LPI–DEVICE ACQUISITION

TECHNICAL APPENDIX

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# Object

Centro Ceibal calls for an international public bid for the acquisition of up to 350,000 user devices to be delivered to its beneficiaries.

Bid devices are divided into the following categories:

***Tablets***

* **Category 1**: Android Tablets 8’’
* **Category 2**: Android Tablets 8’’ LTE/3G
* **Category 3**: Android Tablets 10’’
* **Category 4:** Android Tablets 10’’ LTE/3G

***Laptops***

* **Category 5**: Ubuntu Laptops (optional dual boot Ubuntu/Windows, see Section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS)
* **Category 6**: Chromebooks

Laptops with Windows operating system as sole operating system of the device constitute the purpose of a different Tender Specifications which will be published in July/August 2017, to cover an estimate demand of 15,000 devices.

Each bidder shall present its bid according to specifications in Section 3. BID. Centro Ceibal reserves the right to reject a bid which is not submitted in accordance with the quote and pricing scheme.

It is not required to bid all requested devices, each bidder may opt to bid devices in one or several categories.

# Device life cycle

All bidders purchasing the Tender Specifications shall receive a **document** describing current processes involved in the life cycle of the device. The aim of providing this information is to define certain aspects regarding delivery and maintenance of devices thus enabling bidders to comprehend better the needs of Ceibal and place the requested technical requirements in context.

# Bid

**Clearly segmenting the documentation for its presentation, identifying each product by its corresponding model in the technical and economic offers** would ease the assessment of the offers**.**

## Presentation and quote method

The technical offer will be presented segmented into the following folders.

1. Folder with all complete charts of section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS, for each model of the offered device in the corresponding category. Charts specify the compliance with hardware and software requirements, specification of spare parts, warranty and lead time. The bidder may specify other support and maintenance methods, for which it should include in those folders the corresponding technical details, while costs should be presented in a specific folder within the financial offer. The technical details include the operating procedures involved, the characteristics of the service and its scope, especially the type of faults and maximum failure rate supported per type of fault. Alternative services may include extended warranty, maintenance of devices performed by Ceibal, etc.
2. Folder with documentation requested in section 3.2 DOCUMENTATION for each model of the offered device.
3. Folder with warranty specifications in accordance with requirements in section 4. WARRANTY.
4. Folder with the specification of the lead time in accordance with requirements in section 6. LEAD TIME AND DELIVERY CONDITIONS.
5. (Optional) Folder with the specification of disposability service requested in section 5. DISPOSABILITY.
6. (Optional) Folder with supplementary technical information deemed relevant by the bidder.

The financial offer will be submitted in two closed envelopes, **one containing the financial proposal of tablets and the other one of laptops**. Each envelope will include the following segmentation of folders.

1. Folder with the charts of Appendix 1: QUOTE CHARTS completed for the corresponding device category. If bidding for an alternative support and maintenance method, the spare parts section may not apply. If bidding Ubuntu/Windows dual boot devices in category 5, the license of the operating system must be included in the price quoted. Ceibal devices have qualified for Microsoft’s Shape the Future Initiative in the past. The necessary information will be published so that the bidder can negotiate the license with Microsoft..
2. (Optional) Folder with alternative support and maintenance service, in case of offering it.
3. (Optional) Folder with the quote of additional warranty, in case of offering any.
4. (Optional) Folder with quotes which are additional to those previously specified, if applicable.

Documentation to be included in the documentation folder of the technical offer, for each tendered model, is the following:

## Documentation

## 3.2.1 Tablets

|  |  |  |
| --- | --- | --- |
| **TABLETS DOCUMENTATION** | | |
| MANDATORY | | |
| 3.2.1.1 | TECHNICAL SPECIFICATIONS | Document with technical specifications of each tendered model. |
| 3.2.1.2 | TECHNICAL DOCUMENTATION OF DISASSEMBLING | Technical document specifying the complete disassembling procedure of the device. |
| 3.2.1.3 | MOTHERBOARD COMPATIBILITY | Indicate whether there is compatibility of motherboards between 2 or more models of tablets of one or several quote categories, in case more than one is offered. |
| 3.2.1.4 | TECHNICAL DOCUMENTATION FOR INSTALLING AND CUSTOMIZING FIRMWARE AND OPERATING SYSTEM | Technical document specifying the procedures to install and customize the firmware and operating system of the device. It shall also be required to specify which kind of customizations can be performed only by the manufacturer and which kind of customizations can be performed by Ceibal. It will be appreciated if Ceibal can have complete control over the customization of the image. |
| 3.2.1.5 | INSTALLATION OF OPERATING SYSTEM IN SEVERAL DEVICES | Procedure for the installation of the operating system in several devices simultaneously, for example, through a removable device or a PC. Alternatives easing the operation and minimizing the use of external resources shall be prioritized. |
| 3.2.16 | FREE SPACE | Specify the free space in internal storage for a device with a Google-certified standard image of Android 6.0. |
| 3.2.17 | SERIES NUMBER READING | Instructions explaining how to obtain the Id obtainable through software from the operating system. It is desirable that the Id matches with the series number printed on the casing (See requirements regarding series number, barcodes, Id obtainable through software in charts in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS). |
| 3.2.18 | AVAILABILITY OF OTA METHOD FOR UPDATES | Indicate if there is an OTA (Over The Air) method for the updating of software images. If there is so, specify it. |
| 3.2.19 | AVAILABILITY OF PROCEDURE FOR UPDATES THROUGH REMOVABLE MEDIA | Indicate if there is a method or procedure for the end user to update or re-install the software image of the tablet through a removable media. If there is so, specify it. |
| DESIRABLE | | |
| 3.2.20 | ROBUSTNESS CERTIFICATES | Certificates of robustness standards or regulations complied with by the device. |
| 3.2.21 | RoHS CERTIFICATE | RoHS standard compliance certificate. In case of not having this certificate by the submission of the offer, it must be delivered later in terms to be determined in agreement with Ceibal. (See mandatory requirements of certifications in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS). |
| 3.2.22 | FCC CERTIFICATION | FCC standard compliance certificate. . In case of not having this certificate by the submission of the offer, it must be delivered later in terms to be determined in agreement with Ceibal. (See mandatory requirements of certifications in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS). |

