AI-BOOST

Delivering the next level of European
AI Open competitions

AI CHALLENGE COMPETITION

CALL FOR EXPERTS – EVALUATORS

AI-BOOST CONSORTIUM

#	Participant organisation name	Short name	Country
1	ZABALA INNOVATION CONSULTING, S.A.	ZABALA	Spain
2	F6S NETWORK IRELAND LIMITED	F6S	Ireland
3	CINECA CONSORZIO INTERUNIVERSITARIO	CINECA	Italy
4	INESC TEC- INSTITUTO DE ENGENHARIADE SISTEMAS E COMPUTADORES, TECNOLOGIA E CIENCIA	INESC TEC	Portugal
5	UNIVERZITA PAVLA JOZEFA SAFARIKA V KOSICIACH	UPJS	Slovakia
6	28DIGITAL	28DIGITAL	Hungary
7	UNIVERSIDAD POMPEU FABRA	UPF	Spain

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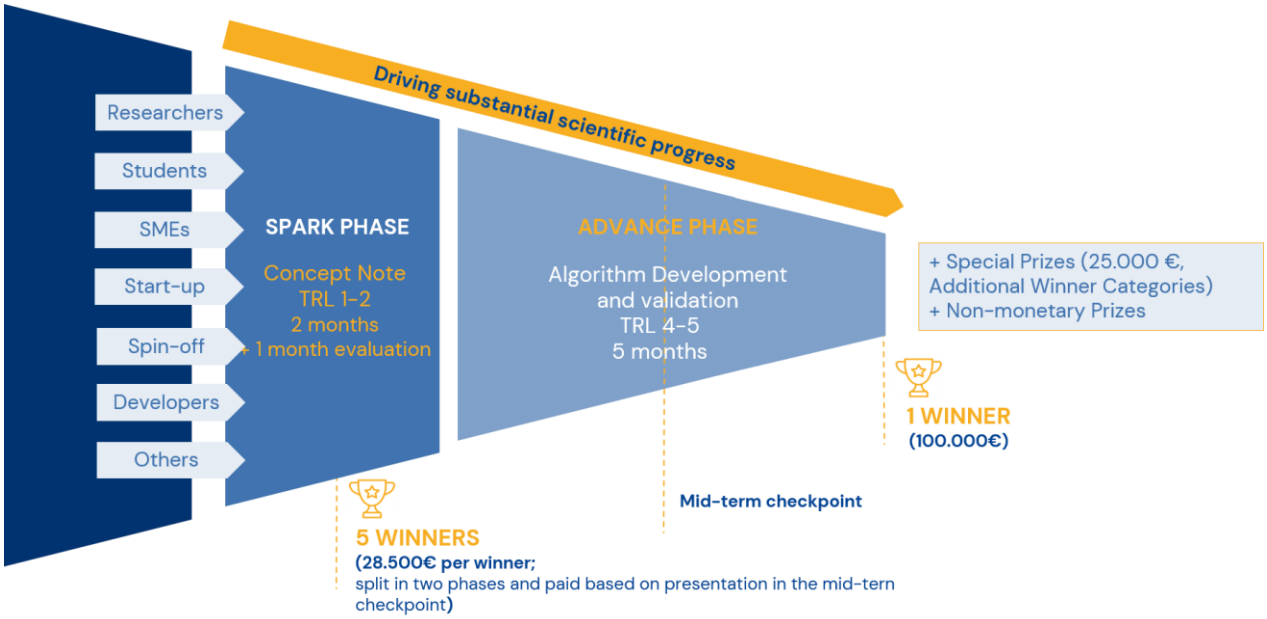
1 ABOUT THE AI CHALLENGE COMPETITION

The AI Challenge Competition (teams from academia and/or industry) will launch 4 attractive Generative AI challenges addressing strategic industrial and societal domains: autonomous robotics, engineering design and simulation, healthcare AI, and automotive safety. The competition aims to drive significant research and technological progress by advancing innovative Generative AI solutions from Technology Readiness Level (TRL) 2–3 to TRL 4–5.

