their federation capabilities, plus a concerted effort to coordinate across the lots, may mitigate a lack of interoperability and unnecessary software diversity. Early involvement of end-users in trials and validation is essential to produce a platform tailored to the needs and priorities of researchers. Collaboration across the lots should also be an obligation on the winning suppliers, and we recommend that consideration is given to who should facilitate and support such work and how. Since the tender builds on *“the key concept of federation, standards and processes for Open Science, such as the EOSC Interoperability Framework and FAIR-by-design data and services”*⁴ emphasis should be placed on interoperability and seamless data exchange through the adoption of existing community-endorsed standards, open APIs and source code.

We also recommend careful prioritisation when allocating the €35 million budget across the four lots to ensure delivery of a production-ready core platform. Lot 1 in particular is very ambitious and there is a danger of scope creep or a lack of focus and non-delivery given the range of different elements to be developed, maintained and operated. Attention should be paid to what is in most need of funding and reusing existing elements rather than supporting entirely new development, unless needed.

The final comment reflects our position on advancing Open Science and data sovereignty. We are not opposed to a public procurement per se and believe that both public and private sector entities have important roles to play in the implementation of EOSC. That said, we feel it would be beneficial for the EC to prioritise the efforts of the procurement in such a way to retrieve the best outcome for the Research & Education community. We believe that the EOSC Core should be owned and governed by the Research & Education community and we would be concerned if control of such critical underlying infrastructure were to be handed over to commercial entities. We believe that entrusting public entities to operate critical services, on which the Research and Education sector depends, is the best way to ensure that these are run in the community’s best interest.

We hope that the feedback we have provided is constructive and helps you to frame a coherent specification across the agreed lots.

We are open to further collaboration and conversations if desired.

³ See in particular the assertion that *“Following the service contract, the final EOSC-core infrastructure and service platform will be property of the European Union, and it will be made available for its Member States and Associated Countries.”* Horizon Europe Work Programme 2021-2022, 3. Research Infrastructures, p129

⁴ [Horizon Europe Work Programme 2021-2022](#), 3. Research Infrastructures, p126