



## **European High Performance Computing Joint Undertaking**

**REF: EUROHPC-2022-CEI-UPG-01**

**CALL FOR EXPRESSION OF INTEREST for  
upgrading the EuroHPC JU Supercomputers**

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## 1. INTRODUCTION – CONTEXT AND BACKGROUND

The European High Performance Computing Joint Undertaking (hereinafter "EuroHPC JU") was established by Council Regulation (EU) 2021/1173 of 13 July 2021 (hereinafter "Regulation") and entered into force on 8 August 2021<sup>1</sup>.

According to Article 3 of the Regulation, the mission of the EuroHPC JU is to develop, deploy, extend and maintain in the Union a federated, secure hyperconnected supercomputing, quantum computing, service and data infrastructure ecosystem; to support the development and uptake of demand-oriented and user-driven innovative and competitive supercomputing systems based on a supply chain that will ensure components, technologies and knowledge limiting the risk of disruptions and the development of a wide range of applications optimised for these systems; and, to widen the use of that supercomputing infrastructure to a large number of public and private users, and to support the twin transition and the development of key skills for European science and industry.

In line with Article 15 of the Regulation, the EuroHPC JU may launch a call for expressions of interest to upgrade the EuroHPC supercomputers it owns or co-owns. The maximum EU contribution to such upgrades may not exceed EUR 150 million for the period 2021-2027 funded by the Union's budget stemming from the Digital Europe Programme.

A hosting entity shall be eligible to respond to this call for expressions of interest at the earliest one year after the selection date of the hosting entity of the EuroHPC supercomputer, and no later than three years after this date. A EuroHPC supercomputer may be upgraded only once.

In accordance with Article 15(5) of the Regulation, the Union financial contribution for the upgrade shall cover up to 35 % of the acquisition costs of the upgrade, depreciated over the expected remaining lifetime of the original supercomputer and up to 35 % of the additional operating costs. Participating States will be required to fund the remaining total costs of the upgrade. The total cost of the upgrade shall not exceed 30 % of the total acquisition cost of the original EuroHPC supercomputer.

The EuroHPC supercomputers to be upgraded shall be selected by the Governing Board of the EuroHPC JU ('Governing Board') following a Call for Expression of Interest evaluated by independent experts.

The present Call for Expression of Interest is launched for the selection of EuroHPC supercomputers to be upgraded that are owned or co-owned by EuroHPC JU, on the basis and in accordance with the Council Regulation (EU) 2021/1173, taking into account the EU Financial Regulation<sup>2</sup> where relevant on the basis of Financial Rules of the EuroHPC JU<sup>3</sup>.

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<sup>1</sup> OJ L 256, 19.07.2021, p. 3-51

<sup>2</sup> Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012, *OJ L 193, 30.7.2018, p. 1–222; ("FR")*

(<https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32018R1046>)

<sup>3</sup> Decision of the Governing Board of the EuroHPC JU No 3/2020 Approving the Financial Rules of the EuroHPC Joint Undertaking readopted by Decision of the Governing Board of the EuroHPC JU No 17/2021 approving the re-adoption of Governing Board Decisions adopted under the framework of Regulation (EU) 2018/1488 and its updated Rules of Procedure in the view of Regulation (EU) 2021/1173.

## 2. OBJECTIVES

The overall objective of this call is to select EuroHPC supercomputers to be upgraded that meet the eligibility criteria set out in this call.

The specific objective of this call is the following:

The Joint Undertaking provides a financial contribution to upgrade a supercomputer it owns or co-owns.

The upgrades should lead to an extension of the supercomputers' lifetime, increase the operational performance, and provide new functionalities to address the evolution of user needs.

For supercomputers it owns, the joint Undertaking shall acquire, jointly with the contracting authorities of the Participating State where the supercomputer is established or with the contracting authorities of the Participating States in the selected hosting consortium the upgrade of the supercomputer. The Joint Undertaking shall own the upgraded features of the supercomputer under the same conditions of ownership of the original EuroHPC supercomputer.

For the supercomputers it co-owns, the Joint Undertaking will provide a financial contribution to fund the upgrade to the contracting authorities of the Participating State where the supercomputer is established or with the contracting authorities of the Participating States in the selected hosting consortium, or directly with the vendor. The Joint Undertaking shall co-own the upgraded feature under the same conditions of ownership of the original EuroHPC supercomputer.

By submitting the application, applicants hosting entities provide their prior acceptance with the terms and conditions set in the original model hosting agreement.

The model 'upgrading' agreement will be included in the original hosting agreement in the form of an amendment or by signing a new hosting agreement for the additional cost for operating the upgrading. The new hosting agreement to be signed will follow the model used in the Call for expression of interest for the selection of a Hosting Entity for a high-end Supercomputer (EUROHPC-2021-CEI-EXA-01) which can be found in EuroHPC Joint Undertaking website<sup>4</sup>. In case of amendment, this will not replace the original hosting agreement.