### 3.2.2 Laptops

|  |  |  |
| --- | --- | --- |
| **LAPTOPS DOCUMENTATIONS** | | |
| MANDATORY | | |
| 3.2.2.1 | TECHNICAL SPECIFICATIONS | Document with technical specifications of each tendered model. |
| 3.2.2.2 | ANTI-THEFT SECURITY SYSTEM | Minimum and recommended requirements of the infrastructure. Especially, sizing of hardware and bandwidth resources to support 50,000, 100,000 and 200,000 clients. |
| Functional description of the system. This must detail all necessary information for the proper functioning of the system, especially that which is exchanged between different components of the solution. |
| Technical document specifying the procedures for the installation and starting up of the system. |
| Technical document specifying the procedures for the operation of the system, such as reporting the theft of a laptop (user guide). |
| Indicate if it is possible to provide the source code. |
| 3.2.2.3 | TECHNICAL DOCUMENTATION ON DISASSEMBLING | Technical document specifying the complete disassembling procedure of the device. |
| 3.2.2.4 | MOTHERBOARD COMPATIBILITY | Indicate whether there is compatibility of motherboards between 2 or more models of laptops of one or several quote categories, in case more than one is offered. |
| 3.2.2.5 | TECHNICAL DOCUMENTATION FOR INSTALLING AND CUSTOMIZING FIRMWARE AND OPERATING SYSTEM | Technical document specifying the procedures to install and customize the firmware and operating system of the device. It shall also be required to specify which kind of customizations can be performed only by the manufacturer and which kind of customizations can be performed by Ceibal. It will be appreciated if Ceibal can have complete control over the customization of the image |
| 3.2.2.6 | INSTALLATION OF OPERATING SYSTEM IN SEVERAL DEVICES | Procedure for the installation of the operating system in several devices simultaneously, for example, through a removable device or a PC. Alternatives easing the operation and minimizing the use of external resources shall be prioritized. |
| 3.2.2.7 | SERIES NUMBER READING | Instructions explaining how to obtain the Id obtainable through software from the operating system. It is desirable that the Id matches with the series number printed on the casing (See requirements regarding series number, barcodes, Id obtainable through software in charts in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS). |
| 3.2.2.8 | AVAILABILITY OF PROCEDURE FOR UPDATES THROUGH REMOVABLE MEDIA | Indicate if there is a method or procedure for the end user to update or re-install the software image of the tablet through a removable media. If there is so, specify it. |
| DESIRABLE | | |
| 3.2.29 | ROBUSTNESS CERTIFICATES | Certificates of robustness standards or regulations complied with by the device. |
| 3.2.2.10 | RoHS CERTIFICATE | RoHS standard compliance certificate. In case of not having this certificate by the submission of the offer, it must be delivered later in terms to be determined in agreement with Ceibal. (See mandatory requirements of certifications in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS). |
| 3.2.2.11 | FCC CERTIFICATION | FCC standard compliance certificate. . In case of not having this certificate by the submission of the offer, it must be delivered later in terms to be determined in agreement with Ceibal. (See mandatory requirements of certifications in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS). |

## 3.3 Samples

**TEN identical samples of each tendered Tablet model, and FIVE identical samples of each tendered laptop model must be provided at the submission of the offer.**

An essential part of the technical assessment shall be performed on these samples (see section 8. CRITERIA FOR TECHNICAL ASSESSMENT).

If Centro Ceibal already has samples of the tendered models, the bidder may defer the delivery of samples for a reasonable term to be specified in its bid by completing the chart in Appendix II: SPECIFICATION OF SAMPLES. Centro Ceibal shall assess if it accepts the proposed term.

If Centro Ceibal does not have a sample of certain models, in exceptional cases and when there are reasons justified by the bidder at Ceibal´s consideration, it may defer the delivery of samples for a reasonable term to be assessed by Ceibal.

**The specifications and performance of the final product must not be less than that in the sample. This aspect shall be verified in quality assurance procedures which define the acceptance of the product.**

**At least one sample of all desirable accessories and/or requirements included in the tender**, such as cases, tempered glass, magnetic connectors, etc must be provided at the submission.

Once the bidding process is completed the awarded bidder shall provide TWENTY identical samples of the awarded model for the development of Ceibal´s software image and other TWENTY identical samples of the awarded for training in repair, **within 14 days as from the award**. The hardware of these samples should be the most similar possible to the final product.

Some tests to be performed with the samples may result in the destruction of these, and those samples which are not destroyed may be returned in different conditions from that in which these were delivered. The bidder will have a 4-week period as from the award to pick up submitted samples. If the previous term is completed and these have not been picked up, Centro Ceibal may freely dispose of them, having the bidder no right to claim.

# Warranty

The bidder shall guarantee that the products provided by virtue of the agreement are new, complete, without use and free of flaws attributable to the design, materials, manufacturing, storage conditions (appropriate packing, temperature and humidity), shipping or any other act or omission of the bidder that may appear caused by the regular use of products in the conditions of the country.

Centro Ceibal will assume the warranty conditions displayed in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS If the bidder presents **additional warranties**, these shall be detailed in its technical proposal. If the additional warranty conditions proposed by the bidder imply additional costs, these must be submitted in the financial offer.

The bidder must indicate the procedures to incur claims in warranty.

# Disposability

The bidder may quote the disposability for all the parts of the device in accordance with effective European dispositions for WEEE.

In case of opting to quote this service**, it must be quoted separately.**

# Lead time and delivery conditions

Lead time set forth in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS is desirable. If the bidder cannot meet such conditions, it must include in the proposal the lead time of the devices according to its volume, to be complied with as from the award notice.

The arrival schedule may be adjusted with the awarded supplier, subject to the plan of delivery of devices to the end user.

