

## **ANNEX A – PARTICULAR CONDITIONS**

**Contracting a provider for the implementation of the computational thinking teaching project by videoconference**

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## **1. BACKGROUND**

In 2017, Plan Ceibal started a pilot of teaching computational thinking through videoconferencing, in full-time and extended-time schools in Uruguay. Said pilot had the participation of 100 groups of 5th and 6th year of Primary Education.

In 2018 the program expanded, reaching almost 500 groups of full-time and extended-time schools and common schools.

In 2019 the program is aimed at children of 4th, 5th and 6th grade of Primary Education, and it is aimed at a participation of an approximate number of 1500 groups.

The objective of Plan Ceibal is to universalize the teaching program of Computational Thinking in groups of 4th, 5th and 6th grade with access to fiber optic and videoconference, by the year 2021. Said universe is composed of a total of approximately 5,000 groups.

## **2. CHARACTERISTICS OF THE PROGRAM**

The program is aimed at children of 4th, 5th and 6th grade of Primary Education, and is based on the remote presence of a teacher of Computational Thinking. The meeting by videoconference is done weekly with a group and their classroom teacher during school hours, and work is done both from digital tools and with specific material.

The weekly class with the remote teacher is 45 minutes long, and a weekly coordination between both teachers is expected to agree on the actions to be taken between one class and the next. This coordination can be via mail, telephone, skype, or videoconference.

Each group (23 students on average) from each school has a remote teacher who is assigned at the beginning of the school year, which runs from March to December, and stays with them throughout the year. In total, each group is expected to have around 30 classes in the year.

There are scripts or lesson plans for the teaching of remote classes and classroom work, which are provided by Plan Ceibal, as well as the necessary materials (both digital and specific material). In point 14. *Annex I* examples of the scripts that Plan Ceibal will provide to the provider for the teaching of the class are presented.

## **3. CALL AIM**

The aim is to hire a provider for the implementation of the Computational Thinking teaching project through videoconference in Primary Education, which may accompany Ceibal in the process of universalizing the program.

The selected institution will be responsible for providing classes by videoconference to the groups of the participating schools and for supporting Plan Ceibal in the design of the program in what refers to specific contents of Computational Thinking.

#### 4. CHARACTERISTICS OF THE SERVICE TO BE PROVIDED

The service to be provided by the provider will consist of 2 components:

##### A. Provision of classes by videoconference

The contracted provider will be responsible for providing weekly classes remotely, for which Plan Ceibal provides licenses for videoconferencing software<sup>1</sup>. The number of groups will be around 1500 in 2019 (the exact number will be known once the registration period of the schools ends). For this, the institution must:

- Select and hire remote teachers for the teaching of classes by videoconference. In addition to teaching experience (in the field of primary, secondary or university education), they must have knowledge in Computational Thinking or Computer Science. The contracted institution will be the only responsible for the recruitment and coordination of remote teachers, as well as the payment of salary and pension items, being these employees of said institution
- Design and implement a training plan for their remote teachers, in coordination with Plan Ceibal. The training plan should include aspects such as: the conceptual framework of Computational Thinking, the class program and its content, the specific characteristics of remote teaching and the technical aspects related to the use of videoconferencing.
- Ensure coordination between the remote teacher and the classroom teacher. In a weekly instance, both teachers agree and align actions for the maximum use of the class by videoconference. It is expected an approximate duration of this weekly instance of 15 minutes.
- Design and implement a quality monitoring system for remote classes, which allows the detection and correction of problems in a timely manner.
- Carry out the administrative management of the classes, which includes from the allocation of groups and schedules to the remote teachers, the control of the classes dictated for billing, the management for the recovery of the classes not dictated, etc.
- Ensure the technical infrastructure for videoconferencing: this includes a laptop for each teacher and optimal connectivity conditions (the requirements for each case are detailed in point 13).
- Provide technical support to remote teachers in order to resolve incidents that prevent the normal development of the classes (problems with internet connection, with videoconferencing software, etc.).