By submitting the application, applicant hosting entities provide their prior acceptance with the terms and conditions set in the model hosting agreement. The hosting agreement to be signed will follow the model used in the Call for expression of interest for the selection of a Hosting Entity for a high-end Supercomputer (EUROHPC-2021-CEI-EXA-01) which can be found in EuroHPC Joint Undertaking website<sup>5</sup>.

The 'upgrading' agreement will be approved by the Governing Board before signature.

Hosting entities with EuroHPC supercomputers eligible for an upgrade shall be selected by the Governing Board through a fair and transparent process based, inter alia, on the following criteria:

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<sup>4</sup>[https://eurohpc-ju.europa.eu/sites/default/files/2021-12/03-%20Annex2\\_%20Hosting%20Agreement%20HighEnd%20.pdf](https://eurohpc-ju.europa.eu/sites/default/files/2021-12/03-%20Annex2_%20Hosting%20Agreement%20HighEnd%20.pdf)

<sup>5</sup>[https://eurohpc-ju.europa.eu/sites/default/files/2021-12/03-%20Annex2\\_%20Hosting%20Agreement%20HighEnd%20.pdf](https://eurohpc-ju.europa.eu/sites/default/files/2021-12/03-%20Annex2_%20Hosting%20Agreement%20HighEnd%20.pdf)

(a) justification of the upgrade: The Hosting Entity shall provide a technical description of the planned upgrade. This description will include the purpose of the upgrade with clarification about whether this upgrade will also target an increase in overall capability.

(b) compatibility with the original EuroHPC supercomputer;

(c) increase in operational capacity performance of the EuroHPC supercomputer;

(d) 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 upgrading cost of the EuroHPC supercomputer that is not covered by the Union contribution as set out in Article 5 of the Regulation or any other Union contribution as set out in Article 6 of the Regulation, either until its ownership is transferred by the Joint Undertaking to that hosting entity or until the supercomputer is sold or decommissioned if there is no transfer of ownership.

The EuroHPC JU will evaluate, with the help of external experts, the received applications to the call for expression of interest and will set up a ranking list of potential hosting entities (and their hosting consortia) for EuroHPC supercomputers eligible to be upgraded. Inclusion in the list entails an obligation on the part of the EuroHPC JU for the conclusion of any contract.

Following this selection:

*An amendment of the hosting agreement for the upgraded system* between the EuroHPC JU and the selected hosting entity will be signed, laying down the terms and conditions for the upgrading of a EuroHPC supercomputer (Regulation Article 15). *The amendment of the hosting agreement for the upgraded system* shall specify the timing of the transfer to the EuroHPC JU of the financial contribution of the selected hosting entity to the acquisition costs and operational costs of the upgrade.

- For supercomputers it owns, the EuroHPC JU will be the sole responsible for implementing the upgrade process. However, the hosting entity will be associated to the process, e.g. for verification of the technical specifications to be met by the suppliers. The amended *hosting agreement* is part of the outcome of the Call for Expression of Interest. It is the first contractual arrangement to be signed.
- For supercomputers it co-owns, the Hosting Entity will be the sole responsible for implementing the upgrade process. However, the EuroHPC JU will be associated to the process. The amended *hosting agreement for the upgraded system* is part of the outcome of the Call for Expression of Interest. It is the first contractual arrangement to be signed.

A second *contractual arrangement* between the EuroHPC JU and the Hosting Entity shall be signed to cover the funding of the supercomputer's operating costs (specifying among others and if applicable any pre-financing of the hosting entity by the EuroHPC JU), which will be covered up to 35 % by the Union contribution. The operating costs must follow a well-defined, jointly agreed (with the hosting entity) and auditable model, which will be part of the contractual arrangement. There will be no transfer of funds from the hosting entity to the EuroHPC JU for the operating costs: the EuroHPC JU will cover its share of the eligible costs, while the hosting entity (or hosting consortium) will cover the remainder of the eligible costs.

### **3. BUDGET AVAILABLE**

The Union financial contribution to the EuroHPC JU shall cover up to 35% of the acquisition costs depreciated over the expected remaining lifetime of the original supercomputer plus up to 35 % of the operating costs of the supercomputer. The remaining total cost of ownership of the supercomputer (including VAT if applicable) shall be covered by the Participating State where the hosting entity is established or by the Participating States in the hosting consortium.

The Union's financial contribution to the EuroHPC JU for the objective of this call in 2022 is estimated at a maximum of EUR 33 million

Grants will be established to cover the operating costs of upgraded EuroHPC supercomputers and once agreed by the Governing Board<sup>6</sup>. The reimbursement from the EuroHPC JU will be calculated on the basis of the declared costs up to the maximum total contribution of the EuroHPC JU or up to a ceiling of 35 % of the declared eligible costs, whichever is lower.

The costs related to the construction of the hosting site per se (i.e., costs related to the building infrastructure that will host the upgraded supercomputer, etc.) shall not be covered by the EuroHPC JU. However, the costs of the preparation and adaptation of the hosting site incurred by the hosting entity that can be directly accounted to the installation of the upgraded supercomputer may be considered as part of the Total Cost of Ownership (TCO) and may thus be considered as eligible costs that can be covered by the EuroHPC JU.