The software image to be developed or, otherwise, the specific settings Ceibal decides to integrate into the devices, shall be installed during the production process in the Factory. **The offer must indicate the deadline for the specific image/settings to be available for its installation in the Factory, in order to comply with specified lead time.** The offer must also indicate if a delay in the delivery of the specific image/settings proportionally affects the lead time. In exceptional cases and where there is a justified reason according to Ceibal, Ceibal may decide to install specific image/settings in the devices once these arrive to Uruguay.

The bidder must deliver the devices in accordance with the following specifications:

● Each pallet must be labelled with the following information:

o Device model/batch/consignment **(pallets containing more than one device model shall not be accepted).**

o Pallet number/ total of pallets in the batch.

o Number of master boxes in each pallet.

o List of master boxes constituting each pallet.

● Each master box must labelled with the following information:

o Device model/batch/consignment.

o Number of master box/ total of master boxes of the batch.

o Series number (barcode and alphanumeric) of each device in the master box.

o Description of the product

● Each individual box must be labelled with the following information:

o Device model.

o Series number(barcode and alphanumeric) of the device.

The design of each individual box and each master box must be customized according to the specifications to be agreed at between Centro Ceibal and the awardee.

# Requirements, warranty and lead time charts

## 7.1 Category 1 - Tablets 8´´

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.1.1 | SIZE | 8´´. Minimum resolution in the smallest dimension of the screen. 800p. |  |  |  |
| 7.1.2 | PROCESSOR | Minimum: Quad Core ARM, 64 bits. Specify. |  |  |  |
| 7.1.3 | RAM MEMORY | Minimum: 1GB. |  |  |  |
| 7.1.4 | INTERNAL STORAGE | Minimum: 16GB. External devices as massive storage solution shall not be accepted. |  |  |  |
| 7.1.5 | MULTIMEDIA | Built-in microphone and speaker(s) |  |  |  |
| 3.5mm jack connector with output for headphones. |  |  |  |
| Minimum2MP resolution rear camera. Specify the characteristics in all cameras built in the device: |  |  |  |
| 7.1.6 | PORTS | MicroSD card reader. |  |  |  |
| 7.1.7 | CONNECTIVITY | Minimum WiFi: Network card 802.11 a/b/g/n 1x1. Specify. |  |  |  |
| Bluetooth |  |  |  |
| 7.1.8 | CHARGER | Europlug Connector (CEE 7/16). |  |  |  |
| Sealed. The charger may only be opened in case of breaking. |  |  |  |
| 7.1.9 | OPERATING SYSTEM | Android 6.0 or higher. |  |  |  |
| 7.1.10 | LANGUAGE | Operating system and all its interfaces and setting options in Spanish. |  |  |  |
| 7.1.11 | CERTIFICATIONS | RoHS, Restriction of Hazardous Substances |  |  |  |
| FCC: Federal Communications Committee Declaration of Conformity |  |  |  |
| 7.1.12 | CEIBAL LOGOTYPE | Clearly visible in the case. |  |  |  |
| Indelible if applying alcohol. |  |  |  |
| Non-removable when sticking and unsticking sealing tape. |  |  |  |
| Specification of printing method. |  |  |  |
| 7.1.13 | SERIES NUMBER, BARCODE AND IDENTIFIER OBTAINABLE THROUGH SOFTWARE | Sole series number and its corresponding barcode printed on the case. |  |  |  |
| Specify case printing method. |  |  |  |
| Sole identifier (Id) obtainable through software by means of a procedure indicated by the bidder. |  |  |  |
| Specify if the Id and SN match. |  |  |  |
| Specify if the id is customizable. |  |  |  |
| 7.1.14 | DISK IMAGE | The software image developed by/for Ceibal must include GMS (Google Mobile Services) |  |  |  |
| The tablet will be delivered to the end user with an interface specially designed for the target audience as operating environment by default, as well as with launcher corresponding to the operating system. For such purposes, the bidder must complete the chart REQUIREMENTS FOR THE DEVELOPMENT OF THE USER INTERFACE. |  |  |  |
| DESIRABLES | | |  | | |
| 7.1.15 | LOGOTYPE IN THE CHARGERS | Chargers with included logotype. |  |  |  |
| 7.1.16 | ADDITIONAL PORTS | Video output (miniHDMI, microHDMI) |  |  |  |
| 7.1.17 | TYPE OF CHARGE CONNECTION | Barrel charge connector. To be quoted separately from the base price. |  |  |  |
| C type micro USB charge connector. To be quoted separately from the base price. |  |  |  |
| 7.1.18 | MAGNETIC MICRO USB CONNECTOR | Magnetic micro USB connector installed in the Factory. To be quoted separately from the base price. |  |  |  |
| 7.1.19 | SCREEN PROTECTION | Protection element on the touchscreen installed in the factory. Such as, tempered glass or another solution minimizing the possibilities of breaking without compromising the safety of the user. (See criteria for maintenance assessment in section 8.4. ASSESSMENT OF SAMPLES). To be quoted separately from the base price. |  |  |  |
| 7.1.20 | PROTECTION OF THE TABLET | Protection case for the tablet. To be quoted separately from the base price. |  |  |  |
| Built-in lid cover. To be quoted separately from the base price. |  |  |  |
| 7.1.21 | NON-WELDED PERIPHERAL DEVICES | Peripheral devices (screen, touchscreen, speakers, battery, antenna, etc) connected to the motherboard through connectors, NOT by welding. |  |  |  |
| 7.1.22 | MOTHERBOARDS TEST BENCH | Equipment that enables to perform quality assurance controls of motherboards, easing the connection of the peripheral devices to the board and the execution of verification tests of the hardware status. To be quoted separately from the base price. |  |  |  |
| 7.1.23 | HARDWARE TEST | Software or Firmware tools that enable the verification of built-in peripheral devices and ports of the device: ideally separate from the applications of the operating system, such as, through an external bootable device. |  |  |  |
| 7.1.24 | USER GUIDE | User guide designed by Ceibal and consisting of 20 pages approximately in dimensions similar to the device, delivered in print together with the device. To be quoted separately from the base price. |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS FOR THE DEVELOPMENT OF USER INTERFACE** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.1.25 | MODIFY BASE IMAGE | Modify the base software image in the device. |  |  |  |
| 7.1.26 | SYSTEM PRIVILEGES | Ceibal must be able to sign applications so that these have system privileges. This may be performed by the bidder when requested by Ceibal, but it would be appreciated if these could be done by Ceibal. For this purpose, indicate whether it is possible to deliver the Platform Key of the system. |  |  |  |
| 7..1.27 | CUSTOMIZATION | Specify procedures and tools to customize the tablets software, and also indicate which kind of changes may be performed on the software image. Do indicate if the following customizations may be performed: |  |  |  |
| \* Default preloaded applications, including both system and user applications. |  |  |  |
| \* Static content supplement (books, audio, video, etc.) so that it is preloaded in the device. |  |  |  |
| \* User interface, such as, wallpaper, image that appears when the device is starting, etc. |  |  |  |
| \* System default setting, such as the language of the device. |  |  |  |
| \* Supplement of other system files, such as SSL certificates for Ceibal system access. |  |  |  |
| 7.1.28 | DEVELOPMENT | Ceibal will plan together with the awardee during the software image generation process based on the requirements of Ceibal, for which relevant documentation shall be provided and lead time agreed at, subject to the limits defined in the agreement (see Appendix IV: AGREEMENT). The bidder shall specify requests response time and the iteration time of each development cycle. Direct contact between Ceibal and the manufacturer may be requested in each cycle. In order to measure the development cycles, these may include the following tasks: |  |  |  |
| \* Modification of basic settings as default language, time zone, among others. |
| \* Installation of Ceibal applications as well as system applications. |
| \* Disk partition |
| \* Loading of digital certificates in specific directories. |
| 7.1.29 | AVAILABILITY OF IMAGE WITH BOOT PRIVILEGES | Indicate if it is possible to count on an image of the device which has root privileges. |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SPECIFICATION OF SPARE PARTS(\*)** | | | | | |
| Spare part | Part number | Estimate percentage of Manufacturer fault | Minimum batch | Lead time | Comments (\*\*) |
| Touchscreen |  |  |  |  |  |
| Screen |  |  |  |  |  |
| Battery |  |  |  |  |  |
| Motherboard |  |  |  |  |  |
| Charger |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
|  |  |  |  |  |  |

