



AI-BOOST

Delivering the next level of European
AI Open competitions

LARGE AI GRAND CHALLENGE

GUIDELINES FOR APPLICANTS

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EXECUTIVE SUMMARY

This guide aims to assist all potential applicants of the Large AI Grand Challenge. You can discover the competition and prizes and learn all the steps and procedures you need to follow once you decided to apply.

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1 AI-BOOST AT A GLANCE

1.1 WHAT IS AI-BOOST?

AI-BOOST is an **EU-funded prominent open challenge prize programme** that will serve as a benchmark for the European artificial intelligence (AI) community.

The overall objective of the project is to create and run highly replicable **AI open innovation competitions** that attracts the outstanding talent all over EU and Associated Countries **to drive scientific progress in the major AI Areas**. The project will foster collaboration between the key stakeholders in AI community to define attractive AI challenges with the potential to lead trustworthy and human-centric real-world solutions.

- A **unique sound methodology** capable to define high social impact AI challenges.
- A highly **replicable and attractive AI open innovation competitions** capable to lead breakthroughs technologies and solutions with substantial scientific progress.
- Provide **access to infrastructure and expert knowledge** and promote its adoption through effective training and troubleshooting during the challenges implementation.
- **Attract outstanding talent** and the best research teams to tackle AI challenges.
- **Engage private and public sponsors** capable to provide funding, attractive rewards, and expertise.
- An **AI community** to foster interaction among all relevant stakeholders.

1.2 WHO IS AI-BOOST?

AI-BOOST consortium is formed by 7 partners from 6 European countries (Spain, Portugal, Ireland, Belgium, Italy and Slovakia).

ZABALA – Zabala Innovation Consulting, S.A.

Website: <https://www.zabala.eu/>



We are a leading international consultancy firm in innovation strategy and R&D&I financing. Since 1986, we have been supporting our clients in their entrepreneurial drive through the search for financing and the management and promotion of innovation. We work with European Institutions, National and International Public Bodies, SMEs & Startups, Large Companies, Research & Academia

F6S – F6S Network Ireland Limited



Website: <https://www.f6s.com/>

Brief description: F6S is a European based entity that has become the largest Startup/SME community globally with over 1.5 million Startups/SMEs and 2.0 million entrepreneurs. F6S delivers more than €2 billion every year to Startups and SMEs with leading CRM for deal flow, corporate challenges, structured programs, startup services, corporate partnering, recruiting, government grants, and free startup resources.

F6S is the leading platform for application management for commercial, corporate, government, university, and other accelerator programs, helping more than 17.000 such initiatives worldwide.

CINECA – Cineca Consorzio Interuniversitario



Website: <https://www.cineca.it/>

Brief description: CINECA's aim is to accelerate the scientific discovery by providing high performance computing resources, data management, as well as HPC services and expertise. Moreover, CINECA (a not-for-profit Interuniversity Consortium with 117 members) provides technical and scientific services related to high-performance computing to the Italian and European research community.

The staff dedicated to HPC supports the users and offers consultancy in tools and techniques in several disciplinary fields ranging from medicine to meteorology, from seismology to fluid dynamics, to bioinformatics and chemistry, to provide a solid and reliable computing environment for the scientific community.

CINECA is the hosting site for EuroHPC JU pre-exascale system LEONARDO.

INESC TEC – Instituto De Engenharia de Sistemas e Computadores, Tecnologia e Ciencia Porto

Website: <https://www.inesctec.pt/en>

Brief description: INESC TEC is a private non-profit research association, with Public Interest status, dedicated to scientific research and technological development, technology transfer, advanced consulting and training, and pre-incubation of new technology-based companies. The 13 R&D Centres of INESC TEC are structured in four thematic domains – Computer Science, Industrial and Systems Engineering, Networked Intelligent Systems, and Power and Energy.

UPJS – Univerzita Pavla Jozefa Safarika V Kosiciach

**PAVOL JOZEF ŠAFÁRIK
UNIVERSITY
IN KOŠICE**

Website: <https://www.upjs.sk/>

Brief description: UPJŠ is a research-based university generating its highest level of scientific knowledge through a vibrant community of young researchers in collaboration with their supervisors. The Faculty of Science is the strongest contributor to the research outputs of the university and key partners in EDIH CASSOVIUM (EDCASS). Within their Law Faculty have experts on AI Legal issues.

EIT DIGITAL –EIT Digital

Website: <https://www.eitdigital.eu/>

Brief description: EIT DIGITAL is a pan-European multi-stakeholder open-innovation ecosystem of top European corporations, SMEs, startups, universities and research institutes, where students, researchers, engineers, business developers and investors address the technology, talent, skills, business and capital needs of digital entrepreneurship.

EIT DIGITAL build the next generation of digital ventures, digital products and services, and breed digital entrepreneurial talent, helping business and entrepreneurs to be at the frontier of digital innovation by

providing them with technology, talent, and growth support.