#### **4. CONTENT OF THE EXPRESSIONS OF INTEREST**

The expressions of interests must be submitted using the application form included as a separate Annex 1 to this call (EuroHPC HE Application Form). Appendix 1 of this document provides information on how to fill the Application Form.

#### **5. ADMISSIBILITY REQUIREMENTS**

In order to be admissible:

- a) Applications must be sent no later than 3 June 2022 at 16:00 Luxembourg time.
- b) Applications must be submitted in electronic format (see section 11 "Procedure for the submission"), using the application form in the Annex 1 (EuroHPC HE Application Form) and available at <https://eurohpc-ju.europa.eu/current-calls>.
- c) Applications must be submitted in the English language.

Failure to comply with those admissibility requirements will lead to the rejection of the application.

#### **6. ELIGIBILITY CRITERIA**

The call is open to entities or consortia of entities fulfilling cumulatively the following conditions as defined in Article 15 of the Regulation:

- a) A hosting entity shall be eligible to respond to this call for expressions of interest at the earliest one year after the selection date of the hosting entity of the EuroHPC supercomputer, and no later than three years after this date. A EuroHPC supercomputer may be upgraded only once.
- b) The applicant hosting entity may represent one Participating State that is a Member State or the original hosting consortium of Participating States that have agreed to contribute to the acquisition and operation of the EuroHPC supercomputer. The applicant hosting entity and the competent authorities of the Participating State or Participating States may differ from the original hosting consortium and shall enter into an agreement to this effect.

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<sup>6</sup> The EuroHPC JU Model Grant Agreement can be found on the EuroHPC JU website: <https://eurohpc-ju.europa.eu/>. For Hosting Entities that have already signed one, this agreement will be provide in the form of an amendment. For those Hosting Entities that have not received grants yet, a Model Grant agreement will need to be signed;

- c) The coordinating applicant has to be registered as a legal entity in one of the Participating States that is a Member State.
- d) The applicant(s) must have a legal personality on the date of the deadline for submission of applications and must be able to demonstrate their existence as a legal person. In case the application is submitted by several Participant States working together (consortium), this criterion (c) applies to all entities.
- e) Applications should include the provision of appropriate supporting documentation proving the commitment of the Member State where the hosting entity is established and, in the case of a hosting Consortium, of the competent authorities of the Participating States of the hosting consortium to cover the share of the total cost of ownership of the supercomputer that is not covered by the Union contribution as set out in Article 5 of the Regulation or any other Union contribution as set out in Article 6 of the Regulation, either until its ownership is transferred by the EuroHPC JU to that hosting entity or until the supercomputer is sold or decommissioned in case there is no transfer of ownership;

In case of a hosting consortium, the hosting agreement shall take the form of a partnership in Participating States, of which the hosting entity will take the lead and act as coordinator of the hosting consortium. The co-ordinator will act as an intermediary for all communications between the EuroHPC JU and the partners. However, partners are jointly responsible for implementing the action resulting from the awarded hosting agreement. To implement the action properly, they must make appropriate internal arrangements.

The hosting entity shall assume full liability towards the EuroHPC JU for the performance of the agreement as a whole, including financial and operational liability

In accordance with Article 15 of the Regulation, the share of the Union's access time to the upgraded EuroHPC supercomputer shall remain unchanged over the lifetime of the machine. If the upgrade entails an increase of capacity, the additional access time shall be directly proportional to the Union contribution

In the case of a joint application, the hosting entity must be given power of attorney to represent the other parties to sign and administrate the hosting agreement (consortium leader).

In order to assess the applicants' eligibility, the following supporting documents are requested:

- The legal entity identification form ([http://ec.europa.eu/budget/contracts\\_grants/info\\_contracts/legal\\_entities/legal\\_entities\\_en.cfm](http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm)) duly completed and signed by the person authorised to enter into legally binding commitments on behalf of the applicant organisation(s) to be submitted in original;
- Hosting consortium: in addition to the supporting documents referring to their legal status, the hosting consortium members will submit a signed declaration based on the model Consortium Agreement/Power of Attorney, appointing a consortium leader and giving a mandate to him (included as annex b).
- Each applicant and Participating State in a hosting consortium must fill-in and provide the duly signed Declaration of Honour (included as annex a).

The following entities will be considered as non-eligible:

- a) natural persons;
- b) entities without legal personality.

## 7. EXCLUSION CRITERIA

### 7.1. Exclusion<sup>7</sup>

The Executive Director of the EuroHPC JU shall exclude an applicant from participating in this call for expression of interest where:

(a) the applicant is bankrupt, subject to insolvency or winding-up procedures, its assets are being administered by a liquidator or by a court, it is in an arrangement with creditors, its business activities are suspended, or it is in any analogous situation arising from a similar procedure provided for under EU or national laws or regulations;

(b) it has been established by a final judgment or a final administrative decision that the applicant is in breach of its obligations relating to the payment of taxes or social security contributions in accordance with the applicable law;

(c) it has been established by a final judgment or a final administrative decision that the applicant is guilty of grave professional misconduct by having violated applicable laws or regulations or ethical standards of the profession to which the applicant belongs, or by having engaged in any wrongful intent or gross negligence, including, in particular, any of the following:

(i) fraudulently or negligently misrepresenting information required for the verification of the absence of grounds for exclusion or the fulfilment of eligibility or selection criteria or in the performance of a contract, a grant agreement or a grant decision;

(ii) entering into agreement with other applicants with the aim of distorting competition;

(iii) violating intellectual property rights;

(iv) attempting to influence the decision-making process of the EuroHPC JU during the award procedure;

(v) attempting to obtain confidential information that may confer upon it undue advantages in the award procedure;

(d) it has been established by a final judgment that the applicant is guilty of any of the following:

(i) fraud, within the meaning of Article 3 of Directive (EU) 2017/1371 of the European Parliament and of the Council and Article 1 of the Convention on the protection of the European Communities' financial interests, drawn up by the Council Act of 26 July 1995;

(ii) corruption, as defined in Article 4(2) of Directive (EU) 2017/1371 or Article 3 of the Convention on the fight against corruption involving officials of the European Communities or officials of Member States of the European Union, drawn up by the Council Act of 26 May 1997, or conduct referred to in Article 2(1) of Council Framework Decision 2003/568/JHA, or corruption as defined in the applicable law;

(iii) conduct related to a criminal organisation, as referred to in Article 2 of Council Framework Decision 2008/841/JHA;

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<sup>7</sup> Article 136 FR



- (iv) money laundering or terrorist financing within the meaning of Article 1(3), (4) and (5) of Directive (EU) 2015/849 of the European Parliament and of the Council;
  - (v) terrorist offences or offences linked to terrorist activities, as defined in Articles 1 and 3 of Council Framework Decision 2002/475/JHA, respectively, or inciting, aiding, abetting or attempting to commit such offences, as referred to in Article 4 of that Decision;
  - (vi) child labour or other offences concerning trafficking in human beings as referred to in Article 2 of Directive 2011/36/EU of the European Parliament and of the Council;
- (e) the applicant has shown significant deficiencies in complying with main obligations in the performance of a contract, a grant agreement or a grant decision financed by the Union's budget, which has led to its early termination or to the application of liquidated damages or other contractual penalties, or which has been discovered following checks, audits or investigations by an authorising officer, OLAF or the Court of Auditors;
- (f) it has been established by a final judgment or final administrative decision that the applicant has committed an irregularity within the meaning of Article 1(2) of Council Regulation (EC, Euratom) No 2988/95;
- (g) it has been established by a final judgement or final administrative decision that the applicant has created an entity in a different jurisdiction with the intent to circumvent fiscal, social or any other legal obligations of mandatory application in the jurisdiction of its registered office, central administration or principal place of business;
- (h) it has been established by a final judgement or final administrative decision that an entity has been created with the intent referred to in point (g);
- (i) for the situations referred to in points (c) to (h) above, the applicant is subject to:
- (i) facts established in the context of audits or investigations carried out by European Public Prosecutor's Office after its establishment, the Court of Auditors, the European Anti-Fraud Office or the internal auditor, or any other check, audit or control performed under the responsibility of an authorising officer of an EU institution, of a European office or of an EU agency or body;
  - (ii) non-final judgments or non-final administrative decisions which may include disciplinary measures taken by the competent supervisory body responsible for the verification of the application of standards of professional ethics;
  - (iii) facts referred to in decisions of persons or entities being entrusted with EU budget implementation tasks;
  - (iv) information transmitted by Member States implementing Union funds;
  - (v) decisions of the Commission relating to the infringement of Union competition law or of a national competent authority relating to the infringement of Union or national competition law; or
  - (vi) decisions of exclusion by an authorising officer of an EU institution, of a European office or of an EU agency or body.

## 7.2. Remedial measures<sup>8</sup>

If an applicant declares one of the situations of exclusion listed above, it should indicate the measures it has taken to remedy the exclusion situation, thus demonstrating its reliability. This may include e.g. technical, organisational and personnel measures to prevent further occurrence, compensation of damage or payment of fines. The relevant documentary evidence which illustrates the remedial measures taken must be provided in annex to the declaration. This does not apply for situations referred in point (d) of section 7.1.

## 7.3. Rejection from the call

The Executive Director of the EuroHPC JU shall not conclude a hosting agreement with an applicant who:

- a. is in an exclusion situation established in accordance with section 7.1;
- b. has misrepresented the information required as a condition for participating in the procedure or has failed to supply that information.
- c. is not already a Hosting Entity of the JU.

The same exclusion criteria apply to affiliated entities.

Administrative sanctions (exclusion) may be imposed on applicants, or affiliated entities where applicable, if any of the declarations or information provided as a condition for participating in this procedure prove to be false.