##### B. Support in the design of the Computational Thinking teaching program

It is expected that the provider has the ability to contribute conceptually to the design of the Computational Thinking teaching program. For this, the institution must:

- Provide advice to Plan Ceibal on the pedagogical aspects of the proposal.
- Perform the revision of the class scripts already developed by Plan Ceibal, providing suggestions for improvements to them and support the writers of Ceibal in the development of new scripts.

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<sup>1</sup> The installation of specific videoconferencing equipment is not required, but the program is developed using VC software licenses provided by Ceibal. For other technical requirements see section 13.

- Provide digital materials for the enrichment of the scripts.
- Advise Plan Ceibal on possible instruments and models for evaluating the results of the program in terms of learning.

## **5. REQUIREMENTS OF THE PROVIDER AND THE SERVICE TO BE CONTRACTED**

The provider must:

- Have institutional backgrounds that accredit the expertise in Computational Thinking / Computer Science
- Have a professional team for the administration and management of the project and with professionals who contribute to the pedagogical design of the program
- Ensure that remote teachers hired under the project meet the following requirements: all remote teachers must speak Spanish, have a degree in teaching and / or accredit direct teaching with students, being desirable previous experience in work in synchronous and / or asynchronous form in educational platforms and remote teaching. They must also have training in Computational Thinking and / or Computer Science. The contracting party may request the replacement of any of the remote teachers when it is found that they do not have the required training or for another justified cause (for example: bad relationship, etc.). The selected institution must designate a new professor with the aforementioned competences.
- Guarantee that the environment from where the teachers dictate the classes is adequate.
- Ensure compliance with technical requirements for teaching classes - see section 13.

## **6. TECHNICAL DOCUMENTATION TO PRESENT**

- Presentation of the institution: it includes background, experience in the implementation of projects of this type, experience in the development of linked content.
- Presentation of the work team (management and pedagogical): including the organization chart of the team and CVs of the key profiles of the same, as well as at least 5 CVs of remote teachers who will participate in the project
- Presentation of the proposal for the recruitment, training (with estimated effort of hours of training and its modality) and monitoring of the activity of the remote teachers.

## **7. PRESENTIAL INSTANCE FOR QUERIES**

In order to ensure that the proposals presented are aligned and adjusted to the requirements of the project, in addition to the space on Ceibal portal for the presentation of queries, a face-to-face meeting will be held in Plan Ceibal where the institutions will have the opportunity to evacuate the doubts and request the clarifying information that it is required for the preparation of the proposals. This talk will be recorded and will be available in the Ceibal Purchasing Portal.

The institutions that decide to participate (in person or remotely) in this instance of consultations, must register through the e-mail address [compras@ceibal.edu.uy](mailto:compras@ceibal.edu.uy), and must make such registration with an anticipation not less

than 48 hours from the date and time scheduled for the meeting. In case the participation is remote, it is a must to notify Ceibal in order to coordinate the technical aspects for the connection.

- Date: 02/26/2019
- Time: 2:00 p.m.
- Place: Plan Ceibal Office. Av. Italia 6201 Edificio Los Ceibos

## 8. EVALUATION

A **technical-economic** evaluation of the presented proposals will be made, where the technical aspects will have a weighting of 70% and the economic offer of 30%. The final score of each offer, considering both the Technical Evaluation and the Economic Evaluation, will be given by the following formula:  $(POME / PO) * 30 + (PTO / PTOMC) * 70$ . In this evaluation scheme "POME" is the price of the most economical offer, "PO" is the price of the offer that is being evaluated, "PTO" is the technical score of the offer being evaluated and "PTOMC" is the technical score of the best qualified offer.

