European Parliament

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Committee on Industry, Research and Energy

2024/0016(CNS)

29.2.2024

AMENDMENTS 1 - 71

Draft report Maria da Graça Carvalho

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

Proposal for a regulation (COM(2024)0029 – C9-0013/2024 – 2024/0016(CNS))

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Amendment 1 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation Citation 4 a (new)

Text proposed by the Commission

Amendment

Having regard to the Communication from the Commission to the European Parliament, the Council, the European Social and Economic Committee and the Committee of the Regions on boosting startups and innovation in trustworthy artificial intelligence,

Or. en

Amendment 2 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation Citation 4 b (new)

Text proposed by the Commission

Amendment

Having regard to the European Parliament report on increasing innovation, industrial and technological competitiveness through a favourable environment for startups and scale-ups,

Or. en

Amendment 3 Maria da Graça Carvalho

Proposal for a regulation Recital 2

Text proposed by the Commission

(2) Since 2021, when Council Regulation (EU) 2021/1173⁴ was adopted, the field of artificial intelligence (AI) has

Amendment

(2) Since 2021, when Council Regulation (EU) 2021/1173⁴ 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 innovation in trustworthy AI, while setting guardrails and developing effective governance.

http://data.europa.eu/eli/reg/2021/1173/oj).

seen enormous technical progress and become a highly strategic and contested domain globally. The Union is at the forefront of efforts to support ethical and responsible innovation in trustworthy AI, while setting guardrails and developing effective governance.

⁴ 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).

Or en

Amendment 4 **Robert Roos**

Proposal for a regulation Recital 2

Text proposed by the Commission

(2) Since 2021, when Council Regulation (EU) 2021/11734 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* innovation in trustworthy AI, while setting guardrails and developing effective governance.

Since 2021, when Council (2) Regulation (EU) 2021/11734 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 innovation in trustworthy AI, while setting guardrails and developing effective governance.

http://data.europa.eu/eli/reg/2021/1173/oj).

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⁴ 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:

Amendment

⁴ 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:

⁴ 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. http://data.europa.eu/eli/reg/2021/1173/oj).

Justification

It should be either responsible innovation, whatever that may mean, or innovation while setting guardrails.

Amendment 5 Ville Niinistö on behalf of the Verts/ALE Group

Proposal for a regulation Recital 4

Text proposed by the Commission

(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 Commission'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.

Amendment

Given that the Union's most **(4)** 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 Commission'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, prioritizing fairness, transparency, trustworthiness, and ensuring positive societal impact.

Or. en

Justification

The addition of a new objective must serve the Union citizens and goals.

Amendment 6 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation Recital 5

Text proposed by the Commission

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AIdedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and the wider scientific community active in AI and to develop dedicated AI applications optimized to run on its supercomputers. 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.

Amendment

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AIdedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models thus strengthening EU's competitiveness and industrial base in AI. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and scaleups with the aim of overcoming cost constraints and a lack of resource expertise, and the wider scientific community active in AI and to develop dedicated AI applications optimized to run on its supercomputers. 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.

Or. en

Amendment 7 Maria da Graça Carvalho

Proposal for a regulation Recital 5

Text proposed by the Commission

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AI-dedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and the wider scientific

Amendment

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of *upgrading or* acquiring and operating AI-dedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources *in particular* for AI startups, *small and*

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community active in AI and to develop dedicated AI applications optimized to run on its supercomputers. 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.

medium enterprises, higher education institutions, research centres and the wider scientific community active in AI and to develop dedicated AI applications, models and systems optimized to run on its supercomputers. 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.

Or en

Amendment 8
Ville Niinistö
on behalf of the Verts/ALE Group

Proposal for a regulation Recital 5

Text proposed by the Commission

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AIdedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and the wider scientific community active in AI and to develop dedicated AI applications optimized to run on its supercomputers. 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.

Amendment

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AIdedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of trustworthy and ethical large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and the wider scientific community active in AI and to develop dedicated AI applications optimized to run on its supercomputers, while safeguarding the basic principles of open acces, fairness and transparency. 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.

Justification

The Union has set a conditionality for AI in the form of trustworthiness and ethics, which must be reflected in the text.

Amendment 9 Henna Virkkunen

Proposal for a regulation Recital 5

Text proposed by the Commission

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AIdedicated supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and the wider scientific community active in AI and to develop dedicated AI applications optimized to run on its supercomputers. 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.

Amendment

(5) The new objective would allow the Joint Undertaking to perform activities in the domains of acquiring and operating AI*oriented* supercomputers or partitions of supercomputers to enable fast machine learning and training of large AI foundation models. The Joint Undertaking should also be allowed to create a new access mode to its computing resources for AI startups and the wider scientific community active in AI and to develop dedicated AI applications optimized to run on its supercomputers. 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.