## 7.4. Supporting documents

Applicants and affiliated entities must provide a declaration on their honour certifying that they are not in one of the situations referred to above under 7.3 by filling in the relevant form attached to the application form accompanying the Call for Expression of Interest and available at <https://eurohpc-ju.europa.eu/participate.html>

## 8. EVALUATION CRITERIA

Eligible applications will be evaluated according to the following evaluation criteria (based on the list of criteria in Article 15 of the Regulation):

1. Compliance with the general upgrade specifications defined in the call for expression of interest; (0-25 points)
  - *Confirmation that the application is at the earliest one year after the selection date of the hosting entity of the original EuroHPC supercomputer, and no later than three years after this date.*
  - *Quality and pertinence of the technical description of the planned upgrade including a justification for the pertinence of the upgrade and a clarification on whether this will target an expansion of overall capacity and/or capability of the current EuroHPC supercomputer.*
  - *Soundness of the concept, and credibility of the application.*
2. Estimation of total cost of ownership (TCO) of the new (upgraded) system and methodology to calculate it including an accurate estimate and a verification method of the operating cost of the new (upgraded) during its lifetime and impact on the performance of the original supercomputer; (0-25 points)
  - *Clarity and effectiveness of the estimated TCO of the new upgraded system and analysis on how the overall system TCO is calculated.*

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<sup>8</sup> Article 136 (7) FR

- *Appropriateness of the methodology to calculate, report, validate and verify the operating costs.*
3. Description with timeline and milestones on how the hosting entity will procure (if relevant), install, integrate and operate the upgraded system (0-25 points)
    - *Proposal setting out a clear description on how the hosting entity will procure (if relevant), install and operate an upgraded system, and impact of the upgraded system on the existing system operations and on system availability. A description of the timeline and milestones will be expected and should include periods of downtimes and system unavailability.*
    - *Soundness of the concept, and credibility of the proposal*
  4. Quality of the hosting facility's physical and IT infrastructure, its security and its connectivity to accommodate the upgraded system alongside the existing system; (0-25 points)
    - *Quality and pertinence of the current hosting facility's physical and IT infrastructure, its existing datacentre, its security and its connectivity to accommodate the upgrade system and a description of necessary upgrades needed on the facility site (if necessary) These could include expanded cooling capacity, power distribution, space etc...)*
    - *Quality and effectiveness of the proposed plan for the readiness of the site (including the data centre)*

Points will be allocated out of a total of 100 on the basis of the above-specified weighting. A minimum threshold of 15 points for each criterion and 60 points for the total will be applied. Applications below these thresholds will be rejected.

For each criterion, if appropriate, applicants must provide detailed information about the role and tasks to be carried out by each consortium member.

## 9. OVERVIEW OF THE EVALUATION AND SELECTION PROCEDURE

The EuroHPC JU is responsible for the implementation of the evaluation of the received expressions of interest. It shall organise the submission and evaluation procedures and communicate with the applicants.

### 9.1. Evaluation procedure

The submitted applications will be evaluated in a procedure by a panel of five independent experts. These experts will be appointed by the EuroHPC JU on the basis of the procedure followed under Digital Europe Programme. For the applications considered admissible according to the section 5, the EuroHPC JU will assess the eligibility and exclusion criteria according to the sections 6 and 7 above. Only eligible applications will be evaluated.

- **Individual evaluations:** In the first step, the independent experts that sit on the panel shall carry out individually the evaluation of expressions of interest on the basis of the evaluation criteria described in section 8 above. They give a score for each criterion, with explanatory comments. These individual reports form the basis of the further evaluation.
- **Consensus meetings:** After carrying out their individual assessment, all the experts that evaluated the application shall convene in a consensus meeting, to agree on a common position, including comments and scores and prepare a consensus report. The consensus meetings shall be moderated by a Senior Officer of the EuroHPC JU who shall seek consensus, impartially, and ensure that all applications are evaluated fairly, in line with the relevant evaluation criteria.
- **Panel review:** The review panel shall be chaired by the Executive Director of the EuroHPC JU. The panel will review the scores and comments for all applications to check for consistency across the evaluations. If necessary, it will propose a new set of marks or revise comments, and resolve cases

where evaluators were unable to agree. The panel will prepare a final ranking list and scores according to the evaluation criteria provided in section 8 above. Only applications above threshold will be ranked by the review panel according to the evaluation criteria total score. If necessary, a priority order for applications with the same score will be determined in the ranked list, according to the following approach:

**Applications with the same score:** Applications with the same total score will be prioritised according to the scores they have received for the evaluation criterion "*compliance with the upgraded system specifications defined in the call for expression of interest*". When these scores are equal, priority will be based on scores for the evaluation criterion "*experience of the hosting entity in installing and operating similar upgraded systems*", then "*total cost of ownership of the supercomputer*" and then "*quality of the hosting's facility's physical and IT infrastructure*". These factors will be documented in the Panel Report.

## 9.2. Selection

The Executive Director of the EuroHPC JU will review the results of the evaluation panel and will elaborate a final ranking list based on the list proposed by the panel. The Executive Director may suggest to the Governing Board to deviate from the ranking proposed by the panel with a justification, for the consideration of the Governing Board.

This final ranking list shall consist of:

- a main list with the application to be selected as Hosting Entity as proposed by the experts complemented by any suggestion for deviation from this list as proposed by the Executive Director;
- a reserve list, with applications that have passed the evaluation thresholds. Applicants in the reserve list might be offered the possibility to become hosting entities and thus, conclude a hosting agreement, in case for whichever reason a hosting agreement cannot be established with a higher ranked application or additional funds become available.

