

Annex 1

# to Call for expression of interest for the selection of existing Hosting Entities of EuroHPC supercomputers to acquire an advanced Experimental AI-optimised Supercomputing Platform (optional) and to establish an AI Factory

APPLICATION FORM

**Call REF: EUROHPC-2024-CEI-AI-01**

Application Ref: [***ACRONYM***]

*[ACRONYM]*

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| *Applicants must use the application form template for their applications (designed to highlight important aspects and facilitate the assessment against the evaluation criteria).**The application form is structured in two main sections.**In the first section, “Information on the applicants”, the application must provide administrative details about the applicants and the consortium, including contact details and legal representatives.**The second section “Information on the Action” is divided in six subsections:** *In the first subsection* ***“overall description of the application”,*** *the Applicants should provide an overall description of their proposal for developing an AI Factory and its different constituent parts. In particular they should demonstrate that their existing EuroHPC supercomputer is an AI-ready EuroHPC supercomputer.*
* *In the second subsection “****Description of the “advanced experimental AI-optimised platform****” (optional), the Applicants may decide to include in their application an optional system/partition targeting the development of an advanced experimental AI-optimised supercomputing platform.*
* *Finally, in the third and last subsection “****Description of the AI Factory****”, the Applicants should present a comprehensive overview of the AI ecosystem they would serve and enhance through the AI Factory and the detailed of services they would offer to this ecosystem.*

*All the above are further detailed in the following subsections.**Should an applicant apply for an advanced AI-optimised experimental platform, they should fill in Section II, 2 of this Application form.**The application form includes a guide on how to fill it for all sections. Character and page limits:** *page limit: 200 pages*
* *minimum font size — Arial 8 points*
* *page size: A4*
* *margins (top, bottom, left and right): at least 15 mm (not including headers & footers).*
* *pagination instructions: each document from the application must be individually numbered in the bottom right corner.*

*.* *Paragraphs in italics or boxes with paragraphs in italics are intended as an explanatory guidance for the applicant and shall be deleted before applying.* *Don’t forget to delete this page and all the explanatory text in italics.* |

*[ACRONYM]*

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| **EUROHPC-2024-CEI-AI-01** |
| **REFERENCE NUMBER OF THE CALL** |
| Call for expression of interest for the selection of existing Hosting Entities of EuroHPC supercomputers to acquire an advanced Experimental AI-optimised Supercomputing Platform (optional) and to establish an AI Factory |
| **SUMMARY OF THE APPLICATION** |
| Title: |
| Identity of the Coordinator/Applicant: |
| Consortium: [*YES]/[NO]* |
| Coordinator:*Partner1*: | Contribution Coordinator: [XXX] *Euro*Contribution *partner1*: [XXX] *Euro* |
| Summary of the Application:(*in EN, max 1000 words)*[insert] |
| Would the hosting consortium be ready to include additional participants if selected? [*YES]/[NO]*If YES, please include the indicative amounts of the contribution of the additional participants: |

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*[ACRONYM]*

# INFORMATION ON THE APPLICANTS

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| **1 REFERENCES OF THE APPLICANTS** |

* 1. (*Option 1: Applicant No1 — or Option 2: Coordinator; please indicate what is applicable*):

|  |
| --- |
| **1.1.1 IDENTITY OF THE APPLICANT** |
| Official name in full: |
| Acronym:(if applicable) |
| Official legal form: |
| Legal personality[1](#_bookmark1): |
| Place of establishment or registration:(Address and country) |
| Entity registration number:(Not applicable if the applicant is a public-sector body.) |
| VAT number (if applicable): |

### The legal details are attached in the Legal Entity Form[2](#_bookmark2) to be provided as annex. Any changes in the legal entity form must be notified in writing to the Executive Director of the EuroHPC JU.

|  |
| --- |
| **1.1.2 CONTACT DETAILS** |
| Street address: |
| Postcode: |
| City: |
| Region (if applicable): |
| Country: |
| Telephone: Mobile: |
| Fax: |
| E-mail address: |
| Website: |

Any change in the addresses, phone numbers, fax numbers or e-mail, must be notified in writing to the Executive Director of the EuroHPC JU. The Executive Director of the EuroHPC JU will not be held responsible in the event that he cannot contact an applicant**.**

1 Legal personality is understood as applicant’s capacity to sign contracts and constitute a party in court proceedings under the applicable national legislation.