Or. en

Justification

It Is important to leave space for more various use cases, while maintaining the idea of putting more emphasis on AI. Therefore 'Artificial Intelligence dedicated' should be replaced with 'Artificial Intelligence oriented' consistently throughout the text.

Amendment 10 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 a (new)

Text proposed by the Commission

Amendment

Whereas the use of (5 a)supercomputers for Artificial Intelligence (AI), requires a higher usage of data, and current datacentres are progressively reaching their storage capacity limits due to the surge in digitalization and the adoption of new technologies, it is essential that supercomputers dedicated for AI are either located nearby or are connected via high-speed networks to an existing datacentre, or future planned datacentre, that is not overloaded and possesses available storage capacities. Furthermore, such datacentres should be interconnected with the Common European Data Spaces to facilitate the training of models in key sectorial domains.

Or. en

Amendment 11 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation Recital 5 a (new)

Text proposed by the Commission

Amendment

(5 a) Environmental impact assessment should be conducted together with a mitigation plan for high energy consumption when establishing the Artificial Intelligence supercomputing service infrastructure. Data centres should fully respect the Energy Efficiency Directive requirements as outlined in Article 12.

Or. en

Amendment 12 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 b (new)

Text proposed by the Commission

Amendment

Whereas the deployment of (5 b)Artificial Intelligence applications requires a significant increase in computational power, which in turn leads to a greater consumption of electrical energy, it is imperative that both new supercomputers dedicated for AI and existing ones being upgraded for AI purposes ensure a stable and secure grid connection and electricity supply to prevent these supercomputers from being underutilized due to potential energy supply constraints. The Joint Undertaking shall regularly monitor and report on the energy consumption of these facilities.

Or. en

Amendment 13 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 c (new)

Text proposed by the Commission

Amendment

(5 c) Whereas the deployment and advancement of Artificial Intelligence (AI) necessitate substantial computational power and specialized support, AI Factories will provide comprehensive supercomputing support services to AI startups, small innovative companies, and the broader research and innovation ecosystem. These services are crucial for facilitating access to supercomputers, offering dedicated programming facilities and algorithmic support for the development, testing, evaluation, and

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validation of AI training models and systems. Furthermore, they will assist in the creation of novel use cases and emerging applications across the European strategic areas including robotics and manufacturing, new materials and batteries, connected and automated driving, health and care, biotech, climate change and adaptation, complex system dynamics, virtual worlds and Digital Twins, cybersecurity, aerospace, agricultural practices, research and innovation and public sector among others.

Or. en

Amendment 14 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 d (new)

Text proposed by the Commission

Amendment

(5 d) AI Factories are committed to promoting innovation and knowledge in AI technology by working in close partnership with startups, SMEs, universities, research centres, and key industrial sectors. This collaboration aims to attract, retain, and develop talent capable of leveraging new technologies, bringing the scientific community closer to AI through specialized support and training, and enhancing access to AI innovations. Supporting the establishment of new enterprises and facilitating joint innovation projects, including the development of human-in-the-loop AI systems for responsible applications, addressing the challenges faced by the AI startup, research, and innovation ecosystem. This effort will promote synergies, encourage collaboration and innovation, and foster the development of a vibrant and sustainable AI ecosystem,

thus contributing to the advancement of society and various industrial sectors.

Or. en

Amendment 15 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 e (new)

Text proposed by the Commission

Amendment

Whereas the EuroHPC Joint Undertaking (JU) is established to serve as a singular contact point at the EU level, directing startups, small companies, and interested users to specific service centres with fair and transparent access procedures, it plays a key role in establishing a one-stop shop to simplify access to its support services for hosting entities. This one-stop shop will represent the principles of open and easy access, ensuring that users can fully leverage the potential of Artificial Intelligence (AI) in supercomputing. The opportunities provided by the 'AI Factories' will be widely communicated to startups, SMEs, the innovation ecosystem and researchers engaged in European programmes, highlighting the numerous benefits that AI can offer in supercomputing applications. Additionally, the Union-level cooperation of 'AI Factories' will make computing power available as a service across the Union, essential to the support services offered, further easing access to this critical infrastructure. This will also serve to develop demand-oriented EuroHPC supercomputers, ensuring that the infrastructure meets the evolving needs of users and sectors across the Union.

Or. en

Amendment 16 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 f (new)

Text proposed by the Commission

Amendment

(5f)Whereas the training of Artificial Intelligence (AI) models heavily relies on specialized AI chips, which are predominantly designed and developed outside the European Union, addressing the design and development of a new generation of microprocessors and AI accelerators is critical. This effort is essential to fully power the first European post-exascale supercomputer, thereby reducing dependency on non-EU technologies and enhancing the Union's technological sovereignty. Furthermore, promoting initiatives such as RISC-V is crucial in fostering open-source and innovative microprocessor technologies within the EU. The Commission should assess the procurement of European technology in selection criteria when such technology is developed within Europe.