In addition, the EuroHPC JU will prepare a list with applications that did not pass the evaluation thresholds or were found to be ineligible.

The Executive Director will submit the final ranking list, together with the Evaluation Summary Reports, to the Governing board of the EuroHPC JU with a proposal for selection of the Hosting Entities for their approval.

The Governing Board will make the final selection of the Hosting Entities, which will be invited to amend the hosting agreement with the EuroHPC JU.

In case the available budget is exhausted without covering all the applications above threshold, the GB may decide to retain some proposals for funding in the next programming period. The decision may take into account the implementation timeline of the applications, giving priority for immediate funding to applications with short term implementation plans.

After the decision of the Governing Board, all applicants will be informed in written by the EuroHPC JU of the outcome of the evaluation in the form of an Evaluation Summary Report (ESR). The EuroHPC JU will also inform about the final selection or rejection of applications.

The EuroHPC JU will invite the selected applicant to the next stages for the signature of the amendment of the hosting agreement, and the preparation of the acquisition of the upgraded supercomputer, but the invitation is not a commitment that the EuroHPC JU will launch the acquisition procedure. The amendment of the hosting agreement shall be approved by the Governing Board before its signature by the respective parties.

### 9.3. Communication

The information contained in the present call document provides all the information required to submit an application. Please read it carefully before doing so, paying particular attention to the priorities and objectives of the present call.

All enquiries must be made by e-mail only to:

Contact point for any questions is<sup>9</sup> [info@eurohpc-ju.europa.eu](mailto:info@eurohpc-ju.europa.eu)

Questions may be sent by to the above address no later than the **19-05-2022 – 23:59 Luxembourg time**, defined as “Deadline to submit questions about the Call” in Section 10.

The EuroHPC JU has no obligation to provide clarifications to questions received after this date.

Replies will be given/published no later than the “Publication of the last answers to questions” defined in the Timeline in section 10.

To ensure equal treatment of applicants, the EuroHPC JU will not give a prior opinion on the eligibility of applicants, or affiliated entity(ies), an action or specific activities.

No individual replies to questions will be sent but all questions together with the answers and other important notices will be published (FAQ in EN) at regular intervals on the website under the relevant call: <https://eurohpc-ju.europa.eu/current-calls>

The EuroHPC JU may, on its own initiative, inform interested parties of any error, inaccuracy, omission or clerical error in the text of the Call for Expression of Interest on the mentioned website. It is therefore advisable to consult this website regularly in order to be informed of any updates and of the questions and answers published.

No modification to the applications is allowed once the deadline for submission has elapsed. If there is a need to clarify certain aspects or to correct clerical mistakes, the EuroHPC JU may contact the applicant for this purpose during the evaluation process. This is generally done by e-mail. It is entirely the responsibility of applicants to ensure that all contact information provided is accurate and functioning.

In case of any change of contact details, please send an email with the application reference and the new contact details to [info@eurohpc-ju.europa.eu](mailto:info@eurohpc-ju.europa.eu)

In the case of hosting consortia, all communication regarding an application will be done with the lead applicant only, unless there are specific reasons to do otherwise, where the consortium coordinator should be in copy.

Applicants will be informed in writing about the results of the selection process. Unsuccessful applicants will be informed of the reasons for rejection. No information regarding the award procedure will be disclosed until the notification letters have been sent to the partners.

## 10. TIMETABLE

The steps and indicative times for the procedure from publication to expected start of the mandate for the selected Hosting Entities are in the table below:

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<sup>9</sup> Questions on submission must be sent before the deadline indicated in section 10

Selection of HE milestones	Date and time or indicative period
<b>Call for Expression of Interest Publication</b>	
Publication of Call for Expressions of Interest	01-04-2022
<b>Submission of applications</b>	
Deadline to submit questions about the Call	19-05-2022 – 23:59
Publication of the last answers to questions	
Call Deadline	03-6-2022 – 16:00
Application Opening day (open of envelopes with expressions of interest)	June 2022
<b>Evaluation</b>	July 2022
Sending questions for the hearings	
Hearings	
Notification of results to applicants	
<b>Signature of the updated hosting agreement</b>	October 2022
Period for additional Participating States to join Consortium	
Signature of hosting agreement	

## 11. PROCEDURE FOR THE SUBMISSION OF APPLICATIONS

Applications **must be sent no later than the 03 June 2022 at 16:00 Luxembourg time.**

Application forms are available at <https://eurohpc-ju.europa.eu/current-calls>

Applications must be submitted in the correct form, duly completed and dated. They must be submitted in electronic format, digitally signed by the person authorised to enter into legally binding commitments on behalf of the applicant organisation.

Applications must be submitted by an electronically signed and encrypted email to [calls@eurohpc-ju.europa.eu](mailto:calls@eurohpc-ju.europa.eu). The application files should be packaged in a password protected zip file.

