



## FAQ

### “Robotics 4 Youth” Innovation Challenge

#### Background

The Rwandan Ministry for Education (MINEDUC) and Ministry for ICT & Innovation (MINICT), together with their secondary organizations and partners, namely Rwanda Basic Education Board (REB), Rwanda TVET Board (RTB) and the German development cooperation (GIZ), are developing a sandbox experiment to understand how a robotics program could be implemented and scaled throughout the education sector, including primary, secondary and TVET education, in Rwanda.

The design of the robotics program will be based on the learning outcomes of the specific courses provided by the Ministry of Education (MINEDUC). The program aims to align with the curriculum objectives and enhance students' understanding of the topics using robotics kits, coding content, and practical experiments.

#### Background of the challenge

GIZ, with the guidance of the MINICT and MINEDUC, REB and RTB, is calling for a design challenge to develop and / or use existing kits to be utilized in a classroom setting. This challenge aims to invite robotics ecosystem players to create or propose a comprehensive robotics program. The proposed solution can either be an off the shelf kit customized to the needs of this tender; or a new and locally sourced robotics and coding kit. This program must encompass a comprehensive robotics educational kit with accompanying student learning material and teacher training manuals and resources for the challenge applied for. The proposed robotics educational kit can be but is not limited to a combination of hardware components, simulations, experiments, coding material, etc.

The objective is to identify an approach to scale a Robotics program across Rwandan schools. The sandbox experiment phase is planned to take place for a period of eight months (this phase comprises of 3 months of participating in the Innovation program, 5 months of implementation and provision of service and maintenance, in parallel to 2 months of monitoring and evaluation) and is crucial in the process leading up to the official nation-wide enrolment of the robotics program.

#### FAQs regarding the submission for the innovation challenge:

##### 1) Is the challenge exclusive to Rwandans or Rwandan companies?

No, the challenge is not exclusive to Rwandan nationals or companies. However, participating companies must be registered within Rwanda to be eligible to enter.



## 2) Can consortiums or joint-ventures apply for the challenge?

Yes, consortiums and joint-ventures are welcome to apply. However, it's essential that all entities involved collectively meet the eligibility criteria outlined for participation. The criteria can be found in the tender.

## 3) How are prototype submissions and intellectual rights protected during the evaluation period?

Your submissions are safeguarded throughout the evaluation process. Only the designated evaluation committee, comprising officials from MINEDUC, MINICT, GIZ, REB, and RTB, will review and assess the ideas based on predetermined criteria. No other bidder or external entity will have access to the submitted ideas. Additionally, bidders are not required to disclose sensitive information during the initial application. However, it's recommended that bidders acquaint themselves with the Intellectual Property (IP) clause outlined in the terms. The IP for the developed solutions will be shared between the service provider and the Government of Rwanda, represented by the Ministry of ICT and Innovation (MINICT).

## 4) What is meant by 'locally sourced consumables' in the bid/terms?

The term 'locally sourced consumables' pertains to materials readily accessible within Rwanda. These consumables can either be sourced locally, available in the Rwandan market, or imported. Importantly, they should be easily obtainable without reliance on a single provider (to prevent a monopoly) and without significant delays in procurement.

## 5) What is the minimum number of people required per team/company?

The minimum team size is two individuals. This requirement ensures that there is a collaborative effort within the team to achieve the set outcomes. A duo or larger team is essential for developing necessary deliverables such as a teacher manual, submitting a Minimum Viable Product (MVP), active participation in the innovation program, engagement with teachers and students for product evolution, and providing teacher training.

Please refer to the terms for comprehensive details on all eligibility criteria.

## 6) Why are only grades P4 and P5 from primary schools eligible to participate?

The selection of grades P4 and P5 for participation in the sandbox experiment is intentional. Excluding final classes allows for a focus on grades where students can engage actively without the pressure of impending final exams in the same academic year. Additionally, students from P4 onwards typically exhibit a better foundational understanding of robotics, enhancing their ability to grasp and benefit from the program's objectives.