Or. en

Amendment 17 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Recital 5 g (new)

Text proposed by the Commission

Amendment

(5 g) Implementing 'Second Life' agreements for IT equipment becomes essential when the ratio of 'Computational Power' to 'Energy Consumed' becomes too unfavourable for its original purpose, indicating that an

upgrade to more energy-efficient equipment is advisable, or when there are upgrades due to technological improvements. Agreements to implement recycling at the end of the supercomputers' lifecycle are also necessary. Such practices would not only enhance efficiency but also contribute to reducing European dependencies.

Or. en

Amendment 18 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 1 – point a
Regulation (EU) 2021/1173
Article 2, point 3b

Text proposed by the Commission

(3b) 'Artificial Intelligence-dedicated supercomputer' means a supercomputer that is primarily designed for training large scale, general-purpose artificial intelligence models and emerging artificial intelligence applications;

Amendment

(3b) (3a) 'Artificial Intelligencededicated supercomputer' means a supercomputer that is primarily designed for training large scale, general-purpose artificial intelligence models and emerging artificial intelligence applications, technologies and systems;

Or. en

Amendment 19 Henna Virkkunen

Proposal for a regulation
Article 1 – paragraph 1 – point 1 – point a
Regulation (EU) 2021/1173
Article 2, point 3b

Text proposed by the Commission

(3b) 'Artificial *Intelligence-dedicated* supercomputer' means a supercomputer that is primarily designed for training large

Amendment

(3b) 'Artificial *Intelligence-oriented* supercomputer' means a supercomputer that is primarily designed for training large

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scale, general-purpose artificial intelligence models and emerging artificial intelligence applications;

scale, general-purpose artificial intelligence models and emerging artificial intelligence applications;

Or. en

Justification

It is important to leave space for more various use cases, while maintaining the idea of putting more emphasis on AI. Therefore 'Artificial Intelligence dedicated' should be replaced with 'Artificial Intelligence oriented' consistently throughout the text.

Amendment 20 Robert Roos

Proposal for a regulation Article 1 – paragraph 1 – point 1 – point a Regulation (EU) 2021/1173 Article 2 point 3b

Text proposed by the Commission

(3b) 'Artificial Intelligence-dedicated supercomputer' means a supercomputer that is primarily designed for training large scale, *general-purpose* artificial intelligence models and emerging artificial intelligence applications;

Amendment

(3b) 'Artificial Intelligence-dedicated supercomputer' means a supercomputer that is primarily designed for training large scale, *civil* artificial intelligence models and emerging artificial intelligence applications;

Or. en

Amendment 21 Ville Niinistö on behalf of the Verts/ALE Group

Proposal for a regulation Article 1 – paragraph 1 – point 1 – point a Regulation (EU) 2021/1173 Article 2, point 3b

Text proposed by the Commission

(3b) 'Artificial Intelligence-dedicated supercomputer' means a supercomputer that is primarily designed for training large

Amendment

(3b) 'Artificial Intelligence-dedicated supercomputer' means a supercomputer that is primarily designed for training large

 scale, *general-purpose* artificial intelligence models and emerging artificial intelligence applications;

scale, artificial intelligence models and emerging artificial intelligence applications;

Or. en

Justification

The notion to be defined, Artificial Intelligence-dedicated supercomputer, is not hinting at scope restrictions to general purpose AI. An AI dedicated supercomputer can be used for specific AI too, without being a different machine. Its use, is now regulated in art. 16 and can be restricted to specific cases.

Amendment 22 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation
Article 1 – paragraph 1 – point 1 – point a
Regulation (EU) 2021/1173
Article 2, point 3c

Text proposed by the Commission

(3c) 'Artificial Intelligence Factory' means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated 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;;

Amendment

'Artificial Intelligence Factory' means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated supercomputer or Artificial Intelligence partition of supercomputer or EuroHPC supercomputer upgraded for Artificial *Intelligence*, an associated data centre, dedicated access and artificial intelligenceoriented supercomputing services and attracting, *developing* and pooling talent to assist and guide users in the utilization of the supercomputers for Artificial Intelligence and providing the services required for their maintenance of supercomputers using Artificial Intelligence;

Or. en

Justification

With the definition proposed by the EC, EuroHPC supercomputers upgraded for Artificial Intelligence are not included. An essential factor in EuroHPC supercomputers is assistance to users to optimize the use of supercomputers. Artificial Intelligence factories can also be environments in which knowledge of supercomputers with artificial intelligence is promoted, and their maintenance is optimised.