(\*)The bidder may specify other support and maintenance methods, for which it should detail involved operating procedures, the characteristics of the service and its scope, especially the type of fault and the maximum failure rate supported per type of fault. Some alternative services may be extended warranty, maintenance of these devices performed by Ceibal, etc.

(\*\*)Specify if the spare part includes other parts of the device. For instance, touchscreen with/without frame, motherboard with/without built-in frame, etc.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MANDATORY WARRANTY** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| Dead On Arrival for a 90-day period upon its arrival | Warranty to replace new devices with faults on DOA. **Tablets**. 10 devices every 1000, **Laptops**. 5 devices every 1000. |  |  |  |
| Systemic failures for a 365-day period from the delivery to the user | The provider must provide the necessary spare parts or replace the device if the number of faults attributable to the Factory or design flaw is greater than 10 times the percentage specified in charts SPECIFICATION OF SPARE PARTS in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS. Costs arising from the execution of this warranty shall be solely bore by the provider. |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **LEAD TIME** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| 50% of the awarded batch | Arrival at Uruguay in the second fortnight of February 2018 |  |  |  |
| Remaining 50% of the awarded batch | Maximum 60 days after the arrival of the first batch. |  |  |  |
| **Indicate the DEADLINE for the software image/specific settings to be available for its installation in the Factory.** | |  | | |

