Council of the European Union

Brussels, 16 May 2024
(OR. en)

9700/24

Interinstitutional File: 2024/0016(NLE)

RECH 219
COMPET 529
IND 251
TELECOM 173

NOTE

From:	Permanent Representatives Committee (Part 1)
To:	Council
No. prev. doc.:	9331/24
No. Cion doc.:	5836/1/24 REV 1
Subject:	Council Regulation amending Regulation (EU)2021/1173 as regards an EuroHPC initiative for start-ups to boost European leadership in trustworthy Artificial Intelligence - *Political agreement*

I. INTRODUCTION

1. On 25 January 2024, the Commission transmitted the above-mentioned proposal[1] for a Regulation to the European Parliament and to the Council.

2. The objective of this Regulation is to amend Regulation (EU) 2021/1173 on establishing the European High Performance Computing (EuroHPC) Joint Undertaking to introduce a further objective for the Joint Undertaking to support the development of a highly competitive and innovative Artificial Intelligence (AI) ecosystem in the Union by developing and operating AI Factories.

[1] 5836/1/24 REV 1.

3. The proposed amendment is part of the new AI initiative of the Union, announced by the President of the European Commission Ursula von der Leyen in her 2023 State of the Union address, which aims at making the Union's supercomputing capacity further available to innovative AI European startups to train their models.

4. The proposed amendment is a continuation of the activities of the existing EuroHPC Joint Undertaking. It broadens the scope of the existing Regulation by including AI Factories, defined as entities providing an AI supercomputing service infrastructure which is composed, amongst other, of an AI-supercomputer, an associated data centre, and AI-oriented supercomputing services.

II. WORK IN OTHER INSTITUTIONS

5. On 14 February 2024, the Council consulted the European Parliament and the European Economic and Social Committee. The European Economic and Social Committee adopted its opinion on 20 March 2024[2].

   The proposal was referred to the Committee on Industry, Research and Energy (ITRE) which appointed Ms Maria da Graça CARVALHO (EPP, PT) as Rapporteur. The European Parliament voted its report at the plenary of 22-25 April 2024.

III. CONCLUSION

6. The compromise proposal provided by the Presidency represents an overall balanced package which could allow for political agreement by the Council. At technical level, all delegations supported the Presidency text.

7. The Permanent Representatives Committee endorsed the Presidency compromise text on 8 May 2024 and submits it to the Council for political agreement at the Competitiveness Council meeting on 23 May 2024.

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[2] 8361/24.

ANNEX

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 COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 187 and Article 188, first paragraph, thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Parliament[3],

Having regard to the opinion of the European Economic and Social Committee[4],

Acting in accordance with a special legislative procedure,

[3] OJ C , , p. .
[4] Opinion of.., OJ C, p.

Whereas:

(1) Regulation (EU) 2024/… of the European Parliament and of the Council[5] laying down harmonised rules on artificial intelligence (the "Artificial Intelligence Act") aims to improve the functioning of the internal market by laying down a uniform legal framework in particular for the development, marketing and use of artificial intelligence in conformity with Union values.

(2) Since 2021, when Council Regulation (EU) 2021/1173[6] was adopted, the field of artificial intelligence (AI) has seen enormous technical progress and become a highly strategic and contested domain globally. The Union is at the forefront of efforts to support responsible research and innovation in trustworthy and ethical AI, while setting guardrails and developing effective governance.

(3) On 13 September 2023, as part of a comprehensive approach to support responsible research and innovation in AI, the Commission announced a new strategic initiative to make the Union's high-performance computing capacity available to innovative European startups in trustworthy AI to train their models. That complements work on setting guardrails for AI through Regulation (EU) 2024/… , establishing governance structures, and supporting innovation through the Coordinated Plan on Artificial Intelligence.

(4) Given that the Union's most powerful world-class supercomputing capacity is found in the European High Performance Computing Joint Undertaking's (the "Joint Undertaking") facilities, it is those facilities that should be made available in order for the Union's initiative to become a reality. It is accordingly necessary to introduce a further objective to the existing six objectives of the Joint Undertaking that would cover the contribution made by its supercomputers to the new AI initiative of the Union.