Amendment 23
Ville Niinistö
on behalf of the Verts/ALE Group

Proposal for a regulation
Article 1 – paragraph 1 – point 1 – point a
Regulation (EU) 2021/1173
Article 2, point 3c

Text proposed by the Commission

(3c) 'Artificial Intelligence Factory' means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated 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;;

Amendment

'Artificial Intelligence Factory' (3c)means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated supercomputer or Artificial Intelligence partition of a supercomputer, an associated data centre, dedicated access and artificial intelligenceoriented supercomputing services that is openly and actively attracting and pooling talent to provide the competences required in using the supercomputers for Artificial Intelligence and respond to the needs and goals of the Union;

Or. en

Justification

The requirements for the AI Factory denomination must be composed of an infrastructure layer and a proper goal-setting condition. The proposed change adds a multiplier effect by inserting openness and proactivity. As the regulation is linked to funding, EU participation must be weighed against the needs and goals of the Union.

Amendment 24 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho, Lina Gálvez Muñoz

Proposal for a regulation Article 1 – paragraph 1 – point 1 – point a Regulation (EU) 2021/1173 Article 2, point 3c

Text proposed by the Commission

(3c) 'Artificial Intelligence Factory' means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated 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;;

Amendment

(3c) 'Artificial Intelligence Factory' means a centralised or distributed entity providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated supercomputer or Artificial Intelligence partition of supercomputer, an associated data centre, dedicated access and artificial intelligence-oriented supercomputing services and attracting, pooling *and retaining* talent to provide the competences, *skills and knowledge* required in using the supercomputers for Artificial Intelligence;;

Or. en

Amendment 25 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 1 – point a
Regulation (EU) 2021/1173
Article 2, point 3c

Text proposed by the Commission

(3c) 'Artificial Intelligence Factory' means a centralised or distributed *entity* providing an Artificial Intelligence supercomputing service infrastructure which is composed of an Artificial Intelligence-dedicated supercomputer or Artificial Intelligence partition of supercomputer, an associated data centre, dedicated access and artificial intelligence-oriented supercomputing services and

Amendment

(3c) (3b) 'Artificial Intelligence
Factory' means a centralised or distributed open ecosystem providing an Artificial
Intelligence supercomputing service
infrastructure which is composed of an
Artificial Intelligence-dedicated
supercomputer or Artificial Intelligence
partition of supercomputer, an associated
data centre, dedicated access and Artificial
Intelligence-oriented supercomputing

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attracting and pooling talent to provide the competences required in using the supercomputers for Artificial Intelligence;;

services, and attracting and pooling talent to provide the competences required in using the supercomputers for Artificial Intelligence;

Or. en

Amendment 26 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho, Lina Gálvez Muñoz

Proposal for a regulation Article 1 – paragraph 1 – point 2 Regulation (EU) 2021/1173 Article 3 – paragraph 2– point h

Text proposed by the Commission

(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;

Amendment

(h) to develop and operate the Artificial Intelligence Factories in support of the further development of a highly competitive, innovative, *trustworthy and ethical* Artificial Intelligence ecosystem in the Union;

Or. en

Amendment 27 Maria da Graça Carvalho

Proposal for a regulation Article 1 – paragraph 1 – point 2 Regulation (EU) 2021/1173 Article 3 – paragraph 2, point h

Text proposed by the Commission

(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;

Amendment

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

Or. en

Amendment 28 Maria da Graça Carvalho

Proposal for a regulation Article 1 – paragraph 1 – point 3 Regulation (EU) 2021/1173 Article 4, paragraph 1, point h

Text proposed by the Commission

(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 innovation capabilities and skills of the Artificial Intelligence ecosystem; *it shall include the following* activities:

Amendment

(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 innovation capabilities and skills of the Artificial Intelligence ecosystem; *those* activities *shall address inter alia*:

Or. en

Amendment 29 Susana Solís Pérez, Izaskun Bilbao Barandica

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (i)

Text proposed by the Commission

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

Amendment

(i) the acquisition and operation of Artificial Intelligence-dedicated supercomputers *and its adequate data infrastructure*, co-located with large data centres or connected to data centres via very high speed networks;

Or. en

Justification

There is a parallel proposal for a data centre infrastructure, to improve the operation of

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artificial intelligence factories we propose that it can be unified to speed up the construction of these data centres together with supercomputers.