## 7.2 Category 2 - 8´´ LTE/3G Tablets

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIERIMENTS** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.2.1 | SIZE | 8´´. Minimum resolution in the smallest dimension of the screen. 800p. |  |  |  |
| 7.2.2 | PROCESSOR | Minimum: Quad Core ARM, 64 bits. Specify. |  |  |  |
| 7.2.3 | RAM MEMORY | Minimum: 1GB. |  |  |  |
| 7.2.4 | INTERNAL STORAGE | Minimum: 16GB. External devices shall not be accepted as massive storage solution. |  |  |  |
| 7.2.5 | MULTIMEDIA | Built-in microphone and speaker/s. |  |  |  |
| 3,5 mm Jack connector for headphones output. |  |  |  |
| Minimum 2MP resolution rear camera. Specify the characteristics in all cameras built in the device: |  |  |  |
| 7.2.6 | PORTS | MicroSD card reader. |  |  |  |
| 7.2.7 | CONNECTIVITY | Minimum WiFi: Tarjeta de red 802.11 a/b/g/n 1x1. Specify. |  |  |  |
| Built-in LTE 3G modems for LTE and 3G network access specified in APPENDIX III: SPECIFICATION OF CELLULAR NETWORKS. |  |  |  |
| NO dual SIM |  |  |  |
| Bluetooth |  |  |  |
| 7.2.8 | CHARGER | Europlug Connector (CEE 7/16). |  |  |  |
| Sealed. The charger may only be opened in case of breaking. |  |  |  |
| 7.2.9 | OPERATING SYSTEM | Android 6.0 o superior. |  |  |  |
| 7.2.10 | LANGUAGE | Operating system and all its interfaces and settings option in Spanish language. |  |  |  |
| 7.2.11 | CERTIFICATIONS | RoHS, Restriction of Hazardous Substances |  |  |  |
| FCC: Federal Communications Committee Declaration of Conformity |  |  |  |
| 7.2.12 | CEIBAL LOGOTYPE | Clearly visible on the case. |  |  |  |
| Indelible if applying alcohol. |  |  |  |
| Non-removable when sticking and unsticking sealing tape. |  |  |  |
| Specification of printing method. |  |  |  |
| 7.2.13 | SERIES NUMBER, BARCODE AND IDENTIFIER OBTAINABLE THROUGH SOFTWARE | Sole series number and its corresponding barcode printed on the case. |  |  |  |
| Specify case printing method. |  |  |  |
| Sole identifier (Id) obtainable through software by means of a procedure indicated by the bidder. |  |  |  |
| Specify if the Id and SN match. |  |  |  |
| Specify if the id is customizable. |  |  |  |
| 7.2.14 | DISK IMAGE | The software image developed by/for Ceibal must include GMS (Google Mobile Services) |  |  |  |
| The tablet will be delivered to the end user with an interface specially designed for the target audience as operating environment by default, as well as with launcher corresponding to the operating system. For such purposes, the bidder must complete the chart REQUIREMENTS FOR THE DEVELOPMENT OF THE USER INTERFACE. |  |  |  |
| DESIRABLES | | |  | | |
| 7.2.15 | LOGOTYPE IN THE CHARGERS | Chargers with included logotype. |  |  |  |
| 7.2.16 | ADDITIONAL PORTS | Video output (miniHDMI, microHDMI) |  |  |  |
| 7.2.17 | TYPE OF CHARGE CONNECTOR | Barrel charge connector. To be quoted separately from the base price. |  |  |  |
| C type micro USB charge connector. To be quoted separately from the base price. |  |  |  |
| 7.2.18 | MAGNETIC MICRO USB CONNECTOR | Magnetic micro USB connector installed in the Factory. To be quoted separately from the base price. |  |  |  |
| 7.2.19 | SCREEN PROTECTION | Protection element on the touchscreen installed in the factory. Such as, tempered glass or another solution minimizing the possibilities of breaking without compromising the safety of the user. (See criteria for maintenance assessment in section 8.4. ASSESSMENT OF SAMPLES). To be quoted separately from the base price. |  |  |  |
| 7.2.20 | TABLET PROTECTION | Cover case for tablet protection. It must be quoted separately from the base price. |  |  |  |
| Tablet integrated flip cover. It must be quoted separately from the base price. |  |  |  |
| 7.2.21 | NON-WELDED PERIPHERAL DEVICES | Peripheral devices (screen, touchscreen, speakers, battery, antenna, etc.) connected to the motherboard through connectors, NOT by welding |  |  | . |
| 7.2.22 | MOTHERBOARDS TEST BENCH | Equipment that enables to perform quality assurance controls of motherboards, easing the connection of the peripheral devices to the board and the execution of verification tests of the hardware status. To be quoted separately from the base price. |  |  |  |
| 7.2.23 | HARWARE TEST | Software or Firmware tools that enable the verification of built-in peripheral devices and ports of the device: ideally separate from the applications of the operating system, such as, through an external bootable device. |  |  |  |
| 7.2.24 | USER GUIDE | User guide designed by Ceibal and of 20 pages approximately in dimensions similar to the device, delivered printed together with the device. To be quoted separately from the base price. |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS FOR THE DEVELOPMENT OF THE USER INTERFACE** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.2.25 | MODIFY BASE IMAGE | Modify the base software image in the device. |  |  |  |
| 7.2.26 | SYSTEM PRIVILEGES | Ceibal must be able to sign applications so that these have system privileges. This may be performed by the bidder when requested by Ceibal, but it would be appreciated if these could be done by Ceibal. For this purpose, indicate whether it is possible to deliver the Platform Key of the system. |  |  |  |
| 7.2.27 | CUSTOMIZATION | Specify procedures and tools to customize the tablets software, and also indicate which kind of changes may be performed on the software image. Do indicate if the following customizations may be performed: |  |  |  |
| \* Default preloaded applications, including both system and user applications. |  |  |  |
| \* Static content supplement (books, audio, video, etc.) so that it is preloaded in the device. |  |  |  |
| \* User interface, such as, wallpaper, image that appears when the device is starting, etc. |  |  |  |
| \* System default setting, such as the language of the device. |  |  |  |
| \* Supplement of other system files, such as SSL certificates for Ceibal system access. |  |  |  |
| 7.2.28 | DEVELOPMENT | Ceibal will plan together with the awardee during the software image generation process based on the requirements of Ceibal, for which relevant documentation shall be provided and lead time agreed at, subject to the limits defined in the agreement (see Appendix IV: AGREEMENT). The bidder shall specify requests response time and the iteration time of each development cycle. Direct contact between Ceibal and the manufacturer may be requested in each cycle. In order to measure the development cycles, these may include the following tasks: |  |  |  |
| \* Modification of basic settings as default language, time zone, among others. |
| \* Installation of Ceibal applications as well as system applications. |
| \* Disk partition. |
| \* Loading of digital certificates in specific directories. |
| 7.2. 29 | AVAILABILITY OF IMAGE WITH ROOT PRIVILEGES | Indicate if it is possible to count on an image of the device which has root privileges. |  |  |  |

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| --- | --- | --- | --- | --- | --- |
| **SPECIFICATION OF SPARE PARTS (\*)** | | | | | |
| Spare part | Part number | Estimate percentage of manufacturer faults | Minimum batch | Lead time | Comments(\*\*) |
| Touchscreen |  |  |  |  |  |
| Screen |  |  |  |  |  |
| Battery |  |  |  |  |  |
| Motherboards |  |  |  |  |  |
| Charger |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
|  |  |  |  |  |  |

(\*)The bidder may specify other support and maintenance methods, for which it should detail involved operating procedures, the characteristics of the service and its scope, especially the type of fault and the maximum failure rate supported per type of fault. Some alternative services may be extended warranty, maintenance of these devices performed by Ceibal, etc.

