



# 2<sup>nd</sup> 6G-SANDBOX Open Call

## Guide for Applicants

### 6G-SANDBOX

Supporting Architectural and technological  
Network evolutions through an intelligent, secured  
and twinning enabled Open eXperimentation  
facility



6G-SANDBOX has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101096328

<https://smart-networks.europa.eu/>

v0.1

## Call identifier and key dates

Call identifier: **6G-SANDBOX-2** – 2<sup>nd</sup> 6G-SANDBOX Open Call for New Infrastructures and Functionalities as well as for Innovative Experiments

**Feasibility check deadline:** **15<sup>th</sup> of February 2024 at 17:00** (Brussels local time)

**Submission deadline:** **29<sup>th</sup> of February 2024 at 17:00** (Brussels local time)

## Call objectives

The purpose of the open call is twofold.

- **OPTION 1 - New infrastructures and functionalities (extensions):** Enlarge and make the 6G-SANDBOX experimental infrastructure ready for advanced experimentation in upcoming project open calls for experimentation. New 6G features and functionalities should be integrated into the 6G-SANDBOX infrastructure.
- **OPTION 2 - Innovative experiments:** Initiate first funded innovative experiments on the 6G-SANDBOX infrastructure. Innovative 6G use cases and KPI measurements are expected to use the 6G-SANDBOX infrastructure.

**OPTION 1.** The new infrastructures and functionalities should be integrated to one or more 6G-SANDBOX platforms based on the technical specifications and the selected technologies described in *ref to the OC2 technical info [DOCUMENT](#)*. The main implementations / expansions that the applicants should target for, include but not limited to:

- Integrated Sensing & Communication (ISAC or JCAS) to save energy
- Technology for use cases in Internet of Sense
- RIS infrastructure to expand the 6G-SANDBOX capabilities in FR1 and or FR2
- Expanding the 6G-Sandbox testbed With Content Distribution Networks for Quality of Experience
- Portable data center / smart furniture for 6G AI/ML workloads
- Self-learning, evolving Digital Twin. Based on real time data
- Testbed network operation center //Experimentation / "experimental load balancer" front end for optimal experimentation (PORTAL)
- Stand-alone mmWave early modules & infrastructure
- Dynamic slice allocation, entitlement server
- 5GPPP final results integration in 6GSANDBOX
- 5G Multicast-Broadcast Services (MBS)
- Use explainable AI (XAI) to improve O-RAN functionality in 6G networks
- provision system for eSIM
- AI techniques for autonomous network management / Zero touch
- Support of Ambient IoT devices
- Expanding 6G capabilities

... as well as further topics of community interest.

**OPTION 2.** In alignment with the overall project objectives 6G-SANDBOX is organizing a competitive open call targeting external organizations, including industry, SMEs, research institutions, and academia, interested in performing experiments on the top of the infrastructure provided by the 6G-SANDBOX. This open call invites experimenters to use the 6G-SANDBOX experimental facilities, by taking advantage of the provided testbed features, in order to deploy and test broad scope of applications, e.g., coming from various vertical sectors, tailored for the future 6G communications networks (e.g., use cases described in [ITU FG-NET2030](#)). The main scope is to provide values/scores for application and network KPIs and also quantify the added value for their target vertical sector.

## Funding

- Maximum amount of financial support for each third party
  - OPTION 1: New infrastructures and functionalities:
    - 60,000€ (if justified, the proposer can request higher amounts)
    - Consortium can request up to 180,000€ when composed of 3 or more participants.
  - OPTION 2: Innovative experiments:
    - 20,000€ + maximum of 10,000€ reserved budget for equipment or software purchase
    - A consortium of two organizations can request up to 40,000€ + 10,000€ for equipment, if it is composed of a technology provider and a vertical/customer
- The project contribution to the third parties will be 90% (for-profit organization) or 100% (not-for-profit organization) of the declared costs, in accordance with the corresponding rules for participation in the SNS JU program
- A total of 540,000€ is available for this Open Call
  - 270,000€ for OPTION 1 – Extensions (new infrastructures and functionalities)
  - 270,000€ for OPTION 2 – Experiments

## Budget

The budget to be allocated to the successful proposals covers personnel and other costs related to the following activities:

- Getting familiar with 6G-SANDBOX testbeds and overall infrastructure
- Detailed definition, implementation, and execution of the new infrastructure/functionality or experiment
- Reporting to the 6G-SANDBOX consortium and submission of deliverables
- Attending required project meetings/events (travel costs)
- Other costs related to implementation of experiments

As a third party, the proposing party must include an overview of the estimated costs in its proposal at the time of submission. Costs consist of personnel costs, direct costs (such as travel, consumables, etc.) and indirect costs. The costs of a third party must comply with the corresponding rules and the principles applied in the Horizon Europe programme and must be

recorded in the accounts of the third party. In other words, the rules relating to eligibility of costs, identification of direct and indirect costs and upper funding limits apply as well as to those concerning controls and audits.

### Submission process

- The proposals must be submitted through the online submission portal, available at <https://submission.eurescom.eu/>
- The proposals must use the proposal template, available for each one of the options of the call at
  - The template for proposals under OPTION 1 can be downloaded by this [link](#)
  - The template for proposals under OPTION 2 can be downloaded by this [link](#)
- Participants are required to upload as attachment to the submission the Declaration of Honor (DoH)
  - The DoH template is available at <https://6g-sandbox.eu/open-call-2/> and it can be downloaded [here](#).