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5 Regulation (EU) 2024/… of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts (OJ L …).

6 Council Regulation (EU) 2021/1173 of 13 July 2021 on establishing the European High Performance Computing Joint Undertaking and repealing Regulation (EU) 2018/1488 (OJ L 256, 19.7.2021, p. 3, ELI: http://data.europa.eu/eli/reg/2021/1173/oj).

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AI-optimised supercomputers or partitions of supercomputers to enable machine learning and training of general purpose AI models. The Joint Undertaking should be allowed to create a new access mode to its computing resources for the AI startup ecosystem and the research and innovation ecosystem and to develop dedicated AI applications optimized to run on its supercomputers. The Joint Undertaking should also be allowed to appoint existing EuroHPC hosting entities as Artificial Intelligence Factories if the hosting entity can demonstrate that its supercomputer has enough computing resources for training large scale, general-purpose artificial intelligence models and emerging artificial intelligence applications, and provided the hosting entity is implementing the full range of additional activities necessary to develop and support the Artificial Intelligence ecosystem. Those changes would enable the Joint Undertaking to offer tailored computing power and services to nurture large-scale AI training and development and uptake in the Union, which is not feasible under the current Regulation. AI Factories will interact with one another, with relevant AI initiatives of the Union and, where applicable, AI Factories may interact with relevant national AI ecosystems and national AI initiatives.

(6) In order to align the application date of this Regulation with the application date of the provisions of Regulation (EU) 2024/… [AI Act] of the European Parliament and of the Council laying down harmonised rules on artificial intelligence, it should apply without undue delay.

(7) Regulation (EU) 2021/1173 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) 2021/1173 is amended as follows:

(1) Article 2 is amended as follows:

(a) the following points (3a) and (3b) are inserted:

‘(3a) ‘Artificial Intelligence-optimised supercomputer’ means a supercomputer that is primarily designed for training large scale, general-purpose artificial intelligence models and emerging artificial intelligence applications;
(3b) ‘Artificial Intelligence Factory’ means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-optimised supercomputer or Artificial Intelligence partition of supercomputer, an associated data centre, dedicated access and artificial intelligence-oriented supercomputing services and attracting and pooling talent to provide the competences required in using the supercomputers for Artificial Intelligence;’;

(b) point (9) is replaced by the following:

‘(9) 'EuroHPC supercomputer' means any computing system fully owned by the Joint Undertaking or co-owned with other Participating States or a consortium of private partners, which can be a classical supercomputer (high-end supercomputer, industrial-grade supercomputer, Artificial Intelligence-optimised supercomputer or mid-range supercomputer), a hybrid classical-quantum computer, a quantum computer or a quantum simulator;’;

(2) in Article 3(2), the following point (h) is added:

‘(h) to develop and operate the Artificial Intelligence Factories in support of the further development of a highly competitive and innovative Artificial Intelligence ecosystem in the Union’;

(3) in Article 4(1), the following point (h) is added:

‘(h) Artificial Intelligence Factory pillar for trustworthy and ethical Artificial Intelligence, covering activities for the provision of an Artificial Intelligence-oriented supercomputing service infrastructure that is aiming at further developing the research and innovation capabilities, competences and skills of the Artificial Intelligence ecosystem; it shall include the following activities:

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

(ii) the upgrade of existing EuroHPC supercomputers with Artificial Intelligence capabilities;

(iii) providing access and fair access opportunities to the Artificial Intelligence-optimised supercomputers or EuroHPC supercomputers upgraded with Artificial Intelligence capabilities, including widening their use to a large number of public and private users, including startups and small and medium-sized enterprises;

(iv) the operation of centralised or distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup ecosystem and the research and innovation ecosystem providing algorithmic support, support for the further development, training, testing, evaluation and validation of Artificial Intelligence training models and systems, and support for the development of emerging large-scale Artificial Intelligence applications in strategic areas such as health and care, climate change, robotics, or connected and automated driving.