Contact point for any questions is<sup>10</sup> [info@eurohpc-ju.europa.eu](mailto:info@eurohpc-ju.europa.eu)

All applications will be treated confidentially, as well as any submitted related information, data, and documents. The EuroHPC JU will ensure that the process of handling and evaluating applications is carried out in a confidential manner.

External experts are also bound by an obligation of confidentiality.

Applicants should avoid taking any actions that could jeopardise confidentiality. They must not attempt to discuss their application with persons you believe may act as expert evaluator for the EuroHPC JU.

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<sup>10</sup> Questions on submission must be sent before the deadline indicated in section 10

Your application should not contain any information that is ‘EU classified’ under the rules on security of information in the [Commission security rules for protecting EU classified information](#) (see also [Classification of Information in HE Projects](#)).

The EuroHPC JU will process personal data in accordance with Regulation (EU) 2018/1725 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC<sup>11</sup>.

Once the coordinator (or sole applicant) has submitted an expression of interest, an acknowledgement of receipt will be sent by the JU. No other interaction will take place with the EuroHPC JU until the application has been evaluated, unless:

- The EuroHPC JU needs to contact the applicant (usually through the coordinator) to clarify matters such as eligibility or to request additional information.

The list of Annexes included as part of this call is:

- Annex 1: Application form (please fill in the application form, including its annexes, and provide the relevant supporting documents – all listed below). Includes the checklist for applicants included at the end of the application form and the following annexes:
  - Annex a Declaration of honour
  - Annex b Mandate letters (if applicable)
  - Other supporting documents to be provided where applicable: see checklist for applicants
- Annex 2 if applicable: Model Hosting Agreement (updated)

Regarding the compilation of the application file, it is recommended to follow the order of documents as listed in the checklist (and attach a ticked checklist as below to the application);

## **12. APPENDIX 1: CONTENT OF THE APPLICATION**

### **12.1. Structure of the Application**

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 consortium, including contact details and legal representatives.

The second section “Information on the Action” is divided in five subsections. In the first subsection, applicants must describe how the following general system specifications will be met, for both the upgraded supercomputer and the site. In the second subsection “Total Cost of Ownership”, the applicant should include an estimation of the total cost of the acquisition and operations of the supercomputer that the applicant has in mind to host and that has been described in the previous section “general system specifications”. In subsection 3, applicants must provide information on their experience in installing and operating similar systems. In subsection 4, Applicants must provide information on the hosting

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<sup>11</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018R1725>

physical and IT infrastructure, including security and connectivity that the site can provide for the upgraded supercomputer. In the last subsection, “Quality of service to the users, namely capability to comply with the service level agreement”, the applicant should specify the benchmarks or deliverables which the applicant intends to employ to achieve the expected results and targets and how they will be used.

The application form includes a guide on how to fill it explanation for all sections.

Character and page limits:

- page limit: 30 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.

As part of the application, applicants must provide a formal statement indicating whether the hosting consortium would be ready or not to include additional Participating States if selected. Such statement should also include the indicative amounts of the contribution of the additional Participating States.

## **12.2. General system specifications**

Applicants must describe in detail the scope of the upgrade, how the following upgraded system specifications will be met in order to be compatible with the original supercomputer and the site.

A detailed description of the system upgrade which may include all or a subset of the following items depending on the upgrade scope:

- Description of computing nodes upgrade, their target configuration, envisioned architecture and the expected sustained performance.
- Local node memory or storage upgrade (target sizes and expected technologies).
- Description of the high-performance storage system upgrade including the target architecture and performance characteristics of the system.
- Interconnect upgrade. Target topology. Bandwidth and latency characteristics. Integration with the existing application, management and monitoring network.
- Compatibility with the existing system. Description of the foreseen integration activities including the expected impact on existing system availability, downtime period required etc.
- Upgrade of software, application libraries and development suites including acquisition of additional licenses for the existing software.
- Acceptance tests and benchmarks to be used for the upgraded system.

## **12.3. Total Cost of Ownership (TCO)**

The applicant should include an estimation of the cost of the upgraded system that the applicant has in mind.

The estimation of the TCO will be based on an estimation of the acquisition costs of the upgraded system that complies with the general system specifications and on an estimation of its operating costs. The



costs related to the extension of the hosting site per se (i.e., the costs related to the building infrastructure that will host the upgraded supercomputer, etc.) shall not be covered by the EuroHPC JU. The costs of the preparation and adaptation of the hosting site incurred by the hosting entity that can be directly accounted to the upgraded system may be considered as part of the TCO.

Applicants must provide their intention with regards to the duration of the operations of the EuroHPC JU supercomputer which will now include the upgraded system.

#### 12.3.1. *Site preparation*

The hosting entity must be able to meet the baseline requirements set out herein in time for the anticipated timeline for the supercomputer upgrade. The applicant must provide a plan of how and in what timeline intends to realise the construction of the extension of the existing site, including costs of each action (indicating the ones that will be considered as in-kind contribution) and the definitive date at which the site will be ready for the installation of the upgraded EuroHPC system.

#### 12.3.2. *Acquisition Costs*

Applicants must detail the estimation for the cost of the acquisition of the upgraded EuroHPC supercomputer. Applicants must indicate clearly what costs will be included in this category, how they will calculate them and who will pay for those.