The AI-BOOST competition follows a two-phase funnel approach designed to identify, support and accelerate the most promising teams from academia and industry. This approach enables the AI-BOOST consortium, evaluators and Challenge Owners to progressively focus resources and support on the strongest candidates, while ensuring continuous monitoring of scientific and technical progress throughout the competition. The methodology builds on the experience and best practices of previous European open innovation programmes, including DAPSI, EDI, REACH and BLOCKCHERS



The competition consists of the following phases:

- **Spark Phase I:** Submission and evaluation of a Concept Note. Five winners will be selected for each challenge and awarded a prize of EUR 28,500 each
- **Advance Phase II:** Development, model validation and demonstration of AI solutions. The five winners of the SPARK Phase will enter a five-month development programme involving algorithm development, validation activities, conceptual and technical monitoring, and a final live demonstration. One winner will be selected for each challenge and awarded a final prize of EUR 100,000.

The AI-BOOST competition is expected to generate 10 breakthrough AI solutions, contributing to substantial scientific and technological progress in the targeted AI domains. Among these, four solutions (one per challenge) will be recognised as the most promising for industrial adoption and real-world deployment.

The two-phase competition structure incorporates dedicated monitoring and support mechanisms to ensure continuous progress throughout the development process, while fostering close collaboration between participants, Challenge Owners, industry stakeholders and AI-BOOST.

2 CHALLENGES COVERED BY THE COMPETITION

- Challenge 1: GenAI-Based Natural Language Mission Generator for Autonomous Robots in Agriculture

  Led by Consorzio Intellimech and JOiINT LAB, this challenge aims to democratise robotic programming by using Generative AI to translate natural language into executable commands.

  By leveraging advanced Vision-Language-Action (VLA) models, participants will develop a modular Proof of Concept (TRL 5) that bridges the gap between human intent and robotic execution. While the initial focus is on enhancing vineyard productivity, the solution is designed for broad application across industrial maintenance and field operations. This challenge seeks to accelerate intelligent automation throughout Europe by making sophisticated robotics accessible to non-technical operators.

- Challenge 2: Agentic AI for Automated CAD Generation and Autonomous Simulation

  Led by SIAD Group, this challenge focuses on developing an agentic AI system to streamline the design and simulation of industrial piping, specifically for routing compressor tubes within skids.

  By translating natural language requirements and existing CAD data into editable parametric models, the solution aims to automate complex tasks such as extracting geometric constraints, mesh generation, and convergence analysis.

  Ultimately, the project seeks to significantly reduce manual engineering effort, optimise layouts for compactness,

  and lower costs, ensuring the final output is validated against stringent industrial standards in real-world environments.

- Challenge 3: Generative AI for Enhancement of Clinical Datasets

  This challenge focuses on using Generative AI to enhance the quality and representativeness of clinical imaging datasets, which are often incomplete or imbalanced. By creating realistic synthetic patient cohorts, the solution aims to fill critical data gaps and harmonise information across various imaging conditions. The system will identify key demographic and clinical characteristics to ensure synthetic data remains realistic and consistent with real-world statistics. Ultimately, the project seeks to improve fairness and reduce bias, enabling the development of trustworthy models that support accurate medical research and clinical decision-making.

- Challenge 4: Generative AI for Automatic Test Case Generation from Crash Databases & Standards

  This challenge aims to enhance the safety and validation of autonomous driving systems by using Generative AI to automate the creation of simulation scenarios. By transforming accident reports, visual data, and international safety standards into structured, simulation-ready formats, the solution replaces slow, manual processes with a more scalable and consistent workflow. This approach strengthens the link between real-world data and regulatory frameworks, helping teams identify critical safety gaps and complex edge cases. Ultimately, the project will provide technical

and regulatory experts with comprehensive scenario sets, significantly improving the efficiency and accessibility of safety assessments for autonomous vehicles.

3 ROLE AND RESPONSIBILITIES OF EVALUATORS

We cordially invite experts with experience in Artificial Intelligence, Generative AI, Machine Learning, synthetic data generation, computer vision, medical imaging, healthcare AI, autonomous systems, robotics, engineering design, simulation technologies, automotive safety, verification and validation, international safety standards, as well as experts with experience in evaluating research and innovation projects, to express their interest in becoming evaluators for the AI Challenge Competition.

As an evaluator, you will play a crucial role in:

- assessing the written Concept Notes submitted by eligible applicants;
- scoring applications against the published SPARK Phase evaluation criteria;
- providing clear and objective comments to justify the scores awarded;
- assessing the technical feasibility, innovation potential and implementation capacity of the proposed solutions;
- participating in internal evaluation discussions, if required;
- contributing to the establishment of the ranking for the selection of the five winners per challenge that will enter the ADVANCE Phase.