### Feasibility check instructions

The open call proposers are encouraged to contact the 6G-SANDBOX consortium and share their intentions to verify the feasibility of the proposals to be implemented in the scope of the project and to receive initial feedback on the proposal planned activities.

- To perform the feasibility checks a description of the planned experiment (up to one page in length) must be sent to [opencalls@6g-sandbox.eu](mailto:opencalls@6g-sandbox.eu).
  - In the e-mail subject line or first line of the e-mail text, the short name of the proposal should be included.
  - The 6G-SANDBOX facilities planned to be used in the experiment/implementation must be mentioned.
  - Please, indicate also which OPTION the proposal targets (i.e., either OPTION 1 – Extensions or OPTION 2 - Experiments).

Proposals submitted without completing the previous feasibility check will undergo the same check right after the submission deadline and before entering the evaluation process.

### Eligibility for participation and funding

- As regards eligibility rules for participation and funding in the Open Calls, the General Annexes to Horizon Europe for the Work Programme 2023-2024 apply. UK entities are allowed to participate subject to the UK/EU agreement being effective in January 2024.
  - Implementing the Decision (EU) 2022/2506 on measures for the protection of the Union budget against breaches of the principles of the rule of law in Hungary, that took effect on 16 December 2022, some of the Hungarian entities are not eligible for funding (more information is available [here](#)).
  - Please, note that organizations from Switzerland are not eligible for the EC funding in this open call. Swiss organizations can apply for the open call, as a

single organization or as part of a consortium, but the funding if requested must be provided by Swiss authorities).

- Proposers' organizations can submit multiple proposals; however, total available funding for the organization in this call is limited to the maximum amounts defined in the funding section.
- Beneficiaries of the 6G-SANDBOX project and organizations funded from 6G-SANDBOX OC1 are not eligible to participate in this open call.

### Contact information

- All communication, questions, or request for information in relation to the Open Call must be directed to [opencalls@6g-sandbox.eu](mailto:opencalls@6g-sandbox.eu).
- You can always refer to our document with the Frequently Asked Questions (FAQ) available at this [link](#)
- Evaluations and ranking of the proposals

To perform evaluations of the received proposals for financing the third parties through the Open Call mechanism, the project will involve independent experts, which cannot be part of the consortium and cannot evaluate proposals where a conflict of interest can be identified. For each of the received proposals, at least two assigned experts will perform off-line reviews independent of each other. Afterward, consensus meetings for all proposals among involved experts will be held either as face-to-face or audio/video meetings, where a common opinion and rating will be built up for all the proposals.

The independent experts will be advised to perform the proposal evaluations, including their rating and ranking, in accordance with requirements and objectives specified in the Open Calls, along at least the following three criteria:

- **Impact** (max 5, threshold = 3, weight 2): value for extension and readiness of the 6G-SANDBOX facilities for experimentation
- **Innovation and technology** (max 5, threshold = 3, weight 2): innovativeness and technological value of the proposal
- **Implementation** (max 5, threshold = 3, weight 1): quality of methodology and of proposed participants

The last step in the evaluation process will be to create ranking among all received proposals per call option, which will be done in cooperation with all independent experts involved in the evaluations. Integration of the proposals in the project plan will be done after final approval of the ranking by EC.

**When scores are equal**, any further prioritization will be based on other appropriate characteristics, which will be decided by the panel of evaluators, related to the contribution of the proposal to the project, in accordance with the **specific conditions of the Call**:

- The proposals (ranked above threshold) will be selected for funding to cover as many identified call topics (OPTION 1) and as many areas/verticals (OPTION 2) as possible.

- Further priority will be given to close to equal utilization of the 6G-SANDBOX facilities (i.e., the equal use of the 4 6G-SANDBOX platforms)

**Evaluation of the received proposals, ranking, and decision on proposals to be funded will be completed no later than the end of April 19<sup>th</sup>, 2024.**

### Third party agreement

Once a proposal is selected, the proposer's organization will be contracted by the project as a third party receiving financial support. This will require the signature of the agreement of which can be found as download on the 6G-SANDBOX website together with this call information.

Further remarks:

- Before awarding any grants to a third party, it will be checked whether the third party is a legal entity with a history of at least three years of commercial operations and has not been declared insolvent.
- Any third-party funding agreement will contain a clause ensuring that the European Commission and the Court of Auditors can exercise their powers of control, concerning documents premises and information, including those stored on electronic media.

### Timing for implementation

The experiments accepted in this Open Call are expected to **start in May/June 2024** and should be **completed in November/December 2024** (i.e., duration of six working months, considering the holiday season).

### Mandatory participation at meetings

The accepted third parties will be required to attend two project meetings (kick-off and a consultation/status meeting) and 6G-SANDBOX review project meeting if required by EC.

### Support after the completion of the work

All activities performed in Open Call 2 must be made available to other experimenters during the rest of the project duration. Any approved extension and or experimentation are seen as building blocks that may require maintenance during the rest of the project period.