EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence

2024/0016(CNS) - 24/04/2024 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 525 votes to 32, with 21 abstentions, a legislative resolution on the proposal for a Council regulation amending Regulation (EU) 2021/1173 as regards an EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence.

The proposed amendment will enable the High-Performance Computing Joint Undertaking (EuroHPC) to make its HPC capacity available to innovative European start-ups, in order to foster the development, testing and validation of AI solutions and to enable the formation and large-scale development of general-purpose, reliable and ethical AI models and systems, thereby strengthening Europe's competitiveness and industrial base in the field of AI.

Parliament approved the Commission proposal subject to the following amendments:

Artificial Intelligence Factory pillar for trustworthy and ethical Artificial Intelligence

This pillar covers activities for the provision of an Artificial Intelligence-oriented supercomputing service infrastructure that is aiming at further developing the innovation capabilities and skills of the Artificial Intelligence ecosystem; those activities should address, *inter alia*:

- the acquisition and operation of Artificial Intelligence-dedicated supercomputers co-located with data centres or connected to data centres via very high speed networks;

- the upgrade of existing EuroHPC supercomputers with Artificial Intelligence capabilities;

- providing access to the Artificial Intelligence-dedicated supercomputers or EuroHPC supercomputers upgraded with Artificial Intelligence capabilities, including widening their use to a large number of public and private users, including start-ups, scale-ups, SMEs, higher education institutions and the wider scientific community;

- broadly communicating the opportunities offered by the Artificial Intelligence Factories to start-ups, scale-ups and research and innovation communities;

- through a transparent, equal opportunities and open process, attracting, pooling, training and retaining talent, including students, developers, researchers, scientists and the user community;

- interacting with the other Artificial Intelligence Factories, making their services accessible across Europe, paying constant attention to geographical and gender balance, and cooperating with the EuroHPC Competence Centres and Centres of Excellence, and with relevant Artificial Intelligence initiatives of the Union;

- maintaining and optimising supercomputers with artificial intelligence capabilities, ensuring their reliability and performance for advanced computational tasks.

Hosting entities

For the Artificial Intelligence-dedicated supercomputers, the following additional selection criteria should apply for the hosting entities:

- the proximity or connection via very high speed networks with a planned or an established data centre;

- vision and plans of the hosting entity regarding the **Artificial Intelligence-dedicated supercomputer's energy efficiency and environmental sustainability**, making use of a lifecycle approach, the availability of adequate access to clean affordable energy, also through power purchase agreements which may be based on renewable energy, and the use of electricity that is locally generated;

- vision, plans and capability of the hosting entity to address the challenges of the Artificial Intelligence start-up and research and innovation ecosystem and the Artificial Intelligence user community, enhancing such an ecosystem by promoting synergies and innovation, including investments in future technologies, contributing and providing a supportive centralised or distributed Artificial Intelligence-oriented supercomputing service;

- existing capabilities and future plans of the hosting entity to contribute to the development, **attraction, training and retention of the talent pool** and the creation of skills, capabilities and competences to use the supercomputers, including in the form of support for start-ups through incubator or accelerator programmes.

Use of EuroHPC supercomputers

The Governing Board should define specific access conditions for different types of users or applications, including dedicated access to start-ups, scale-ups and SMEs. Only proposals for developing **trustworthy and ethical Artificial Intelligence models, systems and applications that are in line with Union rules and values**, should be eligible for access. The access criteria, methodologies and guidance on access prioritisation will be defined in accordance with the Ethics By Design approach for Artificial Intelligence and with the support of the Ethics Appraisal Mechanism of Horizon Europe.

One-stop shop

The amended text stressed that a one-stop shop should be established by the Joint Undertaking on the basis of the principles of open access, in a way that different types of users can fully leverage the potential of AI in supercomputing. The opportunities provided by AI Factories should be widely communicated to start-ups, small and medium enterprises (SMEs), the innovation ecosystem and researchers engaged in Union programmes, highlighting the numerous benefits that AI can offer in supercomputing applications.