4 WHAT DO YOU GET IN RETURN?

The selected external experts will be paid for their time and work in the evaluation process. A contract will be signed between the evaluator and the coordinator of the AI-BOOST project (ZABALA).

- Each external expert is expected to evaluate up to 20 proposals;
- Each external expert will **receive 60€** per full application evaluated;
- Evaluators will have **10** business **days** to complete the whole evaluation process.
- External Experts acting as Evaluator Manager (EM) will receive an **extra 30€** per application acting as EM.

5 ELIGIBILITY

Registration is open to experts from EU Member States and, where applicable, countries associated to Horizon Europe.

We are looking for experts who meet the following profile:

- proven experience in Artificial Intelligence, Generative AI, Machine Learning, Large Language Models (LLMs), Multimodal AI, Computer Vision, Synthetic Data Generation, Medical Imaging, Healthcare AI, Robotics, Autonomous Systems, Engineering Design, Simulation Technologies, Automotive

Safety, Verification & Validation (V&V), Functional Safety, High Performance Computing (HPC), or closely related domains;

- proven experience in research, development, deployment, validation or assessment of AI-based solutions and systems;
- experience in evaluating innovation projects, research proposals, challenge competitions, funding programmes, investment cases, or similar initiatives is considered an asset;
- strong proficiency in English, especially in writing and reading, is mandatory.
- not be in a situation of conflict of interest and must inform the AI-BOOST consortium of any conflict that may arise after expressing their interest to become evaluators.

6 EXCLUSION

Persons who are subject to EU administrative sanctions (i.e., exclusion or financial penalty decision)[1] or in one of the following exclusion situations that bar them from receiving EU funds can NOT work as experts:

- bankruptcy, winding up, court-ordered administration, arrangement with creditors, suspension of business activities or similar procedures
- in breach of social security or tax obligations
- guilty of grave professional misconduct[2]
- 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, prize, expert contract, or similar
- guilty of irregularities within the meaning of Article 1(2) of Regulation No 2988/95
- have created an entity under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin.

Experts will also be refused if it turns out that[3]:

- during the contract award procedure, they misrepresented information required as a condition for participating or failed to supply that information.
- they are in a conflict of interest.

[1] See Article 136 of 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 ('EU Financial Regulation') (OJ L 193, 30.7.2018, p. 1).

[2] 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 advantage.

[3] See Article 141 EU Financial Regulation 2018/1046.

7 EVALUATION PROCESS OF SPARK PHASE

The evaluation of the SPARK phase process is divided into the following steps:

1. **Administrative and Eligibility Check:** All submitted applications will first be reviewed by appointed members of the AI-BOOST consortium in order to verify admissibility and compliance with the eligibility criteria. Applications that do not pass this screening will not proceed further in the evaluation process.

2. **Internal Pre-Assessment:** If more than 20 eligible applications are received for a given challenge, an internal pre-assessment will be conducted by members of the AI-BOOST consortium. The objective of this stage is to identify the 20 highest-ranked proposals per challenge that will proceed to the external evaluation stage.

3. **External Evaluation and Selection of the SPARK Phase Winners:** The shortlisted proposals will be evaluated by independent external experts. Each proposal will be assessed individually by external evaluators who will provide scores and comments for each evaluation criterion.

   Following the completion of the evaluation process, the results will be consolidated and a final ranking list will be established based on the final weighted scores.

   The five highest-ranked proposals per challenge will be selected as SPARK Phase winners and invited to enter the ADVANCE Phase of the AI-BOOST Competition.

   A reserve list may also be established.

SCOPE OF PARTICIPATION OF THE EXTERNAL EVALUATORS UNDER THIS CALL FOR EXPERTS

The experts selected through this call will participate exclusively in the **evaluation of SPARK Phase applications (point 3 above).**

Their work will therefore be limited to:

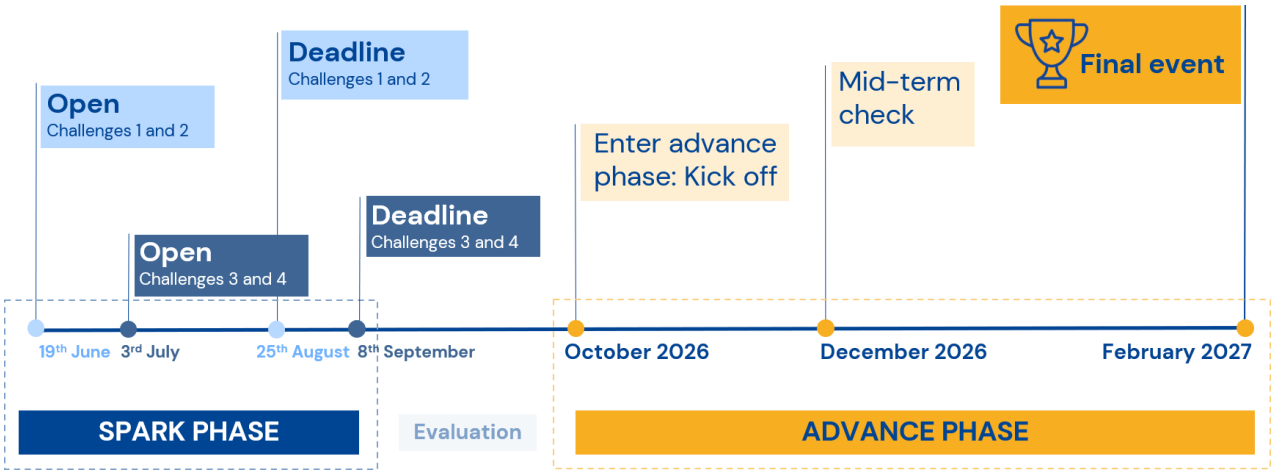
- the individual evaluation of eligible Concept Notes;
- the scoring of applications against the published evaluation criteria;
- the provision of comments supporting the scores awarded;
- where required, participation in discussions related to the consolidation of results.

The experts selected through this call will not participate in the ADVANCE Phase activities, including the Mid-Term Checkpoint assessment, final demonstrations, audience voting, or the final selection of challenge winners.

For more details on the evaluation process, please refer to the Guidelines for Applicants.

8 TIMELINE

- **Call for Evaluators**: The opening of the call is 29th June 2026.
- **Submission Deadline:** submitted electronically via F6S Platform (accessible Apply to Call for Evaluators for AI Competitions | F6Shttps://www.f6s.com/evaluators-call-for-apply-ai-award) before Friday, 29th July 2026, 17:00 Brussels time.
- **Evaluation Period:** The whole evaluation process will take place in September 2026. However, specific timeline will be provided to the selected external evaluators.



9 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:

Apply to Call for Evaluators for AI Competitions | F6S

The F6S platform accessible through AI-BOOST website (AI Challenge Competition – AI-BOOST).

All proposals must be fully completed and submitted via F6S platform before the deadline (see point 7)

Main steps required:

- Registration via F6S platform

- Dully complete the application from (all mandatory fields must be completed) available at Apply to Call for Evaluators for AI Competitions | F6S
- Attach your CV
- Submit the application form before the deadline.

10 SELECTION CRITERIA FOR EVALUATORS

The selection of evaluators will be based on the following criteria:

- proven expertise in Artificial Intelligence, Generative AI, Machine Learning, Large Language Models, Computer Vision, Synthetic Data Generation, Medical Imaging, Healthcare AI, Robotics, Autonomous Systems, Engineering Design, Simulation Technologies, Automotive Safety Engineering, Verification & Validation, Functional Safety Standards, High Performance Computing (HPC), or related fields;
- ability to commit to the assessment timelines and participate actively;
- demonstrable experience in evaluating technical projects, research proposals, innovation competitions, or funding programmes (bonus points);
- ability to assess applications in English with a high degree of clarity, objectivity and consistency;
- demonstrable experience in evaluating AI-related innovation projects, challenge competitions, research proposals, technology transfer initiatives, or similar activities (bonus points).
- Additional consideration may be given to experts with experience at the intersection of AI technology, industrial deployment, scientific excellence, and European innovation ecosystems.

We look forward to your expertise and contribution in shaping the future of AI in Europe. Together, let's embark on a journey to recognize and support the most promising teams developing breakthrough AI solutions capable of advancing scientific and technological progress in Europe.

For any inquiries related to the application process, please contact info@aiboost-project.eu.