Amendment 30 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (i)

Text proposed by the Commission

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

Amendment

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

Or. en

Amendment 31 Susana Solís Pérez, Izaskun Bilbao Barandica

Proposal for a regulation Article 1 – paragraph 1 – point 3 Regulation (EU) 2021/1173 Article 4, paragraph 1, point h, subpoint (ii)

Text proposed by the Commission

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

Amendment

(ii) the upgrade of existing EuroHPC supercomputers with Artificial Intelligence capabilities *and its correspondent data infrastructures*;

Or. en

Justification

There is a parallel proposal for a data centre infrastructure, to improve the operation of artificial intelligence factories we propose that it can be unified to speed up the construction of these data centres together with supercomputers.

Amendment 32 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph1, point h, subpoint (iii)

Text proposed by the Commission

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

Amendment

(iii) 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 startups, small and medium-sized enterprises, *higher education institutions* and the wider scientific community;

Or. en

Amendment 33 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (iii)

Text proposed by the Commission

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

Amendment

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

Or. en

Amendment 34 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho, Lina Gálvez Muñoz

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Proposal for a regulation Article 1 – paragraph 1 – point 3

Regulation (EU) 2021/1173 Article 4 –paragraph 1, point h, new subpoint (iii a)

Text proposed by the Commission

Amendment

(iii a) The opportunities offered by the AI Factories shall be widely communicated to startups and scale-ups and the research and innovation communities;

Or. en

Amendment 35 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (iv)

Text proposed by the Commission

(iv) the operation of centralised or distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup and 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.

Amendment

the operation of centralised or (iv) distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup and 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 manufacturing, new materials, biotech, health and care, climate change, robotics, mobility, or connected and automated driving.

Or. en

Amendment 36 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Artice 4 – paragraph 1, point h, subpoint (iv)

Text proposed by the Commission

(iv) the operation of centralised or distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup and 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.

Amendment

(iv) the operation of centralised or distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup and research and innovation ecosystem. assisting and guiding users, 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 largescale Artificial Intelligence applications in strategic areas such as health and care, climate change, robotics, energy or connected and automated driving.

Or. en

Amendment 37 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4 – paragraph 1, point h, subpoint (iv)

Text proposed by the Commission

(iv) the operation of centralised or distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup and research and innovation ecosystem providing algorithmic support, support for the further development, training, testing, evaluation and validation of Artificial Intelligence training models and systems,

Amendment

(iv) the operation of centralised or distributed Artificial Intelligence-oriented supercomputing service centres in support of the Artificial Intelligence startup and research and innovation ecosystem providing algorithmic support, support for the further development, training, testing, evaluation and validation of Artificial Intelligence training models and systems,

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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. and support for the development of emerging large-scale Artificial Intelligence applications in strategic areas such as health and care, climate change, *aerospace*, *manufacturing*, robotics, *biotech*, or connected and automated driving.

Or. en

Amendment 38 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (v)

Text proposed by the Commission

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

Amendment

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

Or. en

Amendment 39 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (vi)

Text proposed by the Commission

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

Amendment

deleted

Or. en

Amendment 40 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (vii)

Text proposed by the Commission

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

Amendment

(vii) attracting, pooling and training talent, *including students, developers, researchers, scientists and the user community*, to develop their competences and skills in using the EuroHPC supercomputers for Artificial Intelligence;

Or. en

Amendment 41 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho, Lina Gálvez Muñoz

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (vii)

Text proposed by the Commission

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

Amendment

(vii) attracting, pooling, training and retaining talent, as well as providing tailor-made coaching to develop their competences, skills and knowledge in using the EuroHPC supercomputers for Artificial Intelligence;

Or. en

Amendment 42 Ville Niinistö on behalf of the Verts/ALE Group

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Proposal for a regulation Article 1 – paragraph 1 – point 3

Regulation (EU) 2021/1173 Article 4, paragraph 1, point h, subpoint (vii)

Text proposed by the Commission

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

Amendment

(vii) attracting, pooling and training talent *through a transparent, equal opportunities and open process* to develop their competences and skills in using the EuroHPC supercomputers for Artificial Intelligence;

Or. en

Justification

In order to achieve a multiplier effect, this related skill provision needs to be strengthened.

Amendment 43 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho, Lina Gálvez Muñoz

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, new subpoint (vii a)

Text proposed by the Commission

Amendment

(vii a) Specialised user support and training to EU scientists and experts in the field of AI shall be provided;

Or. en

Amendment 44 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, subpoint (viii)

Text proposed by the Commission

(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 Intelligenceoriented Digital Innovation Hubs, the Artificial *Intelligence related* European Institutte of Innovation and Technology Knowledge and Innovation Communities, relevant European research infrastructures and other related initiatives.

Amendment

(viii) 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, 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 Intelligenceoriented Digital Innovation Hubs, the Artificial *Intelligence-related* European Institute of Innovation and Technology Knowledge and Innovation Communities, the Artificial Intelligence-related Horizon Europe Joint Undertakings and partnerships, relevant European research infrastructures and other related initiatives.

