CSC

Position paper
14.7.2026

Contribution to the call for evidence Horizon Europe – European Partnerships to be implemented as joint undertakings

Strengthening EuroHPC for Digital Leadership: Towards an Integrated Computing, Data and AI Ecosystem

CSC thanks the Commission for efforts to strengthen the Joint Undertakings framework to even better respond to strategic challenges during the next Horizon Europe. In a period of growing geopolitical tensions, competition, and data-intensive science and innovation, sovereignty in digital technologies is ever more important. The EuroHPC Joint Undertaking demonstrates how European Partnerships can successfully pool resources, expertise, and coordinate investments across borders around shared strategic priorities. By combining the efforts of the EU, Member States, industry, and research organisations, EuroHPC has created critical mass necessary to build world-class digital infrastructure and capabilities to keep European research and innovation at the forefront of competitiveness.

Providing researchers, innovators, public authorities, SMEs, and industry with access to high-performance computing, as well as AI and quantum infrastructure, EuroHPC has become a cornerstone of Europe's digital leadership. It contributes directly to the EU's objectives of competitiveness, resilience, technological sovereignty, and innovation capacity in strategic technologies. The role of digital research infrastructures will continue to grow as research becomes increasingly data-intensive, and as Europe seeks a productivity leap while reducing dependencies. This work should be pursued more coherently as an integrated whole, and we therefore welcome the Single Basic Act's objective of increasing synergies, links and collaboration between JUs and with other initiatives, policy windows and programmes.

Europe's future competitiveness depends not only on computing capacity but also on trusted, high-quality, sovereign and interoperable data. In addition, skills development is needed across domains and sectors, in applying data-intensive methods and new technologies. Building on its success in supercomputing and AI, EuroHPC is well positioned to further strengthen Europe's capacity building and data capabilities, and for this purpose it should establish stronger links with European data spaces and data infrastructure like EOSC. It should also leverage existing key initiatives such as the Open Web Search project[1], aiming for building a European Open Web Data Infrastructure, to enable web data to be used in Europe for value creation such as AI model development. This would make a difference for European data economy and AI development. Further development of EuroHPC centres' data capacities would support European data sovereignty, facilitate innovation, and create more synergies of research, industry, and public-sector applications. This would also contribute to the stronger

[1] https://openwebsearch.eu/the-project/

cross-fertilisation and coherence between initiatives sought by the new Single Basic Act.

EuroHPC has increasingly emerged as a key European platform for quantum technologies. Europe should continue building on this foundation by promoting hybrid infrastructures that combine the complementary strengths of quantum computing, supercomputing, and artificial intelligence. The greatest innovation potential lies in hybrid computing environments, where different technologies reinforce one another and enable new kinds of scientific and industrial applications.

As the EU seeks to strengthen its position in critical computing technologies, including semiconductors, EuroHPC can further serve as a platform for synergies across initiatives and supporting innovation and competence development from research through deployment. In semiconductors, EuroHPC AI Factories could help strengthen the European critical technology ecosystem and contribute to the RDI processes, by e.g. strengthening European skills and competences, developing simulation tools, providing computing platforms for chip design, and advancing new chip prototypes for the science community.

For greater future impact, it is necessary to sustain the funding and ensure it responds adequately to evolving priorities. Equally important is to ensure the governance structures, technical substance knowledge and skills in JUs reflect their growing and developing competences in the more streamlined framework. Strengthening joint planning and programming, and the role of expert advisory groups and stakeholders can further boost JUs' responses to challenges on the way to competitive scientific and technological bases, and digital leadership.

CSC – IT Center for Science

Kimmo Koski
Managing Director

Irina Kupiainen
Director of EU Affairs, Policy and Business Development