(\*\*)Specify if the spare part includes other parts of the device. For instance, touchscreen with/without frame, motherboard with/without built-in frame, etc.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MANDATORY WARRANTY** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| Dead On Arrival for a 90-day period since its arrival | Warranty to replace new devices with faults on DOA. Tablets. 10 devices every 1000, Laptops. 5 devices every 1000. |  |  |  |
| Systemic failures for a 365-day period from the delivery to the user | The provider must provide the necessary spare parts or replace the device if the number of faults attributable to the Factory or design flaw is greater than 10 times the percentage specified in charts SPECIFICATION OF SPARE PARTS in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS. Costs arising from the execution of this warranty shall be solely bore by the provider. |  |  |  |

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| --- | --- | --- | --- | --- |
| **LEAD TIME** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| 50% of the awarded batch | Arrival at Uruguay in the second fortnight of February 2018 |  |  |  |
| Remaining 50% of the awarded batch | Maximum 60 days after the arrival of the first batch. |  |  |  |
| **Indicate the DEADLINE for the software image/specific settings to be available for its installation in the Factory.** | |  | | |

## 7.3 Category 3 - 10´´ Tablets

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.3.1 | SIZE | 10´´. Minimum resolution in the smallest dimension of the screen. 800p. |  |  |  |
| 7.3.2 | PROCESSOR | Minimum: Quad Core ARM, 64 bits. Specify. |  |  |  |
| 7.3.3 | RAM MEMORY | Minimum: 1GB. |  |  |  |
| 7.3.4 | INTERAL STORAGE | Minimum: 16GB. External devices as massive storage solution shall not be accepted. |  |  |  |
| 7.3.5 | MULTIMEDIA | Built-in microphone and speaker(s) |  |  |  |
| 3.5mm jack connector with output for headphones. |  |  |  |
| Minimum 2MP resolution rear camera. Specify the characteristics in all cameras built in the device: |  |  |  |
| 7.3.6 | PORTS | MicroSD card reader. |  |  |  |
| 7.3.7 | CONNECTIVITY | Minimum WiFi: Network card 802.11 a/b/g/n 1x1. Specify. |  |  |  |
| Bluetooth |  |  |  |
| 7.3.8 | CHARGER | Europlug Connector (CEE 7/16). |  |  |  |
| Sealed. The charger may only be opened in case of breaking. |  |  |  |
| 7.3.9 | OPERATING SYSTEM | Android 6.0 or higher. |  |  |  |
| 7.3.10 | LANGUAGE | The operating system and all its interfaces and language setting options in Spanish. |  |  |  |
| 7.3.11 | CERTIFICATIONS | RoHS, Restriction of Hazardous Substances |  |  |  |
| FCC: Federal Communications Committee Declaration of Conformity |  |  |  |
| 7.3.12 | CEIBAL LOGOTYPE | Clearly visible in the case. |  |  |  |
| Indelible if applying alcohol. |  |  |  |
| Non-removable when sticking and unsticking sealing tape. |  |  |  |
| Specification of printing method. |  |  |  |
| 7.3.13 | SERIES NUMBER, BARCODE AND IDENTIFIER OBTAINABLE THROUGH SOFTWARE | Sole series number and its corresponding barcode printed on the case. |  |  |  |
| Specify case printing method. |  |  |  |
| Sole identifier (Id) obtainable through software by means of a procedure indicated by the bidder. |  |  |  |
| Specify if the Id and SN match. |  |  |  |
| Specify if the id is customizable. |  |  |  |
| 7.3.14 | DISK IMAGE | The software image developed by/for Ceibal must include GMS (Google Mobile Services) |  |  |  |
| The tablet will be delivered to the end user with an interface specially designed for the target audience as operating environment by default, as well as with launcher corresponding to the operating system. For such purposes, the bidder must complete the chart REQUIREMENTS FOR THE DEVELOPMENT OF THE USER INTERFACE. |  |  |  |
| DESIRABLES | | |  | | |
| 7.3.15 | LOGOTYPE IN THE CHARGERS | Chargers with included logotype. |  |  |  |
| 7.3.16 | ADDITIONAL PORTS | Video output (miniHDMI, microHDMI) |  |  |  |
| 7.3.17 | TYPE OF CHARGE CONNECTOR | Barrel charge connector. To be quoted separately from the base price. |  |  |  |
| C type micro USB charge connector. To be quoted separately from the base price. |  |  |  |
| 7.3.18 | MAGNETIC MICRO USB CONNECTOR | Magnetic micro USB connector installed in the Factory. To be quoted separately from the base price. |  |  |  |
| 7.3.19 | SCREEN PROTECTION | Protection element on the touchscreen installed in the factory. Such as, tempered glass or another solution minimizing the possibilities of breaking without compromising the safety of the user. (See criteria for maintenance assessment in section 8.4. ASSESSMENT OF SAMPLES). To be quoted separately from the base price. |  |  |  |
| 7.3.20 | TABLET PROTECTION | Protection case for the tablet. To be quoted separately from the base price. |  |  |  |
| Built-in lid cover. To be quoted separately from the base price. |  |  |  |
| 7.3.21 | NON-WELDED PERIPHERAL DEVICES | Peripheral devices (screen, touchscreen, speakers, battery, antenna, etc) connected to the motherboard through connectors, NOT by welding. |  |  |  |
| 7.3.22 | MOTHERBOARDS TEST BENCH | Equipment that enables to perform quality assurance controls of motherboards, easing the connection of the peripheral devices to the board and the execution of verification tests of the hardware status. To be quoted separately from the base price. |  |  |  |
| 7.3.23 | HARDWARE TEST | Software or Firmware tools that enable the verification of built-in peripheral devices and ports of the device: ideally separate from the applications of the operating system, such as, through an external bootable device. |  |  |  |
| 7.3.24 | USER GUIDE | User guide designed by Ceibal and consisting of 20 pages approximately in dimensions similar to the device, delivered in print together with the device. To be quoted separately from the base price. |  |  |  |