2 <http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal-entities_en.cfm>

*[ACRONYM]*

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| **1.1.3 CONTACT PERSON RESPONSIBLE FOR THE EXPRESSION OF INTEREST** |
| Family name: First Name: |
| Position/Function: |
| Telephone: Mobile: |
| Fax: |
| E-mail address: |
| **1.1.4 LEGAL REPRESENTATIVE (PERSON AUTHORISED TO SIGN THE HOSTING AGREEMENT)** |
| Family name: First Name: |
| Position/Function/Mandate: |
| Telephone: Mobile: |
| Fax: |
| E-mail address: |

* 1. Applicant No 2 (If applicable, repeat this part as often as is required to include all applicants)*.*

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| **1.2.1 IDENTITY OF THE APPLICANT** |
| Official name in full: |
| Acronym:(if applicable) |
| Official legal form: |
| Legal personality[3](#_bookmark3): |
| Place of establishment or registration:(Address and country) |
| Entity registration number:(Not applicable if the applicant is a public-sector body.) |
| VAT number (if applicable): |

### The legal details are attached in the Legal Entity Form[4](#_bookmark4) to be provided as an annex. Any changes in the legal entity form must be notified in writing to the Executive Director of the EuroHPC JU.

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| **1.2.2 CONTACT DETAILS** |

3 Legal personality is understood as applicant’s capacity to sign contracts and constitute a party in court proceedings under the applicable national legislation.

4 <http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal-entities_en.cfm>

*[ACRONYM]*

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| --- |
| Street address: |
| Postcode: |
| City: |
| Region (if applicable): |
| Country: |
| Telephone: Mobile: |
| Fax: |
| E-mail address: |
| Website: |

Any change in the addresses, phone numbers, fax numbers or e-mail, must be notified in writing to the Executive Director of the EuroHPC. The Executive Director of the EuroHPC will not be held responsible in the event that it cannot contact an applicant**.**

|  |
| --- |
| **1.2.3 CONTACT PERSON RESPONSIBLE FOR THE APPLICATION** |
| Family name: First Name: |
| Position/Function: |
| Telephone: Mobile: |
| Fax: |
| E-mail address: |

# TECHNICAL PROPOSAL

## Overall description of the application

In this section of their application, the Applicants should provide a comprehensive overall description of their proposal and its constituent parts. The application should first demonstrate that the existing EuroHPC supercomputer around which the AI Factory is to be established is an AI-ready supercomputer, how the AI Factory will advance AI capabilities in Europe, support innovation and deliver significant value to AI stakeholders, while respecting ethical and regulatory standards.

The following are expected to be described with the required level of detail – please also refer to Annex 3 of this Call for Expression of Interest, “AI Factories” concept paper:

## A comprehensive description of the concept of the proposal and the needs for an AI Factory

* + - 1. **Description of the existing AI-ready EuroHPC supercomputer**
1. Description of the main features of the existing EuroHPC supercomputer and demonstration that it is an AI-ready EuroHPC supercomputer, i.e., it has enough computing resources for training large scale, general- purpose AI models and emerging AI applications.
2. Description of relevant AI/ML benchmarks used for the evaluation of the computing capacity of the supercomputer. Inclusion of examples of training large AI models (if available).
3. Description of the AI/HPC software ecosystem (including software stacks, platforms, libraries, workflows, etc.) available at the hosting entity and its suitability for AI development and for preparing the next generation of complex AI applications.
4. Description of the proximity to the EuroHPC supercomputer data centre and its connectivity with the supercomputer.
	* + 1. **Concept of the AI Factory**
5. Vision, Rationale and Objectives of the proposed AI Factory.
6. A roadmap for developing the national AI ecosystem(s) and how that would be served, justifying the need for setting up the AI Factory.
	* + 1. **Targeted key Industrial sectors and Applications and targeted Stakeholders and their needs:**
7. Description of the key industrial/application sectors as well as of the key obstacles to overcome to further develop the AI innovation ecosystem in these sectors.
8. Description of a convincing plan for attracting such key AI stakeholders from these sectors.
9. Description of any plans the Applicants may have to include internal or external cloud solutions to bridge the needs towards an end-to-end computing continuum.
	* + 1. **Overall plan for investing in physical and virtual infrastructure required for the AI factory**

This includes an overall description of the computing, networking and data resources as well as investments in human capital that will be required to address the needs of the AI ecosystem.

