

CALL TO INTERESTED PARTIES: REGISTER OF COMPACT ROBOTS FOR THE TEACHING OF PROGRAMMING AND COMPUTATIONAL THINKING FOR INITIAL AND PRIMARY EDUCATION

A. CALL AIM

Centro Ceibal calls companies interested in integrating the Provider Registry "Compact Robots for their use in Initial and Primary Education".

Said Robots must be able to execute basic actions such as: movement, drawing, recording and / or playing sounds, etc.

Robots that need to be assembled for basic use will not be accepted.

Notwithstanding the foregoing, accessories such as programming files, maps, boards and / or other products that are used as part of the set may be offered, which must be quoted separately, and may be evaluated by Ceibal.

The object of the registry is to obtain feedback from different models of Robots in the groups from 5th to 6th grade of Primary that participate in the Computational Thinking program. This is intended to gather information on how different models contribute to the teaching of programming, the development of computational thinking, and more generally, the development of skills such as critical thinking, creativity, etc. Therefore, it is Centro Ceibal's intention to diversify the products to be acquired, subject to the budgetary availability of the year.



B. BACKGROUND

Although Plan Ceibal has vast experience in the acquisition and distribution of robotics kits, it has not yet ventured into the acquisition and distribution of compact robots (which do not require assembly). With this line it is sought that the robotics strategy also reaches smaller children and teachers who find in the conventional kits difficulties and barriers for their effective incorporation into the classroom.

C. TARGET AUDIENCE

<u>Two categories</u> divided by age groups are contemplated. The bidders may offer one or more products in one or both categories.

In each case, the minimum requirements described in the mandatory section must be met.

1. INITIAL AND FIRST CYCLE OF PRIMARY EDUCATION

This category is focused on providing robots to Computational Thinking groups for grades 5 to 3rd of Primary Education (5 to 9 years old).

2. SECOND CYCLE OF PRIMARY EDUCATION

The category of the Second Cycle of Primary includes 4th to 6th grade (10 to 12 years old).

D. TECHNICAL SPECIFICATIONS— MANDATORY REQUIREMENTS

Requirements for category 1 - INITIAL AND FIRST CYCLE OF PRIMARY EDUCATION

- 1. **Unplugged:** The robot must have the ability to be programmed in an unplugged manner. This means that it does not require the use of an application or device.
- 2. **Free of written instructions.** It means that the use of the robot should be possible without the exclusive need of written instructions from the students, adapting to the target audience.



Requirements for category 2 - SECOND CYCLE OF PRIMARY EDUCATION

1. **Block programming platform:** It must have a programming environment (own or external) that allows the development in blocks.

The privacy policy of the platform must be indicated, and the offeror must comply with the provisions of Annex A of this document.

Adaptation with the equipment (laptops and tablets) delivered by Ceibal: The
behavior of the tool in Ceibal devices will be evaluated taking into account,
among other aspects, adequacy to the size of the screen and the performance of
the equipment. For more information on Ceibal's equipment consult:
http://www.ceibal.edu.uy/es/dispositivos

Requirements for categories 1 and 2 - MANDATORY REQUIREMENTS FOR BOTH

- 1. **Usability**: friendly, intuitive and easily appropriated by users.
- 2. **Pedagogical use:** the robot must offer ample possibilities of being incorporated into the pedagogical proposal of Computational Thinking according to the characteristics of the target audience (students of initial and primary school).
- 3. **Compact Robot**: the robot must work, at least in its basic and central functions, without the need for assembly by pieces.

It must detail all the technical characteristics of the products offered as well as the accessories, add-ons, kits or applications that are part of the initial or expanded set.

E. PRESENTATION OF THE PROPOSALS

The offeror must present his proposal indicating:

- General description of the product.
- Specify the target audience to which it is oriented.
- Technical specifications of the product.
- In the case of including optional, accessory, and / or additional items, it must include their proper description and unit cost.
- Specify delivery capacity according to the quoted slots.



- Regulations and standards that robots, loaders and accessories presented meet, as well as the materials that compose them.
- Specify product warranty policies.

F. WAYS TO QUOTE

The bidder should quote unit prices according to a scheme of rates by volume. In case of presenting additional, accessory or optional items, they must be quoted separately, otherwise they will be included in the price of the product offered.

Robots Pricing- Specifically indicate Category 1 or 2

Rate	1 to 50	51 to 100	101 to 500	501 to 1000	+ 1000
Price per unit in USD CIF MVD					

^{*} It is important that the bidder clearly highlights to which category he is presenting his offer / s.

The rates are of reference, not forcing Ceibal to acquire 100% of said volume by category, and the quantity to be acquired may vary by category. Quote additional / accessory / optional items.

In case of offering products and / or services that are additional, accessory or optional, the bidder must specify them and their associated cost per unit. If there is a volume discount, the quotation must be made according to the same rates previously mentioned.

G. EVALUATION

Centro Ceibal will evaluate the product (being able to consider in the evaluation the additional, accessory or optional items), according to the fulfillment of the technical



requirements and the economic convenience, being able to discard those products that may be economically inconvenient.

The evaluation will be done according to the criteria mentioned above:

- GENERAL

- Usability
- Pedagogical use
- Adaptation to the target audience
- Technical characteristics
- Economic convenience
- Requirements Compliance (by category)

Centro Ceibal will be able to divide the award among the different categories, awarding one or several products by category, according to the aforementioned criteria as well as its strategy and demand from the target audience.

Date for the first evaluation of proposals: October 11, 2019

The date may be modified in case Ceibal deems it pertinent. The changes will be notified through the institutional portal of Centro Ceibal. Beyond this instance of evaluation, the proposals may be submitted at any time of the year, as of the opening of this record.

SAMPLES AND DEMOS

Centro Ceibal may request demos or samples of the products offered, which must be free of charge. They may be returned at the request of the provider and in the state resulting from the technical checks carried out.