(v) the operation of supercomputer-friendly programming facilities, including for the parallelisation of Artificial Intelligence applications for optimising the use of supercomputing capabilities;

(vi) the operation of other Artificial Intelligence-enabling supercomputing services;

(vii) attracting, pooling and training talent to develop their competences and skills in using the EuroHPC supercomputers for Artificial Intelligence;

(viii) interacting with the other Artificial Intelligence Factories, making their services accessible across Europe and cooperating with the EuroHPC Competence Centres and Centres of Excellence, and with relevant Artificial Intelligence initiatives of the Union, such as the hubs of Artificial Intelligence startups, the Artificial Intelligence and data ecosystems, the Artificial Intelligence Testing and Experimentation Facilities, the European central Artificial Intelligence platform, the Artificial Intelligence-oriented Digital Innovation Hubs, the Artificial Intelligence related European Institute of Innovation and Technology Knowledge and Innovation Communities, relevant European research infrastructures and other related initiatives.'

(4) in Article 9(5), the following point (g) is added:

'(g) for the Artificial Intelligence-optimised supercomputers the following additional selection criteria shall apply for the hosting entities:

(i) proximity with an established datacentre, or connection to it via very high speed networks;

(ii) vision, plans and capability of the hosting entity to address the challenges of the Artificial Intelligence startup ecosystem, the research and innovation ecosystem, and the Artificial Intelligence user community and providing a supportive centralised or distributed Artificial Intelligence-oriented supercomputing service;

(iii) quality and pertinence of experience and know-how available at the intended team that would be in charge for the supportive Artificial Intelligence-oriented supercomputing service environment;

(iv) plans for interaction and cooperation with other Artificial Intelligence Factories, with EuroHPC Competence Centres and EuroHPC Centres of Excellence and with relevant Artificial Intelligence activities such as the hubs of Artificial Intelligence startups, the Artificial Intelligence and data ecosystems, the Artificial Intelligence Testing and Experimentation Facilities, the European central Artificial Intelligence platform, the Artificial Intelligence-oriented Digital Innovation Hubs and other related initiatives;

(v) existing capabilities and future plans of the hosting entity to contribute to the development of the talent pool';

(5) in Article 9, the following paragraphs (5a) and (6a) are added:

(5a) An existing hosting entity may apply to become an Artificial Intelligence Factory. Following a call for expression of interest, an existing hosting entity shall be selected by the Governing Board through a fair and transparent process based, inter alia, on the selection criteria described in Article 9(5)(g), and provided that the hosting entity can demonstrate that its EuroHPC supercomputer has enough computing resources for training large scale, general-purpose artificial intelligence models and emerging artificial intelligence applications;

(6a) For the Artificial Intelligence-optimised supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for users, including startups, small and medium-sized enterprises and scientific users, to facilitate access to its support services.

(6) in Article 10(2), point (l) is replaced by the following:

'(l) the specific conditions applicable when the hosting entity operates a EuroHPC supercomputer for industrial usage, *or an Artificial Intelligence*-optimised *supercomputer.*';

(7) the following Article 12a is inserted:

‘*Article 12a*

Acquisition and ownership of Artificial Intelligence-optimised supercomputers

1. The Joint Undertaking shall acquire Artificial Intelligence-optimised supercomputers and shall own them.

2. The Union financial contribution referred to in Article 5(1) shall cover up to 50 % of the acquisition costs plus up to 50 % of the operating costs of the Artificial Intelligence-optimised supercomputers. The operating costs include the costs for the Artificial Intelligence-oriented supercomputing services.

The remaining total cost of ownership of the Artificial Intelligence- optimised supercomputers shall be covered by the Participating State where the hosting entity is established or by the Participating States in the hosting consortium, possibly supplemented by the contributions referred to in Article 6.

3. The selection of the supplier of the Artificial Intelligence- optimised supercomputers shall address the security of the supply chain. It shall be based on tender specifications that shall be demand-driven, shall take into account the user requirements and the general system specifications provided by the selected hosting entity in its application for the call for expression of interest.