UPF – Universitat Pompeu Fabra



Website: www.upf.edu/web/etic

Brief description: UPF is a public, international and research-intensive university that, in just thirty-two years, has earned a place for itself among the best universities in Europe. UPF is the third Spanish university in the world Top 200 (THE2023). The [Department of Information and Communication Technologies](#) (DTIC) of UPF has an important track record of active participation in EU projects (67 H2020 projects, many ERC grants (21)). DTIC-UPF is the only Spanish university ICT department that has been awarded a second time the *Maria de Maeztu* research excellence seal by the Spanish government.

2 THE EUROPEAN HIGH PERFORMANCE COMPUTING JOINT UNDERTAKING

2.1 ABOUT EUROHPC JU

EuroHPC JU is a joint initiative between the EU, European countries and private partners to develop a World Class Supercomputing Ecosystem in Europe. The European High Performance Computing Joint Undertaking (EuroHPC JU) aims to improve quality of life of European citizens, advance science, boost industrial competitiveness, and ensure Europe’s technological autonomy. It is a legal and funding entity, created in 2018 and located in Luxembourg.

The EuroHPC Joint Undertaking is composed of public and private members:

- Public members:
 - the European Union (represented by the Commission),
 - Member States and Associated Countries that have chosen to become members of the Joint Undertaking: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, and Türkiye.
- Private members: representatives from the three participating private partners, the European Technology Platform for High Performance Computing (ETP4HPC), the Big Data Value association (BDVA) and the European Quantum Industry Consortium (QuIC).

#EuroHPC Joint Undertaking

The European High Performance Computing Joint Undertaking (EuroHPC JU) will pool European resources to develop top-of-the range exascale supercomputers for processing big data, based on competitive European technology.

Member countries are Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and Turkey.



FIGURE 1: THE EUROHPC JOINT UNDERTAKING IS COMPOSED OF PUBLIC AND PRIVATE MEMBERS



Other Member States and Associated States to Horizon 2020 Europe or Digital Europe Programme can also join the Joint Undertaking, subject to approval of the EuroHPC JU Governing Board.

The EuroHPC Joint Undertaking (JU) enables the coordination of efforts and the sharing of EuroHPC resources with the objective of deploying a world-class High-Performance Computing (HPC) infrastructure and a competitive innovation ecosystem in supercomputing technologies, applications, and skills in Europe.

The EuroHPC JU is acquiring a large range of supercomputers (the EuroHPC supercomputers) which are located at and operated by supercomputing centres (Hosting Entities) in the Union. The supercomputing infrastructure deployed by EuroHPC, comprises a significant investment of the JU members (European Union and Participating States).

2.2 EUROHPC SYSTEMS

The supercomputer systems and their operations provided for the AI-BOOST Large AI Grand Challenge are:

System	Location	Architecture	Total	Per project
	CINECA (IT)	Atos BullSequana XH2000	4 million GPU hours	2 million GPU hours
	CSC (FI)	HPE Cray EX	4 million GPU hours	2 million GPU hours

If you require further information on LEONARDO or LUMI systems, please contact the Hosting Entity via email at eurohpc-tech@cineca.it and resource@lumi-supercomputer.eu, respectively. Please refer to the Large AI Grand Challenge Open Call organised through AI-BOOST project.

3 SCOPE OF THE LARGE AI GRAND CHALLENGE COMPETITION

3.1 LARGE AI GRANT CHALLENGE DESCRIPTION – CONTEXT AND OBJECTIVES

Large AI Grand Challenge – General context

Large-scale AI models refer to a new generation of general-purpose AI systems that can adapt to various domains and tasks without significant modification. Thanks to their adaptability, these models hold immense potential to revolutionise various industries. Notable examples of large-scale AI models include OpenAI's GPT-4 and Meta's LLaMA 2. It is of strategic importance for European sovereignty to ensure European companies master this field.

Large AI Grand Challenge – Scope

The purpose of the Large AI Grand Challenge is to foster the development of large-scale AI models in Europe and to substantially increase the visibility of Europe's activity in this field. The competition will reward innovative start-ups for devising ambitious strategies and making commitments to develop large-scale AI models that will provide a competitive edge for Europe.

The expected outcome of the Large AI Grand Challenge is the **selection of up to 4 proposals** to create innovative foundational language models that will outperform state-of-the-art systems in a number of relevant tasks. The development of these models should necessarily involve the use of High-Performance Computing (HPC).

Large AI Grand Challenge – Overview

Participants in the Grand Challenge are invited to submit a proposal for the development of a language foundation model, utilising one of the EuroHPC JU targeted facilities (i.e. LUMI or Leonardo supercomputers). The model must be trained from scratch, possess a minimum of 30 billion parameters, and be trained following state-of-the-art optimal scaling laws for computing and training data size.

Applicants are required to provide a detailed project scope and plan for the development of the large-scale AI model. They must also offer solid justification for the planned model's relevance, the justification for the use of HPC, and demonstrate their team's expertise in training foundation models using HPC systems, as well as the efficient use of the target supercomputers (i.e. LUMI or Leonardo), along with an appropriate plan of the use of the computing time.