* + - 1. **Links to a national AI strategy, and national data and access policies to computing and data**
1. Description of how the AI Factory proposal is linked to the national AI Strategy / Strategies or equivalent[5](#_bookmark10)

of the Applicant(s).

1. Description of how the AI Factory is linked to a current National Data Policy of the hosting entity or the hosting consortium, enabling access to large datasets. If this does not exist, description of a plan to make available large data sets to the AI Factory ecosystem.
2. Description of an AI user-friendly access policy of the AI Factory to the national share of computing time of the EuroHPC supercomputer and how it will contribute to the development of the national AI Ecosystem.
	* + 1. **Overall plan for networking the AI Factory with existing European and national AI initiatives and with other EuroHPC AI Factories.**

Description of the plan for networking the AI Factory with existing European and national AI initiatives, and other EuroHPC AI Factories.

* + - 1. **Overall plan for linking the AI Factory to a national strategy for startups/SMEs**

Description of the plans the Applicants have for linking the AI Factory ecosystem with relevant national/regional investment measures targeted at startups and SMEs.

## Description of the “advanced experimental AI-optimised platform” (optional – remove if not applicable)

One of the targets of EuroHPC JU is also promoting the further development of European technologies and thus contributing to developing a competitive European technology supply industry. As part of this objective, it is proposed that interested hosting entities may also include in their application an optional system/partition targeting the development of an advanced experimental AI -optimised supercomputing platform.

The goal of such a platform shall be to operate an exploratory supercomputing infrastructure for the development, integration, testing, and co-design of a wide range of European technologies suitable to be part of the existing AI-ready EuroHPC supercomputer.

In case the hosting entity decides to include such optional part in its application, the hosting entity should include:

1. A description of the advanced experimental AI-optimised platform
2. How it complements the existing AI-ready EuroHPC supercomputer
3. The development targets (milestones)
4. The time plan as well as a detailed work plan
5. The cost breakdown (such as direct personnel costs, direct costs of subcontracting, other direct costs and indirect costs)
6. Measures to maximise impact - Dissemination, exploitation and communication
7. A list of critical risks, relating to project implementation, that the stated project's objectives may not be achieved. Detail any risk mitigation measures. You will be able to update the list of critical risks and mitigation measures as the project progresses

The potential of the advanced experimental AI-optimised platform, as well as its duration, should be duly justified in the application and will be evaluated on its own merits for receiving or not financial support. This evaluation shall not affect the overall evaluation of the other aspects of the application.

## Description of the AI Factory

 In this section the Applicants should provide a detailed description of the AI Factory and the services it will offer,

5 In the absence of a formal national AI strategy, the Applicants will need to describe the strategic national (or Consortium) character of their AI Factory approach.

complementing the general description of their proposal as presented in Section 12.2 of this Call.

Applicants should at least address the following – for more detailed information, Applicants should refer to the Concept Paper found in Annex 3 of this Call for Expression of Interest:

## A detailed description of the AI Factory data facilities and services and its networking with other AI Factories

* + - 1. **AI Factory tools and services**
* *Overview of the user support services*: This includes: (i) Description of the range of services that the AI Factory will provide to the AI ecosystem (e.g., guidance for using the HPC environment, adapting the computational tasks associated to the training and fine- tuning of the AI models and related inference activities to the HPC environment, etc.). (ii) Description of a plan for servicing private and public national users as well as users from other EuroHPC Participating States, which do not host an AI Factory. (iii) Description of the foreseen professional user support plan, describing the range of user support activities (i.e., how the AI Factory plans to engage with and serve the broader AI community – from startups, SMEs and large industry to academia and research institutions – and how will these professional services be provided). (iv) Description of the resources required for the AI Factory to provide a well-functioning user support service.
* *Software and application development environments*: description of the software environment that the AI Factory will deliver, including ready-to-use set of AI-oriented tools containerized workloads and workflows, etc.
	+ - 1. **Data facilities, access to data, confidentiality and integrity of data**
* *Data facilities:* Description of the data repositories and data assets that the AI Factory plans to make available to the AI ecosystem.
* *Access to Common European Data Spaces*, including preliminary agreements on the principles of an access and use, establishing relevant data repositories (e.g., Hugging Face).
* *Plans for establishing secure and trusted environments,* for guaranteeing the confidentiality and integrity of sensitive data and for ensuring the integrity of computational processes.
	+ - 1. **Trustworthy AI**

Description of the plans the Applicants have for developing of robust guidelines and standards for AI algorithmic development aligned with the principles and requirements of the AI Act.