#### 12.3.3. *Operating Costs*

Applicants must provide an auditable methodology to calculate and to verify the operating costs of the upgraded supercomputer for the duration of the action. Applicants must describe the model that will be used for calculating the costs of the Operational expenditures (OPEX), detailing the cost elements included in the model and providing estimates for each cost.

The hosting entity should be in position to provide an accurate estimate and to verify the operating costs of the upgraded supercomputer.

The method should be used in the operating grant to calculate the operating costs and the amount that will be covered by Union's contribution. Applicants can use the indicative list of cost elements provided in Appendix 2 to consider in the calculation of the operating costs.

Applications must include at least the following information and/ or estimations:

1. Average power usage effectiveness (PUE) for the current data centre over the last 12 months.<sup>12</sup> And, in the case that the applicant would be upgrading the site to host the upgraded supercomputer, what is the planned (design specification) PUE for the upgraded data centre<sup>13</sup>
2. Updated depreciation time for the building, technical building infrastructure and IT investments and method used for the depreciation of the assets (e.g. linear).

### 13. APPENDIX 2: INDICATIVE LIST OF COST ELEMENTS TO CONSIDER IN THE CALCULATION OF THE OPERATING COSTS

In-kind contributions are marked with coloured fields.

#### **Supercomputer and maintenance**

Cost item	Verification	Method	Provider
Upgraded HPC system	N/A procured by EuroHPC JU	N/A	
High Performance disks/Scratch Storage	N/A procured by EuroHPC JU	N/A	

#### **Equipment and commercial software**

Cost item	Verification	Method	Provider	
Site preparation	Invoice sheet /Balance	Fraction committed to the EuroHPC JU (JU)	Hosting site only	Related equipment
Network at data centre level	Invoice sheet /Balance	Fraction committed to JU	Hosting site only	
High Performance disks/Home Storage	Invoice sheet /Balance	Fraction committed to JU	Hosting site / others	
Backup storage	Invoice sheet /Balance	Fraction committed to JU	Hosting site / others	
Level 2 storage/Long term Storage	Invoice sheet /Balance	Fraction committed to JU	Hosting site / others	
Other IT equipment	Invoice sheet /Balance	Fraction committed to JU	Hosting site only	
Supercomputers (SC) room	Invoice sheet /Balance	Fraction of the room occupied by the JU systems		
Building	Invoice sheet /Balance	Fraction of the building occupied by the SC room		
Power supply to the facility	Invoice sheet /Balance	Fraction of MW used by JU	Hosting site only	
Power backup	Invoice sheet /Balance	Fraction of MW used by JU	Hosting site only	
Power distribution	Invoice sheet /Balance	Fraction of MW used by JU	Hosting site only	

Cooling	Invoice sheet	/Balance	Fraction of MW used by JU	Hosting site only	Other infrastructure services
Fire detection and extinction	Invoice sheet	/Balance	Fraction of the surface of the SC room occupied by the JU systems	Hosting site only	
CCTV, security, access control	Invoice sheet	/Balance	Fraction of the surface of the SC room occupied by the JU systems	Hosting site only	
Monitoring, building and facility	Invoice sheet	/Balance	Fraction of MW used by JU	Hosting site only	
File system software	Invoice		Fraction of sw used by JU	Hosting site only	
Accounting software	Invoice		Fraction of sw used by JU	Hosting site only	
Compilers	Invoice		Fraction of sw used by JU	Hosting site only	
Debuggers	Invoice		Fraction of sw used by JU	Hosting site only	
Scientific software	Invoice		Fraction of sw used by JU	Hosting site only	

### **Personnel**

<b>Cost item</b>	<b>Verification</b>	<b>Method</b>	<b>Provider</b>
System administration, user support and training	Payroll, and/or invoice when part of the service is subcontracted	Timesheets to show dedication to the JU	Hosting site only
Application enablement	Payroll, and/or invoice when part of the service is subcontracted	Timesheets to show dedication to the JU	Hosting site / others
Facility	Payroll, and/or invoice when part of the service is subcontracted	Timesheets to show dedication to the JU	Hosting site only
Installation	Payroll, and/or invoice when part of the service is subcontracted	Timesheets to show dedication to the JU	Hosting site only
Security	Payroll, or invoice when the service is subcontracted	Fraction according to max. dedication	Hosting site only
Cleaning	Payroll, or invoice when the service is subcontracted	Fraction according to max. dedication	

**Operations and maintenance**

<b>Cost item</b>	<b>Verification</b>	<b>Method</b>	<b>Provider</b>
Electricity	Invoice/Meters	Fraction used by the JU	Hosting site only
Water	Invoice/Meters	Fraction used by the JU	
Gasoil	Invoice/Meters	Fraction used by the JU	
Network connection	Invoice /Balance sheet	Fraction committed to the JU	Hosting site only
Maintenance of HPC system and the high-performance disks/scratch storage	N/A procured by EuroHPC	N/A	
Maintenance of items under "Equipment and commercial software"	Invoice	According to method in "Equipment and commercial software"	Hosting site / others