The technical evaluation will have a total of 100 points and will be made according to the following grid:

- Institutional background (expertise in Computational Thinking / Computer Science and experience in implementing projects related to these issues)
- Conformation of the project team
- Experience in the development of materials related to Computational Thinking
- Proposal for the hiring, training and monitoring of the activity of remote teachers

<b>Technical evaluation of the proposal</b>	<b>Max</b>	<b>Points</b>
Institutional background	40	
Conformation of the project team	30	
Experience in the development of materials	15	
Proposal for recruitment, training and monitoring of remote teachers	15	
<b>Total</b>	100	
<b>Minimum Required</b>	70	

Those offers whose technical proposals reach at least **70 points** will be considered.

## 9. PRICE QUOTE

The price quote must include both the cost of the remote class and the cost of the annual fixed cost for the management, administration and advisory services described in point 4 of this document. It must be taken into account that Plan Ceibal will pay for the classes that have actually been issued or those canceled by the school and that it is not possible to recover (in case of re-standardization, only the class recovered is paid).

Any additional service must be quoted independently. Whoever is awarded is obliged

It is estimated a scenario in which at least 60% of the groups of each year will be assigned to the bidder who is awarded.

### 9.1 Quotation of the remote class:

	Amount
<i>Cost per group per week<sup>2</sup></i>	

### 9.2 Quotation of the annual fixed costs:

Due to the fact that the expansion progression 2019 till 2021 is not defined, it is required to quote the fixed costs in 3 different scenarios of weekly classes:

	Amount (specify currency)		
	700 a 1500 classes	1501 a 3000 classes	3001 a 5000 classes
<i>Annual fixed costs<sup>3</sup> for administration, management and advisory services</i>			

If applicable, the parametric adjustment proposed for 2020 and 2021 must be presented, both in terms of the cost of the remote class and the fixed costs.

<sup>2</sup> The cost per group per weekly class must include, in addition to the cost of the class per VC, the cost of the weekly instance of coordination between the remote teacher and the classroom teacher. Only the variable cost associated with the class teaching should be quoted. Fixed costs should be included in Annual fixed costs for administration, management and advisory services.

<sup>3</sup> In 2019 the annual cost will be prorated based on the months of the year remaining after the signing of the contract.

## **10. CONTRACT TERM**

The contract provides a horizon of 3 years (12/31/2021), provided that the evaluation made by Ceibal on the services provided by the supplier in 2019, is positive.

## **11. INTELLECTUAL PROPERTY**

Whoever is awarded is obliged to confer to Centro Ceibal a perpetual, non-territorial, non-exclusive license, on the developments, materials, etc., that are created within the framework of the contract. Centro Ceibal may freely modify, translate, alter, disseminate and use such developments and materials.

In the event that the Institution has a different intellectual property policy, it must expressly specify it, otherwise it will be understood that it accepts the foregoing.

The Institution will be solely responsible for legal actions and / or claims of any nature - including, but not limited to, extrajudicial, judicial, civil, criminal or administrative claims - that may arise in relation to developments, materials, etc. is drawn up, and shall be liable for damages, fines, penalties, costs, attorney's fees, expenses, and any other losses that may be brought to Centro Ceibal for that reason.

## **12. CONFIDENTIALITY AND PROTECTION OF PERSONAL DATA**

The institution that is awarded, expressly agrees to keep in the strictest confidentiality all information processed or used during its relationship with Centro Ceibal. The Confidential Information includes, among others and by way of example, the following information: any strategy, business plan and procedure, proprietary information, software, tool, process, images, personal data, methodology, information and trade secret, and other information and material of Ceibal, as well as of the students, beneficiaries, teachers, schools, that could be obtained by the Institution from any source or could be developed as a consequence of this contract. The Institution undertakes to process the personal data to which it has access under this contract, in accordance with Law No. 18,331, of August 11, 2008 and Decree No. 414/2009, of August 31, 2009, solely for the benefit and in the framework of the contracted service, not being able to use them for another purpose, neither for their own benefit, free or onerous, nor to assign them, communicate them or transfer them to third parties, except with prior authorization from Centro Ceibal.