An SME can present a proposal targeting the LUMI supercomputer and an independent proposal targeting the Leonardo supercomputer. Only one proposal can be submitted by a SME to each of the specific supercomputer. However, it's important to note that an individual SME is not eligible to receive both prizes.

A critical component of the proposal will be the inclusion of a substantial differentiating factor compared to existing large language models. This could be accomplished either by introducing innovative enhancements or by devising novel models that effectively address the limitations of

current ones. Additionally, the proposal should provide a rationale for the utilization of HPC facilities, accompanied by a well-defined plan.

Large AI Grand Challenge – Specific Conditions

- Applicants should consider the specific architecture and development framework that best suits their models, and the software requirements should be present in the project proposal.
- Projects are expected to use the facilities of one of these two EuroHPC facilities, LUMI and Leonardo supercomputers with a maximum amount of computing hours of 2 million of GPU hours per system in total (including pre-processing, parallelization, experimenting, benchmarking and training). A description of data to be used should be also provided, as well as a data management plan. All projects should comply with the GDPR and other applicable privacy protection and non-discrimination rules.
- General benchmarking will be the criteria to evaluate the success for all projects, the benchmarks are available at the evaluation guidelines.
- An impact and ethical assessment will be required for the proposals
- Multimodal models are not expected during this challenge.

3.2 TIMELINE

- Start and term of the Challenge. The Challenge starts on 16th November 2023, and will last until April 2024.
- Deadline for Application. Applications must be submitted through the AI-BOOST Challenge website (or “Website”) by 16th January 2023 at 17:00 (i.e., Closure of application period). No Application will be admitted after the Closure of the application period.
- Eligibility Assessment period. After the closure of the application period, the eligibility assessment will be conducted by the Panel during the two weeks period following the Closure of application.
- Announcement of the eligible Participants. The eligible participants will be announced on the dedicated Website; all the teams complying with the eligibility criteria will be presented.
- Prize Awards. The presentation of the awards for the prizes will be made during a special event to be determined (the award ceremony).
- Change in the timelines. The Challenge duration and any of the above-mentioned timelines may be modified by the AI-BOOST in agreement with EuroHPC JU, in case it is necessary to better fulfil the Specific Objectives of the Challenge. This(these) potential change(s) will be notified in advance to all Participants and communicated to all the interested parties (e.g. press etc.).

3.3 TYPES OF BENEFICIARIES

To be eligible to apply to the Large AI Grand Challenge, applicants must meet all of the following criteria:

- **Single legal entity**

- **Small and medium-sized enterprises (SMEs)** as defined in the Commission Recommendation 2003/361/EC¹, this includes start-ups.

Therefore, consortiums are NOT eligible within this Large AI Grand Challenge, as well as single legal entities that are NOT an SMEs (e.g., universities, research centres; NGOs, governmental organisations, large companies, etc.).

3.4 ELIGIBLE COUNTRIES

Single Legal entities **established in one of the eligible countries:**

- the Member States (MS) of the European Union (EU)²:
Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.
- the Overseas Countries and Territories (OCTs) linked to the Member States³:
Aruba (NL), Bonaire (NL), Curaçao (NL), French Polynesia (FR), French Southern and Antarctic Territories (FR), Greenland (DK), New Caledonia (FR), Saba (NL), Saint Barthélemy (FR), Sint Eustatius (NL), Sint Maarten (NL), St. Pierre and Miquelon (FR), Wallis and Futuna Islands (FR).

3.5 SPECIFIC ELIGIBILITY REQUIREMENTS

The following additional Eligibility Criteria:

- The challenge is open only to SMEs with **technical capacity AND experience** working on large-scale AI models.
- **Open science**⁴ is a legal obligation under Horizon Europe and under the Large AI Grand challenge competition organised by AI-BOOST and EuroHPC.
- Projects must focus exclusively on civil applications.
- Eligible activities are the ones described in the challenge conditions. Applications will only be considered eligible if their content corresponds, wholly or in part, to the challenge description for which it is submitted.
- Actions must, moreover, comply with EU policy interests and priorities (environment, social, security, industrial policy, etc.).

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361>

² https://european-union.europa.eu/principles-countries-history/country-profiles_en

³ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-13-general-annexes_horizon-2023-2024_en.pdf

⁴ https://rea.ec.europa.eu/open-science_en

3.6 SPECIFIC EXCLUSION CRITERIA

No double financing rule: – There is a strict prohibition of double funding for the same action. Actions that have already received an EU prize or Grant cannot benefit from Large AI Grand challenge rewards for the same activities. In particular, actions that have been funded through EuroHPC Access Calls will not be eligible for Large AI Grand challenge competition.

In the event of duplicated funding, it will be deemed a breach and may lead to the withdrawal of funds, as well as potential legal actions. This provision aims to prevent resource duplication and ensure the fair allocation of funding across different projects.