Or. en

Amendment 45 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation
Article 1 – paragraph 1 – point 3
Regulation (EU) 2021/1173
Article 4, paragraph 1, point h, new subpoint (viii a)

Text proposed by the Commission

Amendment

(viii a) The maintenance and optimization of supercomputers with artificial intelligence capabilities, ensuring their reliability and performance for advanced computational tasks.

Or. en

Amendment 46 Robert Roos

Proposal for a regulation Article 1 – paragraph 1 – point 3

Regulation (EU) 2021/1173

Article 4, paragraph 1, point h, new subpoint (viii a)

Text proposed by the Commission

Amendment

(viii a) fostering interdisciplinary research with the application of Artificial Intelligence.

Or. en

Amendment 47 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Article 1 – paragraph 1 – point 4

Regulation (EU) 2021/1173 Article 9, paragraph 5, point g, subpoint (i)

Text proposed by the Commission

Amendment

(i) proximity with an established datacentre;

(i) proximity with an established datacentre that has available storage data, or connection to it via very high speed networks, or proximity to a datacentre that is expected to be constructed within one year following the expression of interest, provided that detailed plans and commitments are presented to demonstrate the feasibility and timeline of the construction;

Or. en

Justification

The inclusion of 'available storage data' as a requirement recognizes the critical need for ample data storage capacity, ensuring the data centre can immediately meet the supercomputer's demands without being already overloaded. The amendment also introduces flexibility in the criteria, with the option for connection via 'very high-speed networks', aligning with EC communications. Moreover, it also introduces flexibility to the criteria if a data centre is expected to be constructed within one year in proximity.

Amendment 48 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, subpoint (i)

Text proposed by the Commission

(i) proximity with an established *datacentre*;

Amendment

(i) proximity with *a planned or* an established *data centre*;

Or. en

Amendment 49 Ville Niinistö on behalf of the Verts/ALE Group

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, new subpoint (i a)

Text proposed by the Commission

Amendment

(i a) provision of an energy management plan that examines the availability of an adequate access to clean affordable energy, also through renewable power purchase agreements, and a strategy to increase energyefficiency of the installations;

Or. en

Justification

The energy consumption of supercomputers can have an impact on the grid in the area where they are located, in particular when training AI, therefore it is essential to assess it and take measures to reduce the consumption.

Amendment 50 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, new subpoint (ia)

Text proposed by the Commission

Amendment

(i a) vision and plans of the hosting entity regarding the Artificial Intelligence-dedicated supercomputer's energy efficiency and environmental sustainability, also through the use of electricity that is locally generated;

Or en

Amendment 51 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová, Morten Løkkegaard

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, subpoint (ii)

Text proposed by the Commission

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

Amendment

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

Or. en

Justification

Plans also should take into account the creation of synergies and promotion of innovation within the technological ecosystems that will be created around these supercomputers

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Amendment 52 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, subpoint (v)

Text proposed by the Commission

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

Amendment

(v) existing capabilities and future plans of the hosting entity to contribute to the development of the talent pool *and to* the creation of skills, capabilities and competences to use the supercomputers;

Or. en

Amendment 53 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Article 1 – paragraph 1 – point 4 Regulation (EU) 2021/1173 Article 9, paragraph 5, point g, subpoint (v)

Text proposed by the Commission

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

Amendment

(v) existing capabilities and future plans of the hosting entity to contribute to the development of the talent pool *and* attracting and retaining talent in the field;

Or. en

Amendment 54 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho, Lina Gálvez Muñoz

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, subpoint (v)

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Text proposed by the Commission

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

Amendment

(v) existing capabilities and future plans of the hosting entity to contribute to the development, *training and retention* of the talent pool;

Or. en

Amendment 55 Henna Virkkunen

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, new subpoint (v a)

Text proposed by the Commission

Amendment

(v a) Existing capabilities and future plans of the hosting entity to address the supercomputer's energy efficiency and environmental sustainability, making use of a life cycle approach.

Or. en

Justification

The AI-oriented supercomputers have a high energy consumption and can therefore have a larger carbon footprint. This Regulation should recognize the growing AI-carbon footprint and take measures to reduce the climate and environmental impact, by adding another selection criterion for the hosting entities to Article 9(5). The life cycle approach is in line with the ambitions of the EuroHPC Multi-Annual Strategic Programme 2021-2027 (version 2023).