APPENDIX A: APPLICATION FORM

(A) PERSONAL DETAILS

- Full Name: _____
- Date of Birth: dd/mm/yyyy
- Nationality: _____
- Current Organization: _____
- Position/Title: _____
- Email Address: _____
- Contact Number: _____

(B) CHALLENGE

- Rank the challenges in order of preference for evaluation.
    1. _____
    2. _____
    3. _____
    4. _____

(C) EXPERTISE DETAILS

- Primary Area of Expertise (choose one or more):
    - Artificial Intelligence and Generative AI
    - Machine Learning and Data Science
    - Computer Vision and Multimodal AI
    - Medical Imaging and Healthcare AI
    - Synthetic Data Generation
    - Robotics and Autonomous Systems
    - Engineering Design and Simulation Technologies
    - Automotive Safety, Verification & Validation
    - Functional Safety and International Standards (ISO 26262, ISO 21448/SOTIF, Euro NCAP, UNECE, etc.)
    - High Performance Computing (HPC)
    - Research and Innovation Project Evaluation
    - Technology Transfer and Innovation Management
    - Other AI-related expertise

- Years of Experience in Chosen Area: _____
- List of Relevant Publications/Projects: (Attach additional sheets if necessary)
    1. _____
    2. _____
    3. _____

(D) TECHNICAL AND PROFESSIONAL EXPERTISE

Please mark the statements that align with your background and expertise (choose one or more):

- AI Models and Systems Development: I have been involved in the design, development, training, deployment, validation or assessment of AI models and AI-based systems.
- Generative AI Expertise: I have professional experience working with Generative AI technologies, including Large Language Models (LLMs), multimodal AI, foundation models, agentic AI systems or related technologies.
- Computer Vision and Multimodal AI: I have experience developing or applying computer vision, multimodal AI or vision-language models for image, video or sensor data analysis.
- Medical Imaging and Healthcare AI: I have professional or research experience in AI applied to medical imaging, clinical datasets, healthcare analytics, radiology, biomedical AI or digital health.
- Synthetic Data Generation: I have experience developing or evaluating synthetic data generation techniques, data augmentation methods or privacy-preserving AI for structured or imaging datasets.
- Robotics and Autonomous Systems: I have professional or research expertise in robotics, autonomous systems, mission planning, control systems, computer vision or related domains.
- Engineering Design and Simulation: I have expertise in CAD systems, engineering design, simulation environments, digital engineering workflows or related technologies.
- Automotive Safety and Verification & Validation: I have expertise in autonomous and assisted driving systems, simulation-based testing, scenario generation, verification and validation, or safety assessment methodologies.
- Safety Standards and Regulatory Frameworks: I have experience with automotive safety standards and regulations (e.g. ISO 26262, ISO 21448/SOTIF, UNECE regulations, Euro NCAP) or equivalent regulatory frameworks.
- High Performance Computing (HPC): I have experience using, managing or evaluating computational infrastructures, AI training environments or HPC resources.
- Research Contributions: I have authored or co-authored academic, technical or industry publications related to AI, robotics, healthcare AI, simulation tech, autonomous systems, automotive safety, HPC or digital innovation.
- Conference Engagements: I have participated as speaker, panelist, presenter or moderator in conferences, seminars or events focused on AI, healthcare AI, robotics, autonomous systems, digital engineering, automotive technologies or related technological fields.
- Project Evaluation: I have experience reviewing or evaluating research projects, innovation proposals, AI competitions, grant applications or technical initiatives.

- Policy or Strategic Relevance: I have experience assessing how AI technologies and innovation initiatives contribute to EU competitiveness, technological sovereignty, industrial leadership, sustainability or public value.

(E) STATEMENT OF INTEREST

In a brief paragraph, please explain why you consider yourself a suitable candidate for this evaluator panel and your motivation to participate.

[maximum 800 characters]

(F) CONFLICT OF INTEREST DISCLOSURE

Please declare any affiliations, past or present, with potential contest participants, or any other information that might pose a conflict of interest (if applicable):

[List]

(G) CV ATTACHMENT

Please attach an updated CV highlighting your expertise and relevant experience. Ensure it includes your educational background, professional experiences, awards, honors, and other relevant details.

(H) ACCEPTANCE OF TERMS AND CONDITIONS

Absence of conflict of interest*

- ☐ I declare that I have not submit, nor am I to my knowledge involved in any proposal currently under evaluation or submitted for evaluation under the AI Challenge Competition.

Acceptance of Data Privacy Policies*

- ☐ I understand and accept, F6S Data privacy policy and that the data collected in this form will be used by the AI-BOOST Consortium to manage expressions of interest of evaluators.

Acceptance of Non-binding and no commitment from AI-BOOST*

- ☐ I understand and accept that this expression of interest in participating in the AI Challenge Competition as an external evaluator is NOT binding and does NOT constitute any commitment for the AI-BOOST Consortium.