3.7 DECLARATION OF HONOUR – EXCLUSION

To be eligible for the Large AI challenge, prize winner must sign a Declaration of Honour –DoH (Declaration of EU Policy and Law) about the compliance with EU Norms and Regulations. The Declaration of Honour can be downloaded from the AI-BOOST website: <https://aiboost-project.eu/large-ai-grand-challenge/>.

Overall, applicants which are subject to an EU exclusion decision OR exclusion grounds under the EU Financial Regulation 2018/1046 or in one of the following exclusion situations that bar them from receiving EU funding/prize can NOT participate:

- bankrupt, being wound up, having the affairs administered by the courts, entered into an arrangement with creditors, suspended business activities or subject to any other similar proceedings or procedures.
- in breach of social security or tax obligations
- guilty of grave professional misconduct⁵
- committed fraud, corruption, links to a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking
- shown significant deficiencies in complying with main obligations under an EU procurement contract, grant agreement or grant decision
- guilty of irregularities within the meaning of Article 1(2) of Regulation No 2988/95
- created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin (including creation of another entity with this purpose).

Selected beneficiaries (prize-winners) accept to be potentially subject of audits and control activities by the European Commission. Overall, selected beneficiaries must ensure that the European Commission, the European Court of Auditors (ECA), the European Public Prosecutor's Office (EPPO)

⁵ Professional misconduct includes: violation of ethical standards of the profession, wrongful conduct with impact on professional credibility, false declarations/misrepresentation of information, participation in a cartel or other agreement distorting competition, violation of IPR, attempting to influence decision-making processes or obtain confidential information from public authorities to gain an advantage.

and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 25 of the [Annotated Model Grant Agreement of the Horizon Europe Programme](#).

3.8 AVAILABLE BUDGET – MONETARY PRIZES

Subject to conditions described below, **up to four (4) prizes** may be awarded by the panel of the Large AI Grand Challenge as follows:

- **LUMI Winner: Up to two prizes of Euros 250,000** and an allocation of **2 million GPU hours** on the LUMI facility per project. This allocation will be used to develop the large-scale AI model described in the proposals in the 12 months following the prize awards. If there is ultimately only one winner, the total prize will be 500,000 Euros, along with an allocation of 4 million GPU hours on the LUMI facility.
- **Leonardo Winner: Up to two prizes of Euros 250,000** and an allocation of **2 million GPU hours** on the Leonardo facility per project. This allocation will be used to develop the large-scale AI model described in the proposals in the 12 months following the prize awards. If there is ultimately only one winner, the total prize will be 500,000 Euros, along with an allocation of 4 million GPU hours on the Leonardo facility.

The allocations are granted for a period of one (1) year. Access to EuroHPC systems implies adherence to the rules and conditions set in the EuroHPC Access Policy.

The winners will be listed by Team name on the official Challenge website and promoted by AI-BOOST. An individual SME cannot receive both prizes. In case of termination of the Challenge or if the requirements are not met, the prizes may not be awarded upon decision of the Panel.

3.9 GENERAL PRIZE TERMS – DELAYS OR CANCELLATION

The Participants acknowledge and accept that all or part of the prizes:

- might not be granted in case of termination of the Challenge;
- might be granted with delays in case of extension of the Challenge;
- might not be granted or granted with delays if the requirements are not fulfilled.

In case the Challenge is terminated for any reason, no further prize(s) shall be awarded. AI-BOOST may cancel the contest or decide not to award the prizes without any obligation to compensate participants, in particular where its objectives cannot be fulfilled.

The prize(s) already awarded at that time may not be revoked.

The monetary prize to be paid will always be subject to the availability of EC funds to be transferred by the AI-BOOST Coordinator in the bank account during the relevant payment period.

4 APPLICATION PROCESS

4.1 HOW TO APPLY?

Applicants are invited to register, create a user profile, and complete the full application form, prepare the required supporting documents and submit them via the F6S platform and accessible through AI-BOOST website: <https://aiboost-project.eu/large-ai-grand-challenge/>. All proposals must be fully completed and submitted via F6S platform before the deadline (see section 4.6)

Main steps required:

- Registration via F6S platform
- Dully complete the application form (all mandatory fields must be completed)
- Attach the Declaration of Honour (see section 3.7) dully filled in and signed by the legal representative.
- Attach the Attachment 2 – Tables and Images
- Submit the application form before the deadline (see section 4.6)

4.2 WHERE CAN I FIND THE APPLICATION FORM?

The applications must be built and submitted through the online F6S application form, available via AI-BOOST website: <https://aiboost-project.eu/large-ai-grand-challenge/>.

However, an indicative template (word document) can be downloaded from AI-BOOST website to assist applicants in preparing the application form. It is just an example; the actual online application form might differ from this example.

We recommend that applicants submit their proposals well in advance of the specified deadline to ensure that all required fields are completed and that their submissions are accepted.

4.3 WHICH INFORMATION MUST BE PROVIDED IN THE APPLICATION FORM?

The information to be provided in the application is summarized below. However, please see the online application form and the template of the application form for further information.