Amendment 56 Robert Roos

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, new subpoint (v a)

Text proposed by the Commission

Amendment

(v a) the existence of a long-term strategic vision in AI, including investments in future technologies;

Or. en

Amendment 57 Robert Roos

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, new subpoint (v b)

Text proposed by the Commission

Amendment

(v b) contribution to the national and Union innovation ecosystem, including in the form of support for startups through incubator or accelerator programs;

Or. en

Amendment 58 Robert Roos

Proposal for a regulation
Article 1 – paragraph 1 – point 4
Regulation (EU) 2021/1173
Article 9, paragraph 5, point g, new subpoint (v c)

Text proposed by the Commission

Amendment

(v c) the adminstrative burden in the host country;

Or. en

Amendment 59 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

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Proposal for a regulation Article 1 – paragraph 1 – point 4 Regulation (EU) 2021/1173 Article 9, paragraph 5, new point (g a)

Text proposed by the Commission

Amendment

(g a) An existing hosting entity selected by the Governing Board after a call for expressions of interest shall meet through a fair and transparent process the criteria referred to in Article 9(5) point g to become an Artificial Intelligence Factory.

Or. en

Justification

This amendment attempts to standardize the selection criteria for upgrading a supercomputer to have artificial intelligence capacity.

Amendment 60 Maria da Graça Carvalho

Proposal for a regulation Article 1 – paragraph 1 – point 5 Regulation (EU) 2021/1173 Article 9, paragraph (6a)

Text proposed by the Commission

(6a) For the Artificial Intelligence dedicated supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for the startups and other users to facilitate access to its support services.

Amendment

(6a) For the Artificial Intelligence dedicated supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for the startups and other users to facilitate access to its support services and to support the development of their skills and competences.

Or. en

Amendment 61 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

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Proposal for a regulation Article 1 – paragraph 1 – point 5 Regulation (EU) 2021/1173 Article 9 – paragraph 6a

Text proposed by the Commission

(6a) For the Artificial Intelligence dedicated supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for the startups and other users to facilitate access to its support services.

Amendment

(6a) For the Artificial Intelligence dedicated supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for the startups and *scale-ups and* other users to facilitate access to its support services.

Or. en

Amendment 62 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová, Morten Løkkegaard

Proposal for a regulation Article 1 – paragraph 1 – point 5 Regulation (EU) 2021/1173 Article 9– paragraph (6a)

Text proposed by the Commission

(6a) For *the Artificial Intelligence dedicated* supercomputers referred to in *Article 12a*, the hosting entity shall create a one-stop shop for the startups and other users to facilitate access to its support services.

Amendment

(6a) For *EuroHPC* supercomputers referred to in *Articles 11, 12, 12a, 14, 15*, the hosting entity shall create a one-stop shop for the startups, *small size companies* and other users to facilitate access to its support services.

Or. en

Justification

EuroHPC supercomputers, (dedicated, upgraded and others), should also have a one-stop shop to improve access.

Amendment 63 Robert Roos

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Proposal for a regulation Article 1 – paragraph 1 – point 5 Regulation (EU) 2021/1173 Article 9, paragraph 6(a)

Text proposed by the Commission

(6a) For the Artificial Intelligence dedicated supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for the startups and *other users* to facilitate access to its support services.

Amendment

(6a) For the Artificial Intelligence dedicated supercomputers referred to in Article 12a, the hosting entity shall create a one-stop shop for the startups and *SMEs* to facilitate access to its support services.

Or. en

Amendment 64 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation Article 1 – paragraph 1 – point 5 Regulation (EU) 2021/1173 Article 9 – new paragraph (6a a)

Text proposed by the Commission

Amendment

(6a a) When establishing the Artificial Intelligence supercomputing service infrastructure environmental impact assessment shall be conducted and mitigation plan for high energy consumption shall be developed. Data centres shall fully respect EED requirements as outlined in article 12.

Or. en

Amendment 65 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová, Morten Løkkegaard

Proposal for a regulation Article 1 – paragraph 1 – point 6 Regulation (EU) 2021/1173 Article 10 – paragraph 2, point (1)

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Text proposed by the Commission

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

Amendment

(l) the specific conditions applicable when the hosting entity operates a EuroHPC supercomputer for industrial usage, or *for* Artificial *Intelligence purposes*;

Or. en

Justification

The original phrase does not take into account the supercomputers that are being upgraded to have artificial intelligence capabilities.

Amendment 66 Henna Virkkunen

Proposal for a regulation Article 1 – paragraph 1 – point 7 Regulation (EU) 2021/1173 Article 12 a – paragraph 4

Text proposed by the Commission

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

Amendment

4. The Joint Undertaking may act as first user of Artificial *Intelligence-oriented* supercomputers that integrate *leading* technologies *preferably* developed in the Union

Or. en

Justification

It is important to leave space for more various use cases, while maintaining the idea of putting more emphasis on AI. Therefore 'Artificial Intelligence dedicated' should be replaced with 'Artificial Intelligence oriented' consistently throughout the text. 'Leading' and 'preferably' still reflect the ambition to increase the use and uptake of European technology in EuroHPC systems, but do not compromise the goal of providing best possible advantage and conditions for supercomputing in Europe.