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| **REQUIREMENTS FOR THE DEVELOPMENT OF USER INTERFACE** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **YES** | **No** |
| 7.3.25 | MODIFY BASE IMAGE | Modify the base software image in the device. |  |  |  |
| 7.3.26 | SYSTEM PRIVILEGES | Ceibal must be able to sign applications so that these have system privileges. This may be performed by the bidder when requested by Ceibal, but it would be appreciated if these could be done by Ceibal. For this purpose, indicate whether it is possible to deliver the Platform Key of the system |  |  |  |
| 7.3.27 | CUSTOMIZATION | Specify procedures and tools to customize the tablets software, and also indicate which kind of changes may be performed on the software image. Do indicate if the following customizations may be performed: |  |  |  |
| \* Default preloaded applications, including both system and user applications. |  |  |  |
| \* Static content supplement (books, audio, video, etc.) so that it is preloaded in the device. |  |  |  |
| \* User interface, such as, wallpaper, image that appears when the device is starting, etc. |  |  |  |
| \* System default setting, such as the language of the device. |  |  | . |
| \* Supplement of other system files, such as SSL certificates for Ceibal system access. |  |  |  |
| 7.3.28 | DEVELOPMENT | Ceibal will plan together with the awardee during the software image generation process based on the requirements of Ceibal, for which relevant documentation shall be provided and lead time agreed at, subject to the limits defined in the agreement (see Appendix IV: AGREEMENT). The bidder shall specify requests response time and the iteration time of each development cycle. Direct contact between Ceibal and the manufacturer may be requested in each cycle. In order to measure the development cycles, these may include the following tasks: |  |  |  |
| \* Modification of basic settings as default language, time zone, among others. |
| \* Installation of Ceibal applications as well as system applications. |
| \* Disk partition. |
| \* Loading of digital certificates in specific directories. |
| 7.3.29 | IMAGE AVAILABILITY WITH ROOT PRIVILEGES | Indicate if it is possible to count on an image of the device which has root privileges. |  |  |  |

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| --- | --- | --- | --- | --- | --- |
| **SPECIFICATION OF SPARE PARTS (\*)** | | | | | |
| Spare part | Part number | Estimate percentage of Manufacturer fault | Minimum  Batch | Lead Time | Comments (\*\*) |
| Touchscreen |  |  |  |  |  |
| Screen |  |  |  |  |  |
| Battery |  |  |  |  |  |
| Motherboards |  |  |  |  |  |
| Charger |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
|  |  |  |  |  |  |

(\*)The bidder may specify other support and maintenance methods, for which it should detail involved operating procedures, the characteristics of the service and its scope, especially the type of fault and the maximum failure rate supported per type of fault. Some alternative services may be extended warranty, maintenance of these devices performed by Ceibal, etc.

(\*\*)Specify if the spare part includes other parts of the device. For instance, touchscreen with/without frame, motherboard with/without built-in frame, etc.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MANDATORY WARRANTY** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| Dead On Arrival for a 90-day period upon its arrival | Warranty to replace new devices with faults on DOA. Tablets. 10 devices every 1000, Laptops. 5 devices every 1000. |  |  |  |
| Systemic failures for a 365-day period from the delivery to the user | The provider must provide the necessary spare parts or replace the device if the number of faults attributable to the Factory or design flaw is greater than 10 times the percentage specified in charts SPECIFICATION OF SPARE PARTS in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS. Costs arising from the execution of this warranty shall be solely bore by the provider. |  |  |  |

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| --- | --- | --- | --- | --- |
| **LEAD TIME** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| 50% of the awarded batch | Arrival at Uruguay in the second fortnight of February 2018 |  |  |  |
| Remaining 50% of the awarded batch | Maximum 60 days after the arrival of the first batch. |  |  |  |
|  | |  | | |

## 7.4 Category 4 - 10’’ LTE/3G Tablets

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| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.4.1 | SIZE | 10´´. Minimum resolution in the smallest dimension of the screen. 800p. |  |  |  |
| 7.4.2 | PROCESSOR | Minimum: Quad Core ARM, 64 bits. Specify. |  |  |  |
| 7.4.3 | RAM MEMORY | Minimum 1GB. |  |  |  |
| 7.4.4 | INTERAL STORAGE | Minimum: 16GB. External devices as massive storage solution shall not be accepted. |  |  |  |
| 7.4.5 | MULTIMEDIA | Built-in microphone and speaker(s) |  |  |  |
| 3.5mm jack connector with output for headphones. |  |  |  |
| Minimum 2MP resolution rear camera. Specify the characteristics in all cameras built in the device: |  |  |  |
| 7.4.6 | PORTS | MicroSD card reader. |  |  |  |
| 7.4.7 | CONNECTIVITY | Minimum WiFi: Network card 802.11 a/b/g/n 1x1. Specify. |  |  |  |
| Built-in LTE and 3G modems for LTE and 3G network access specified in APPENDIX III: CELLULAR NETWORKS SPECIFICATION. |  |  |  |
| NO dual SIM |  |  |  |
| Bluetooth |  |  |  |
| 7.4.8 | CHARGER | Europlug connector (CEE 7/16). |  |  |  |
| Sealed. The charger may only be opened in case of breaking. |  |  |  |
| 7.4.9 | OPERATING SYSTEM | Android 6.0 or higher. |  |  |  |
| 7.4.10 | LANGUAGE | Operating system and all its interfaces and settings option in Spanish language. |  |  |  |
| 7.4.11 | CERTIFICATIONS | RoHS, Restriction of Hazardous Substances |  |  |  |
| FCC: Federal Communications Committee Declaration of Conformity |  |  |  |
| 7.4.12 | CEIBAL LOGOTYPE | Clearly visible in the case. |  |  |  |
| Indelible if applying alcohol. |  |  |  |
| Non-removable when sticking and unsticking sealing tape. |  |  |  |
| Specification of printing method. |  |  |  |
| 7.4.13 | SERIES NUMBER, BARCODE AND IDENTIFIER OBTAINABLE THROUGH SOFTWARE | Sole series number and its corresponding barcode printed on the case. |  |  |  |
| Specify case printing method. |  |  |  |
| Sole identifier (Id) obtainable through software by means of a procedure indicated by the bidder. |  |  |  |
| Specify if the Id and SN match. |  |  |  |
| Specify if the id is customizable. |  |  |  |
| 7.4.14 | DISK IMAGE | The software image developed by/for Ceibal must include GMS (Google Mobile Services) |  |  |  |
| The tablet will be delivered to the end user with an interface specially designed for the target audience as operating environment by default, as well as with launcher corresponding to the operating system. For such purposes, the bidder must complete the chart REQUIREMENTS FOR THE DEVELOPMENT OF THE USER INTERFACE. |  |  |  |
| DESIRABLES | | |  | | |
| 7.4.15 | LOGOTYPE IN THE CHARGERS | Chargers with included logotype. |  |  |  |
| 7.4.16 | ADDITIONAL PORTS | Video output (miniHDMI, microHDMI) |  |  |  |
| 7.4.17 | TYPE OF CHARGE CONNECTOR | Barrel charge connector. To be quoted separately from the base price. |  |  |  |
| C type micro USB charge connector. To be quoted separately from the base price. |  |  |  |
| 7.4.18 | MAGNETIC MICRO USB CONNECTOR | Magnetic micro USB connector installed in the Factory. To be quoted separately from the base price. |  |  |  |
| 7.4.19 | SCREEN PROTECTION | Protection element on the touchscreen installed in the factory. Such as, tempered glass or another solution minimizing the possibilities of breaking without compromising the safety of the user. (See criteria for maintenance assessment in section 8.4. ASSESSMENT OF SAMPLES). To be quoted separately from the base price. |  |  |  |
| 7.4.20 | TABLET PROTECTION | Protection case for the tablet. To be quoted separately from the base price. |  |  |  |
| Built-in lid cover. To be quoted separately from the base price. |  |  |  |
| 7.4.21 | NON-WELDED PERIPHERAL DEVICES | Peripheral devices (screen, touchscreen, speakers, battery, antenna, etc.) connected to the motherboard through connectors, NOT by welding. |  |  |  |
| 7.4.22 | MOTHERBOARDS TEST BENCH | Equipment that enables to perform quality assurance controls of motherboards, easing the connection of the peripheral devices to the board and the execution of verification tests of the hardware status. To be quoted separately from the base price. |  |  |  |
| 7.4.23 | HARDWARE TEST | Software or Firmware tools that enable the verification of built-in peripheral devices and ports of the device: ideally separate from the applications of the operating system, such as, through an external bootable device. |  |  |  |
| 7.4.24 | USER GUIDE | User guide designed by Ceibal and consisting of 20 pages approximately in dimensions similar to the device, delivered in print together with the device. To be quoted separately from the base price. |  |  |  |