* + - 1. **AI Factory Hub facilities**
* *co-working space facilities:* description of the plans the Applicants have for making available co-working space physical facilities, possibly complemented also by virtual working spaces.
* *hosting facilities for AI students*: and description of the Applicants Plans for making available a physical campus hosting AI students located nearby or associated to the foreseen AI Factory.
	+ - 1. **AI Factory training facilities**
* *Skills plan*: Description of the AI Factory Skills Plan outlining the skills needed for the targeted AI stakeholders, including a description of a diverse range of training courses, complementary training facilities and activities and timelines tailored to the varying needs of potential users.
* *Access to human capital*: in house and external direct access to the necessary human capital and talent to provide the necessary education/training activities planned. This includes plans for collaboration and engagement with universities to train and equip students at all levels with the necessary in-demand AI skills.
	+ - 1. **Detailed plans for networking the AI Factory with existing European and national initiatives and with other EuroHPC AI Factories.**
* *Networking with other existing European and national AI & HPC initiatives:* Detailed plans for linking the AI Factory with European and national AI and HPC initiatives such as TEFs, EDIH, National HPC Competence Centres, ALT-EDIC, or others, and to engage with them while avoiding duplication of efforts.
* *Networking with other AI Factories*: Detailed plans for linking the AI Factory with other EuroHPC AI factories once they become operational in order to network, exchange best practice, share experiences, and avoid duplication of efforts.

## A comprehensive description of the AI Factory Implementation Plan

* + - 1. **Implementation Plan and risk management**

Applicants should provide an indicative implementation plan, an organisational structure and roles for the management of the AI Factory, and a project timeline with phases for the establishment of the AI Factory. Applicants should also include a risk management approach by identifying potential risks and mitigation strategies.

* + - 1. **Key performance indicators (KPIs)**

Description of a set of KPIs and metrics that the Applicant(s) will use to measure the contributions to the success of their AI Factory and associated AI ecosystem.

* + - 1. **Budget estimate of the proposal**

Applicants should provide an estimated budget the establishment of the AI Factory, including development, implementation and expected operational costs.

## A comprehensive description of the expected Impacts of the AI Factory:

Applicants should describe the pathways to achieve the expected outcomes and expected impacts and the measures they will take for maximising these expected outcomes and impacts.

By submitting an application, the applicant accepts that in case of award certain data like the name, locality and amount (amongst others) will be published.

By submitting an application, the applicant and participants of the hosting consortium accept the terms and conditions set out in the call for expression of interest and the model hosting agreement to be found in Annex 2 of the call for expression of interest.

I declare that all information provided in this application form and its annexes is correct.

Date:

Signature of the legal representative of the coordinator organisation

## CHECKLIST FOR APPLICANTS

*Please use this checklist to ensure that you attach all of the necessary documents*

|  |  |  |
| --- | --- | --- |
| **Document and content** | **Coordinator** | **Partner** |
| All sections of the application form have been filled in, where appropriate, in accordance with the Call for Expression of Interest or any other document provided as guidance related to the programme concerned. |  | N/A |
| Provision of an appropriate supporting document proving the commitment of the Member State where the hosting entity is established or of the competent authorities of the Participating States of the hosting consortium to cover the share of the total cost of ownership of the industrial supercomputer that is not covered by the Union contribution (seetemplate in Annex 1c of this Call for Expression of Interest). |  |  |
| The declaration(s) on honour has (have) been signed and attached in original (see template in Annex 1a) |  |  |
| Legal details have been included in the Legal Entity Form annexed.[http://ec.europa.eu/budget/contracts\_grants/info\_contracts/legal\_entities/legal-](http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal-entities_en.cfm) [entities\_en.cfm](http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal-entities_en.cfm) |  | N/A |
| Mandate letters have been signed and attached in original (if applicable; see template in Annex 1b) | N/A |  |