- **Excellence**
 - Objectives and ambition:
 - Describe the main problem this proposal tries to solve.
 - What are the main objectives of the proposal?
 - What are the main expected outcomes from the proposal?
 - Background:
 - What are the state-of-the-art advances of the proposal?

- Methodology:
 - Describe and justify the choice of computational methods.
 - What are the main requirements for executing the proposal?
- Data: Management Plan, Storage, Analysis and Visualization:
 - What are the main datasets used to train and test the models?
 - Provide details of your data management plan.
- **Innovation and Impact**
 - Expected results:
 - What are the expected achievements in product development?
 - What are the expected technical results?
 - Requirements and potential barriers:
 - Determine the main risk and potential barriers for developing your proposal.
 - What are the measures to tackle the main risks to your proposal?
 - Open Science and Responsible AI strategy:
 - Which are the open science aspects in your project?
 - Do you plan to make your code and/or models open source?
 - Do you have an ethical and responsible assessment?
- **Quality and Efficiency of the Implementation**
 - Workplan and resources:
 - Define the project workplan.
 - Define the milestones to be achieved during the execution of the project.
 - Gantt Chart.
 - What are the developmental objectives for the proposal?
 - Capacity of the applicant:
 - What are the previous achievements in the field?
 - What is the expertise of the SMEs technical staff?
 - What is the current infrastructure available?
 - What are the SME's previous products or current products?
 - What is the SME's level of development and its market position?

The F6S platform contains all functionalities to upload attachments. Please provide the following mandatory documents dully completed.

- **Attachment 1 – Declaration of Honour** (see 4.5) – **Mandatory**.

- **Attachment 2 – Tables and Images:** Please download the available word template (Attachment – Tables and Images), complete the document with the following information and upload the file:
 - Gantt Chart – **Mandatory**
 - What are the developmental objectives for the proposal? – Complete and attach the Table – **Mandatory**
 - Others – **Optional**. We invite applicants to submit any relevant image (i.e., photos, diagrams, graphs) to help understand better the project and information provided. Those type of information are not systematically read during the evaluation. Avoid sending extensive information.

4.4 IS IT POSSIBLE TO SUBMIT THE DOCUMENTS IN NATIONAL LANGUAGE?

English is the official language for Large AI Grand Challenge. Submissions done in any other language will not be evaluated. English is also the only official language during the whole execution of the AI-BOOST action.

4.5 DOES THE APPLICATION REQUIRE A DECLARATION OF HONOUR?

Yes, the Participants will be required to provide a Declaration of Honour with the Application, including confirmation that the Participant fulfils all the eligibility conditions specified in the Large Grand Challenge Call (see section 3.7 for further information).

The Declaration of Honour can be downloaded from the AI-BOOST website: <https://aiboost-project.eu/>.

4.6 WHEN TO SUBMIT THE APPLICATION FORM?

All sections of the Application Form must be submitted electronically via F6S Platform (accessible via <https://www.f6s.com/large-ai-grand-challenge/apply>) **before 16 of January 2023, 17:00.00 Brussels time**.

We recommend that applicants **submit their proposals well in advance of the specified deadline** to ensure that all required fields are completed and that their submissions are accepted.

4.7 IS THERE A CONFIRMATION FOR THE SUBMISSION PROCESS?

All submitted proposals will receive an automatic acknowledgement of receipt of the application from info@aiboost-project.eu , including the number of the proposal, date and hour of the submission. If this mail is not received after submitting a proposal, check the spam box. This e-mail should not be taken as an indication that the proposal is admissible, only that it was submitted.

4.8 CAN AN ENTITY SUBMIT MORE THAN ONE PROPOSAL (MULTIPLE SUBMISSION)?

Yes, an SME can submit a proposal targeting the LUMI supercomputer and another independent proposal targeting the Leonardo supercomputer. In other words, only one proposal can be submitted by a SME to each of the specific supercomputer. However, applicant can benefit only once from the Large AI Grant Challenge. Therefore, it's important to note that an individual SME is not eligible to receive both prizes.

4.9 ARE THERE ANY OTHER TERMS APPLICANTS SHOULD BE AWARE OF?

The Participants acknowledge and accept that all or part of the prizes:

- might not be granted in case of termination of the Challenge;
- might be granted with delays in case of extension of the Challenge;
- might not be granted or granted with delays if the requirements are not fulfilled

In case the Challenge is terminated for any reason, no prizes shall be awarded. However, if prizes have already been awarded at that time, they may not be revoked.