4. The Joint Undertaking may act as first user of Artificial Intelligence- optimised supercomputers that integrate technologies primarily developed in the Union.

5. The Governing Board may decide in the work programme, if duly justified for security reasons, to condition the participation of suppliers in the acquisition of the Artificial Intelligence- optimised supercomputers in accordance with Article 12(6) of Regulation (EU) 2021/694 or to limit the participation of suppliers for security reasons or actions directly related to the Union's strategic autonomy, in accordance with Article 18(4) of that Regulation.

6. The Artificial Intelligence- optimised supercomputers shall be located in a hosting entity of a EuroHPC supercomputer or a supercomputing centre located in the Union.

7. Without prejudice to the winding up of the Joint Undertaking, as referred to in Article 23(4) of the Statutes, at the earliest five years after the successful acceptance test by the Artificial Intelligence- optimised supercomputer installed in a hosting entity, the ownership of the Artificial Intelligence- optimised supercomputer may be transferred to that hosting entity, sold to another entity or decommissioned upon decision of the Governing Board and in accordance with the hosting agreement. In the case of transfer of ownership of an Artificial Intelligence- optimised supercomputer, the hosting entity shall reimburse the Joint Undertaking the residual value of the supercomputer that is transferred. If there is no transfer of ownership to the hosting entity but a decision for decommissioning, the relevant costs shall be shared equally by the Joint Undertaking and the hosting entity. The Joint Undertaking shall not be liable for any costs incurred after the transfer of ownership of the Artificial Intelligence- optimised supercomputer or after its sale or decommissioning.'

(8) Article 15 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. The Joint Undertaking may launch a call for expressions of interest to upgrade the EuroHPC supercomputers it owns or co-owns, *to raise the performance level of the supercomputer close to exascale, or for increasing the Artificial intelligence capabilities of the supercomputer, or to increase the operational performance of the supercomputer in any other way, including quantum accelerators.* ';

(b) paragraph 2 is deleted;

(c) paragraph 5 is replaced by the following:

‘5. The *percentage of the* Union*’s* financial contribution for *the acquisition costs of* the upgrade shall *be the same as the percentage of the Union’s financial contribution for the original EuroHPC supercomputer*, depreciated over the expected remaining lifetime of the original supercomputer. *The percentage of the Union’s financial contribution for the additional operational* costs of the upgrade shall be *the same as the percentage of the Union’s financial contribution for the original EuroHPC supercomputer*. For the petascale supercomputers acquired during the time of application of Regulation (EU) 2018/1488 the Union financial contribution for the upgrade shall cover up to 35 % of the additional operating costs’;

(9) Article 16 is amended as follows:

(a) the following paragraph 1a is inserted:

‘1a. The Artificial Intelligence- optimised supercomputers and EuroHPC supercomputers upgraded for Artificial Intelligence capabilities shall primarily be used for the development, testing, evaluation, and validation of large scale, general purpose artificial intelligence training models and emerging Artificial Intelligence applications, as well as for the further development of artificial intelligence solutions in the Union requiring High Performance Computing and the execution of large-scale Artificial Intelligence algorithms for the resolution of science problems.’;

(b) the following paragraph 2a is inserted:

‘2a. The Governing Board shall define special access conditions for the Artificial Intelligence- optimised supercomputers and the EuroHPC supercomputers upgraded for Artificial Intelligence capabilities in accordance with Article 17 taking into account the specific needs of the Artificial Intelligence startup ecosystem and the research and innovation ecosystem. This shall include dedicated access to startups and small and medium-sized enterprises. Only proposals for developing trustworthy and ethical Artificial Intelligence models, systems and applications that are in line with EU values shall be eligible for access.’

(10) Article 17, paragraph 1 is replaced by the following:

‘1. The share of the Union's access time to each high-end, quantum, *and Artificial Intelligence*- optimised *EuroHPC supercomputer* shall be directly proportional to the financial contribution of the Union referred to in Article 5(1) to the total cost of ownership of the EuroHPC supercomputer and shall thus not exceed 50 % of the total access time of the EuroHPC supercomputer.’

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Council

The President