Centro Ceibal will be responsible for the data base and the treatment, being the awarded Institution and its contracted companies, in charge of treatment, in accordance with the provisions of literals H) and K) of article 4 of Law No. 18,331. In no case may the Institution, its employees and its contracted companies record the classes, reproduce them or use them for a purpose outside the contract. In addition, access to personal data cannot be understood as assignment, communication or permission for its free use by the Institution, its employees and subcontracted companies. The awarded institution must adopt the necessary security measures to guarantee the security and confidentiality of personal data and to prevent its adulteration, loss, consultation or unauthorized treatment, as well as to detect deviations of information.



In the event that the Institution hosts the data, it must inform in its proposal the territory where they will be housed, and the subcontracts to which they adhere for the treatment of the same. In the event that the personal data is housed, even temporarily, outside the national territory, the Institution is obliged that the importer be in countries considered to have adequate levels to the European data protection standards, in accordance with the General Protection Regulation of Data 2016/679, of the European Parliament and of the Council, amending, concordant and complementary. Otherwise, it must have the consent of the owner of the data for the transfer to an unsuitable territory, or that the importer is adhering to the Privacy Shield framework, has signed standard contractual clauses with the exporter or has a Code of Conduct registered, with the consequent authorization of international transfer of data processed before the Regulatory Unit and Control of Personal Data, in the last two cases.

At the end of the contract, the Institution must return or delete from all its physical and logical systems and files, whether owned or contracted to third parties, the personal data accessed, obtained or processed under this contract, as well as the associated metadata, in case if applicable and without prejudice to the particularities of each service, which will be considered by Centro Ceibal in the specific case to evaluate this obligation as fulfilled. For the purposes of this agreement, personal information is considered information of any type referring to individuals or legal entities determined or determinable, by way of example, any numerical, alphabetical, graphic, photographic, voice and image registration, acoustic or any other information of any type that refers to them directly or indirectly, in accordance with the provisions of article 4 of Law No. 18,331 and articles 1 and 4 of Decree No. 414/009. 5.4.

### 13. TECHNICAL REQUIREMENTS FOR TEACHING CLASSES

Plan Ceibal provides schools in Uruguay with a videoconferencing infrastructure (generally with Cisco equipment), these educational centers have an Internet connection via fiber optics or a similar solution.

From the side of the remote teacher a videoconferencing software is used for which Ceibal provides the licenses. The remote teacher must have a laptop that meets at least the minimum requirements detailed below.

#### **Minimum requirements of the laptops to use for the teaching of classes:**

OS	Microsoft Windows 7, 8, and 10 (Desktop Mode)
Minimum CPU (speed and type)	Mobile AMD Sempron Processor 3600+ at 2 GHz Intel® Core 2 CPU T7400 at 2.16 GHz Intel Atom
RAM	2-GB RAM (Windows 7)
Disc space	256 MB

Graphic processing	DirectX11
Ports	To use USB cameras or audio devices, it is necessary to have USB 2.0 ports
Microphone and speakers	High Definition (recommended)
Camera	Resolution of 720p at 30 fps

**Recommended requirements of the laptops to use for the teaching of classes:**

OS	Microsoft Windows 7, 8, and 10 (Desktop Mode)
CPU (speed and type)	Intel Core i5-7200U at 2.50 GHz
RAM	8-GB RAM
Disc space	256 MB
Graphic processing	DirectX11
Ports	To use USB cameras or audio devices, it is necessary to have USB 2.0 ports
Microphone and speakers	High Definition (recommended)
Camera	Resolution of 720p at 30 fps

**Connectivity requirements:**

Videoconferencing software requires a symmetric 2 Mbps connectivity with broadband access. The service must be provided by the provider or the teacher, as well as the associated technical service. Ceibal will be able to check before the beginning of classes if the connectivity of the teachers is optimal for the teaching of classes, and to offer recommendations.

**14. ANNEX I: Examples of scripts provided by Ceibal for the teaching of classes**

3 class scripts are attached as an example of the dynamics proposed in the program.