5 EVALUATION AND SELECTION OF APPLICANTS

5.1 SELECTION CRITERIA (AWARD CRITERIA)

- **Excellence** – aims to evaluate the scientific quality and merit of the project.
 - Objectives and ambition Includes demonstrated background in LLMs and background intellectual property
 - The soundness of the proposed concept;
 - Correctly identify the requirements and potential barriers in the field – Includes mechanisms for regulating the model's output in relation to different levels of creativity or trusted facts.
 - Clarity, credibility and appropriateness of the proposed methodology – Includes Data management, Ethics and impact assessment, Development framework, Resources needed concerning corresponding architecture of choice (LUMI or Leonardo).
- **Innovation and Impact** – intends to assess the innovative nature, the potential impacts and contributions of the project. Sustainability and business impact should be described.
 - Originality and novelty of the proposed project beyond the state of the art
 - Capabilities and definitions of the model that follow European values – e.g., diversity and inclusiveness, multilingualism, explainability, robustness, energy efficiency, transparency, human oversight/ human in the loop, removal of biases, fight against misinformation.
 - Demonstrated innovation and industrial impact on a diversity of sectors, markets and the broader socio-economic impact;
 - [Open science](#) strategy for exploitation planning .
- **Quality and Efficiency of the Implementation** – intends to evaluate the quality and feasibility of the work plan to deliver the project successfully. It also evaluates the technical expertise of the SME submitting the proposal.
 - Feasibility of the project plan;
 - Alignment with the objectives of the project;
 - Efficient use of the resources requested and in accordance with available HPC resources;
 - Appropriateness of resource allocation schedule to successfully complete the project;
 - Technical capability and previous technical expertise in the field as part of implementation criteria

5.2 EVALUATION PANEL

Role of the Panel; The Panel will:

- Approve Applications,

- Evaluate Applications,
- Provide the final ranking list of the Applications

Composition

The evaluation Panel will be composed of an odd number of experts, from a minimum of three (3) to a maximum of nine (9) experts, each having a voting right. The experts will be appointed by AI-BOOST and EuroHPC JU. A representative from AI-BOOST or EuroHPC JU would chair the panel without voting rights.

The panel shall consist exclusively of natural persons who are independent of the contest participants. At least one-third of the panel members shall have extensive experience in leading-class HPC systems and their use as main expertise area, while another third shall be experts in large AI systems.

Decisions

All decisions made by the Panel shall be considered binding and final on the Participant, in all Phases of the Challenge.

5.3 SELECTION PROCEDURE – WHAT IS THE OVERALL PROCEDURE TO AWARD THE PRIZES?

PRELIMINARY ASSESSMENT

- a) Administrative Check: All submitted applications through the F6S Platform (accessible through AI-BOOSTS website) within the deadline (see section 4.6) will be collected and pass through a first screening and eligibility. The proposals are assessed for any administrative inconsistency and for compliance with the eligibility criteria. This first macroscopic screening will be conducted by appointed members of the AI-BOOST Grand Challenge office.

The proposals must pass the administrative check to proceed to next evaluation steps. Proposals that have been administratively rejected will not proceed further.

- b) Pre-screening process: **If more than 20 proposals are received**, an administrative check may be included. For this purpose, a panel composed by representatives from AI-BOOST will rank the proposals according to the specific objectives of the challenge. The pre-screening will consist of scoring specifically technical aspects and the coherence of the proposal:

- Dedication to the project (15 points)
- Company capacities (10 points)
- Proved experience (if any) (10 points)
- Soundness of the proposal (15 points)
- Potential of adoption and scalability of the solution (10 points)

In total a project can receive 60 points. The top 20 ranked proposals will continue with the technical validation and the selection process. This process **shall take approximately between two and four working weeks**.

TECHNICAL ASSESSMENT.

Proposals will be technically reviewed by technical experts of EuroHPC JU Hosting sites (i.e., LUMI or Leonardo), who will assess the suitability of the application to run in the indicated system. This process shall take **approximately one working week**.

SCIENTIFIC ASSESSMENT

The Panel Chair assigns proposals to 3 panel members (Rapporteurs) to evaluate the proposals per 3 set criteria: Excellence, Innovation and Impact, Quality and Efficiency of the Implementation. Each evaluator will receive the whole proposal package and carry out the assessment. This process **shall take approximately two working weeks**.

Individual Assessment – The first step is the independent assessment by single evaluators. The scoring process will be the same as with Horizon Europe.

- **Poor** – the criterion is inadequately addressed, or there are serious inherent weaknesses.
- **Fair** – the proposal broadly addresses the criterion, but there are significant weaknesses.
- **Good** – the proposal addresses the criterion well, but a number of shortcomings are present.
- **Very good** – the proposal addresses the criterion very well, but a small number of shortcomings are present.
- **Excellent** – the proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

Each evaluator will score the proposal with a mark from 0 to 5 (with 0.5 resolution) on each of the three award criteria (or areas of evaluation):

- Excellence.
- Innovation and Impact.
- Quality and Efficiency of the Implementation

The threshold for each individual criteria is 3. The overall threshold, applying to the sum of the 3 individual scores, is 10 points – not including bonuses.

In addition to the scores, each evaluator could assign each proposal **one or more “bonuses”**, whose presence will be considered in the elaboration of the final ranking. These bonuses are related to the following topics:

- Artifacts, code and model weights released as open source
- Multilingual models

Each evaluator will insert the outcomes of his/her evaluation (mark from 1 to 5 with 0.5 resolution) for each of the four areas of evaluation (total mark out of 15 resulting from the sum of the four marks) into an evaluation tool and the bonuses. The score given by other evaluators will not be visible until the evaluation is completed by all evaluators.