**7) Why wasn't the PCM (Physics, Chemistry, Mathematics) combination considered for secondary schools? Who was selecting the curriculum?**

The selection of schools, grades and curriculum emphasizing computer science was guided by the expertise and recommendations of key educational bodies, including the Rwanda Basic Education Board (REB) and the Rwanda TVET Education Board (RTB). While PCM subjects have an immediate relationship with robotics and physics concepts, the decision to initially focus on schools with a computer science program was influenced by the fact that O'level students in Rwanda currently do not study PCM. Hence, the computer science program is allowing for an easier comparison between age groups.

**8) Who is responsible for identifying schools? Do they need to be public?**

The identification of schools has been conducted by the Rwanda Basic Education Board (REB) and the Rwanda TVET Education Board (RTB). Successful bidders are expected to work exclusively for the benefit of public schools. However, any prior experience gained from collaborating with private schools can still be considered as valuable experience.

**9) What form of due diligence is undertaken during the evaluation process?**

The evaluation process involves a stringent assessment to ensure compliance with the eligibility criteria outlined in the terms. Only submissions meeting these criteria are reviewed by the committee. These criteria include various aspects such as:

- a) **Legal Requirements:** Companies must be duly registered under Rwandan law.
- b) **Prototype Ownership:** The business should possess a functional Minimum Viable Product (MVP) or beta version of the proposed solution.
- c) **Adaptability to Public Sector Needs:** Capability to adapt the solution to meet the requirements of the public sector partner.
- d) **Training Capabilities:** Ability to offer training programs, indicated through previous projects or the submission of training manuals.
- e) **Resource and Capacity:** Having the necessary resources and a team of at least two full-time technical staff members capable of handling the project's demands within the specified timeline.

Additionally, successful bidders are expected to commit to collaborating with MINICT, MINEDUC, REB, RTB, and GIZ to tailor the solutions to the specific needs of the project. These requirements are thoroughly evaluated and verified throughout the tender process.

**10) Can additional supporting documents/forms be submitted with the proposal?**

Yes, additional supporting documents are required. While the evaluation committee reviews the technical and financial proposal forms, it's essential to submit supporting documents that



substantiate how you meet the eligibility criteria. Failure to provide these supporting documents may render your submission ineligible for assessment, as it becomes impossible to evaluate compliance with the criteria. All necessary attachments and forms have been provided as annexes to the terms.

### **11) Which aspect holds more weight in the evaluation: the technical or financial proposal?**

The evaluation process is designed to assess innovation based on technical merit, feasibility, and impact. Each participating team will receive an equal amount of funding, ensuring that a "cheaper" offer does not confer any advantage. However, bidders are encouraged to provide realistic financial and expected impact figures. Therefore, both the technical proposition and the financial aspect carry equal weight in the evaluation process.

### **12) Can the allocated funds be used for mass production of existing hardware?**

Bidders have the flexibility to allocate the funds towards the mass production of existing hardware if they determine it to be the most impactful outcome. However, it's essential that they substantiate this choice by demonstrating how they will fulfill other mandatory requirements. These include, among other things, developing a teacher manual, providing necessary trainings, and active participation in the innovation program. Compliance with these requirements is mandatory for all selected participants.

### **13) If we submit for two challenges, will we receive prize money for both?**

Yes, you are allowed to submit proposals for two challenges. If your submissions are selected, you will receive funding to address both challenges. However, it's crucial to convincingly outline how your team intends to address the requirements of each challenge. This may entail having two distinct Minimum Viable Products (MVPs) tailored for each age group or specific challenge. You'll need to engage with each age group separately to meet their distinct needs, potentially resulting in two different final products.

Please note, if you wish to participate in two challenges, you are required to submit two separate submissions, each addressing the specific requirements of the respective challenge.