Amendment 67 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

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Proposal for a regulation Article 1 – paragraph 1 – point 7 Regulation (EU) 2021/1173 Article 12a – paragraph 7

Text proposed by the Commission

Without prejudice to the winding 7. up of the Joint Undertaking, as referred to in Article 23(4) of the Statutes, at the earliest four years after the successful acceptance test by the Artificial Intelligence-dedicated supercomputer installed in a hosting entity, the ownership of the Artificial Intelligence-dedicated 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 a Artificial Intelligence-dedicated 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-dedicated supercomputer or after its sale or decommissioning.

Amendment

Without prejudice to the winding 7. 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-dedicated supercomputer installed in a hosting entity, the ownership of the Artificial Intelligence-dedicated 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 a Artificial Intelligence-dedicated 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-dedicated supercomputer or after its sale or decommissioning.

Or. en

Justification

Should be in line with the 2021/1173.

Amendment 68 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová

Proposal for a regulation Article 1 – paragraph 1 – point 8 – point b

 Regulation (EU) 2021/1173 Article 15 – paragraph 5

Text proposed by the Commission

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.';

Amendment

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 difference in the operational costs of the upgrade, whether increased or decreased, shall be the same as the percentage of the Union's financial contribution for the original EuroHPC supercomputer.';

Or. en

Justification

In the event that the upgrade brings with it lower operating costs, it should be reflected.

Amendment 69 Maria da Graça Carvalho

Proposal for a regulation
Article 1 – paragraph 1 – point 9 – point b
Regulation (EU) 2021/1173
Article 16, paragraph 2b

Text proposed by the Commission

2b. The Governing Board shall define *special* access conditions for the Artificial Intelligence-dedicated 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 and research ecosystem. *This shall include* dedicated access to startups. Only proposals for developing trustworthy and ethical

Amendment

2b. The Governing Board shall define *specific* access conditions for the Artificial Intelligence-dedicated 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 and research ecosystem. *The Governing Board may define specific access conditions for different types of users or applications*,

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Artificial Intelligence models, systems and applications that arein line with EU values shall be eligible for access.

including dedicated access to startups and small and medium enterprises. The security and quality of service shall be the same for all users within each user category. Only proposals for developing trustworthy and ethical Artificial Intelligence models, systems and applications that arein line with EU rules and values shall be eligible for access.

Or. en

Amendment 70 Susana Solís Pérez, Izaskun Bilbao Barandica, Ivars Ijabs, Martina Dlabajová, Morten Løkkegaard

Proposal for a regulation Article 1 – paragraph 1 – point 9 – point b Regulation (EU) 2021/1173 Article 16, paragraph 2b

Text proposed by the Commission

2b. The Governing Board shall define *special* access conditions for the Artificial Intelligence-dedicated 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 and research ecosystem. This shall include dedicated access to startups. Only proposals for developing trustworthy *and ethical* Artificial Intelligence models, systems and applications *that arein line with EU values* shall be eligible for access.

Amendment

The Governing Board shall define 2b. the general access conditions for the Artificial Intelligence-dedicated 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 and research ecosystem. This shall include dedicated access to startups and small companies. Only proposals for developing trustworthy Artificial Intelligence models, systems and applications ensuring a high level of protection of health, safety, fundamental rights enshrined in the article 2 of the Lisbon Treaty and the EU Charter of Fundamental Rights shall be eligible for access.

Or. en

Justification

Changes to general access will align with previous HPC regulations and include provisions

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for small businesses in dedicated accesses for the use of artificial intelligence. Union Values and ethical are general concepts, we tend to clarify what we are talking about.

Amendment 71 Ivo Hristov, Tsvetelina Penkova, Carlos Zorrinho

Proposal for a regulation
Article 1 – paragraph 1 – point 9 – point b
Regulation (EU) 2021/1173
Article 16, paragraph 2b

Text proposed by the Commission

2b. The Governing Board shall define special access conditions for the Artificial Intelligence-dedicated 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 and research ecosystem. This shall include dedicated access to startups. Only proposals for developing trustworthy and ethical Artificial Intelligence models, systems and applications that arein line with EU values shall be eligible for access.

Amendment

2b. The Governing Board shall define special access conditions for the Artificial Intelligence-dedicated 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 and research ecosystem. This shall include dedicated access to startups *and scale-ups*. Only proposals for developing trustworthy and ethical Artificial Intelligence models, systems and applications that arein line with EU values shall be eligible for access.

Or. en

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