EXPERTS EVALUATION MEETINGS

The evaluation system created for evaluation purposes will compare marks given by different reviewers and, in case marks given by different reviewers in more than one award criteria will differ by more than 1.0 from the average mark, the evaluation tool will highlight the proposal as needing discussion.

For each proposal requiring discussion among evaluators, a conference call having a maximum duration of 30 minutes will be organized through a suitable platform and will involve all the three evaluators.

Each evaluator will explain the reasons of the given score and discussion will take place with the aim of providing a consolidated scoring per proposal according to the mentioned criteria and a ranking of the proposals. Minutes of the meeting will be taken.

EVALUATION SUMMARY REPORT

An Evaluation Summary Report (ESR) with the consolidated results and final score will be elaborated by the Evaluator Manager (rapporteur), which will be one representative of the evaluation panel assigned for a given proposal. The Evaluator Manager will be appointed by AI-BOOST Grand Challenge office.

Average marks will be calculated with two decimals and rounding will be applied according to the following rules:

- values with decimals up to 0.24 will be rounded to the lower integer number;
- values with decimals from 0.25 to 0.74 will be rounded to 0.5;
- values with decimals between 0.75 and 0.99 will be rounded to the higher integer number.

According to the received bonuses, 2 additional points will be provided:

- **1 for Artifacts, code and model weights released as open source.** The proposal will receive the average bonus mark, determined by calculating the arithmetic average of the marks given by the evaluators rounding the result to 0 points if the average is lower than 0.24, to 0.5 points if the average is between 0.25 and 0.74, or to 1 point if the average is higher than 0.75;
- **1 for Multilingual models.** The proposal will receive the average bonus mark, determined by calculating the arithmetic average of the marks given by the evaluators rounding the result to 0 points if the average is lower than 0.24, to 0.5 points if the average is between 0.25 and 0.74, or to 1 point if the average is higher than 0.75;

PANEL MEETING AND FINAL RANKING

After the completion of the evaluation process, a final panel meeting will be conducted online with all the evaluation experts. The average marks will be used to define the final ranking. Two separated ranked lists for LUMI and Leonardo-targeted proposals will be created.

For projects having the same total score, precedence in the ranking will be given according to:

- Impact and Innovation in the European market
- Efficiency in its implementation
- Originality of the proposal

In the unlikely event that all the application are ranked equally according to these criteria, earliest date of submission will define precedence (i.e., date of submission of the application to the F6S Platform).

The highest-ranking proposals from these lists will be selected until the first of the following conditions are met.

- the total score threshold of 10 is reached,
- 4 applicants are selected or the cumulated support to selected projects reaches the maximum of EU funding available for the Large AI Grand Challenge. The 2 highest-ranking proposals from each list will be granted the prize: 2 winners for LUMI and 2 winners for Leonardo. It's important to note that a single SME is eligible for only one prize. The other selected beneficiaries will be put on the reserve list or rejected.

COMMUNICATION OF RESULTS

The Grand Challenge office will communicate the results to all applicants. They will receive an email with the final decision regarding their proposal; the same outcome can also be seen in the AI-BOOST website with the list of prize-winners. Moreover, the rejected applicants will also receive an Evaluation Summary Report (ESR) with the reasons for exclusion.

Applicants are strongly encouraged to check Spam inbox.

5.4 HOW LONG DOES IT TAKE TO RECEIVE THE RESULT?

The evaluation process shall take approximately **two (2) months** starting from the closing date of the call. After this period, applicants will be informed about the result.

6 COMMUNICATION FLOW WITH APPLICANTS

6.1 IS THERE ANY SUPPORT FOR THE APPLICANTS?

For more information about the Large AI Grand Challenge Open Call, please check the AI-BOOST website: <https://www.f6s.com/large-ai-grand-challenge/apply>.

For additional details concerning the Large AI Grand Challenge, any inquiries regarding eligibility criteria, questions about the required information in the Application Form, or if you encounter technical difficulties or issues with the Application Form, please reach out to the AI-BOOST Technical Helpdesk via email at: info@aiboost-project.eu

We also recommend following us on LinkedIn to stay updated on the latest news and events: <https://www.linkedin.com/company/aiboost-project/>.

On the other hand, if you require further information on LEONARDO or LUMI systems, please contact the Hosting Entity via email at eurohpc-tech@cineca.it and resource@lumi-supercomputer.eu, respectively. Please refer to the Large AI Grand Challenge Open Call organised through AI-BOOST project.

6.2 HOW ARE THE RESULTS COMMUNICATED TO APPLICANTS?

After the evaluation process is concluded, applicants are informed via e-mail about the results, although AI-BOOST website will also publish the list of prize-winners. Moreover, the rejected applicants will also receive an Evaluation Summary Report (ESR) with the reasons for exclusion.

Applicants are strongly encouraged to check Spam inbox.

6.3 CAN APPLICANTS APPEAL A REJECTION?

If, at any stage of the evaluation process, the applicant considers that a mistake has been made or that the evaluators have acted unfairly or have failed to comply with the rules of AI-BOOST first open call, and that her/his interests have been prejudiced as a result; the following appeal procedures are available.

A complaint should be drawn up in English and submitted by email to: info@aiboost-project.eu

Any complaint made should include:

- contact details,
- the subject of the complaint,
- Reference or code of the application form
- information and evidence regarding the alleged breach.

Complaints should also be made within five (calendar) days since the evaluation results are presented to the applicants.

As a standard procedure, the AI-BOOST Grand Challenge office will thoroughly investigate any complaints with the aim of reaching a decision to either issue a formal notice or close the case. This process will typically be completed within **twenty days** from the date of receiving the complaint, assuming that all necessary information has been provided by the complainant. In the event that this time frame is exceeded, the AI-BOOST Grand Challenge office will promptly notify the complainant via email.

7 AWARD, IMPLEMENTATION AND MONITORING

No commitment for prize: Invitation to this stage does NOT constitute a formal commitment for prize award. The AI-BOOST Grand Challenge office will still need to make various legal checks before prize award: legal entity validation, financial capacity, etc.

Moreover, the selected applicants should, if awarded a prize, accept the award in the Grand Challenge Website. This action will trigger a notification to the Hosting Entities to officially contact the applicants regarding the access to their systems.

7.1 ARE THERE ANY OTHER DOCUMENTS TO BE SENT AT THIS STAGE?

Yes, selected beneficiaries will be requested to provide the following documentation:

- **Legal Entity Form:** All selected beneficiaries need to provide the Legal Entity Form dully filled and signed by the legal representative. In addition, the beneficiary must attach copies of official supporting documents to proof the data provided in the form. The editable form can be downloaded in all EU languages from the following website⁶.
- **Financial Identification Form:** All selected beneficiaries need to provide the Financial Entity Form dully filled and signed according to the instructions provided in the form⁷.
- **Acceptable Use Policy:** Successful applicants sign an Acceptable Use Policy with the EURO HPC JU in which defines their limits and obligations when accessing the systems as End Users.
- **Additional documents:** In the specific cases additional documents to prove the SME condition.

7.2 HOW IS THE MONETARY PRIZE PAID?

The prizes will be disbursed in a **single payment via bank transfer**, after the Large AI Grand challenge ceremony, provided that all the requested documents have been submitted.

7.3 ARE THERE ANY ADDITIONAL OBLIGATIONS OF AWARD WINNERS?

Yes, the obligations and responsibilities of the winner (selected beneficiaries)

- The SMEs receiving awards must utilise the allotted HPC time for the development of the foundation model outlined in their proposals.
- Upon completion of the allocation period, the SMEs are required to submit a comprehensive Final Report within three months.

⁶ https://commission.europa.eu/publications/legal-entities_en

⁷ https://commission.europa.eu/publications/financial-identification_en

- The SMEs are expected to present the main results at the EuroHPC summit to be celebrated in March 2025 or a similar event.
- Acknowledge the role of the HPC Centre and EuroHPC JU in all publications which include the results above mentioned. Users shall use the following wording in such acknowledgement in all such papers and other publications: “We acknowledge EuroHPC JU for awarding this project access to [resource-name hosted by at site]”

7.4 IS THERE ANY OBLIGATION ABOUT COMMUNICATION?

The prize-winners must **actively promote the action and its results** by providing targeted information to multiple audiences (including the media and the public).

Unless otherwise agreed with the AI-BOOST and EuroHPC, communication activities of the winners related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge EU support and display the **European flag** (emblem) and **funding statement** (translated into local languages, where appropriate)⁸.

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text.

Apart from the emblem, no other visual identity or logo may be used to highlight the EU support.

When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.

For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to exclusive use. Moreover, they may not appropriate the emblem or any similar trademark or logo, either by registration or by any other means.

Any communication or dissemination activity related to the action must use factually accurate information.

Moreover, it must indicate the following **disclaimer** (translated into local languages where appropriate):

“Funded by the European Union under GA No 101135737. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.”

⁸ https://ec.europa.eu/regional_policy/information-sources/logo-download-center_en

7.5 WHAT IS THE IPR OWNERSHIP OF RESULTS?

The awarding entity does not acquire ownership of the outcomes generated within the framework of the prize.

The granting authority has the right to use non-sensitive information relating to the action and materials and documents received from the prize-winners (notably summaries for publication deliverables, as well as any other material, such as pictures or audio-visual material, in paper or electronic form) for policy, information, communication, dissemination and publicity purposes – during the action or afterwards.

The right to use the beneficiaries' materials, documents and information is granted in the form of a royalty-free, non-exclusive and irrevocable license.

Photos and videos taken by the awarding authority either in preparation of the award ceremony or during the award ceremony are the sole property of the awarding authority.