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| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS FOR THE DEVELOPMENT OF USER INTERFACE** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.4.25 | MODIFY BASE IMAGE | Modify the base software image in the device. |  |  |  |
| 7.4.26 | SYSTEM PRIVILEGES | Ceibal must be able to sign applications so that these have system privileges. This may be performed by the bidder when requested by Ceibal, but it would be appreciated if these could be done by Ceibal. For this purpose, indicate whether it is possible to deliver the Platform Key of the system. |  |  |  |
| 7.4.27 | CUSTOMIZATION | Specify procedures and tools to customize the tablets software, and also indicate which kind of changes may be performed on the software image. Do indicate if the following customizations may be performed: |  |  |  |
| \* Default preloaded applications, including both system and user applications. |  |  |  |
| \* Static content supplement (books, audio, video, etc.) so that it is preloaded in the device. |  |  |  |
| \* User interface, such as, wallpaper, image that appears when the device is starting, etc. |  |  |  |
| \* System default setting, such as the language of the device. |  |  |  |
| \* Supplement of other system files, such as SSL certificates for Ceibal system access. |  |  |  |
| 7.4.28 | DEVELOPMENT | Ceibal will plan together with the awardee during the software image generation process based on the requirements of Ceibal, for which relevant documentation shall be provided and lead time agreed at, subject to the limits defined in the agreement (see Appendix IV: AGREEMENT). The bidder shall specify requests response time and the iteration time of each development cycle. Direct contact between Ceibal and the manufacturer may be requested in each cycle. In order to measure the development cycles, these may include the following tasks: |  |  |  |
| \* Modification of basic settings as default language, time zone, among others. |
| \* Installation of Ceibal applications as well as system applications. |
| \* Disk partition |
| \* Loading of digital certificates in specific directories. |
| 7.4.29 | AVAILABILITY OF IMAGE WITH ROOT PRIVILEGE | Indicate if it is possible to count on an image of the device which has root privileges. |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SPECIFICATION OF SPARE PARTS (\*)** | | | | | |
| Spare part | Part number | Estimate percentage of Manufacturer fault | Minimum  Batch | Lead time | Comments (\*\*) |
| Touchscreen |  |  |  |  |  |
| Screen |  |  |  |  |  |
| Battery |  |  |  |  |  |
| Motherboards |  |  |  |  |  |
| Charger |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
|  |  |  |  |  |  |

(\*)The bidder may specify other support and maintenance methods, for which it should detail involved operating procedures, the characteristics of the service and its scope, especially the type of fault and the maximum failure rate supported per type of fault. Some alternative services may be extended warranty, maintenance of these devices performed by Ceibal, etc.

(\*\*)Specify if the spare part includes other parts of the device. For instance, touchscreen with/without frame, motherboard with/without built-in frame, etc.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MANDATORY WARRANTY** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| Dead On Arrival for a 90-day period upon its arrival | Warranty to replace new devices with faults on DOA. Tablets. 10 devices every 1000, Laptops. 5 devices every 1000. |  |  |  |
| Systemic failures for a 365-day period from the delivery to the user | The provider must provide the necessary spare parts or replace the device if the number of faults attributable to the Factory or design flaw is greater than 10 times the percentage specified in charts SPECIFICATION OF SPARE PARTS in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS. Costs arising from the execution of this warranty shall be solely bore by the provider. |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **LEAD TIME** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| 50% of the awarded batch | Arrival at Uruguay in the second fortnight of February 2018 |  |  |  |
| Remaining 50% of the awarded batch | Maximum 60 days after the arrival of the first batch. |  |  |  |
| **Indicate the DEADLINE for the software image/specific settings to be available for its installation in the Factory.** | |  | | |

## 7.5 Category 5 - Ubuntu Laptops

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.5.1 | PROCESSOR | Minimum: Dual Core, 64 bits. Specify. |  |  |  |
| 7.5.2 | RAM MEMORY | Minimum: 2GB DDR3. |  |  |  |
| 7.5.3 | INTERAL STORAGE | Minimums: 32GB for devices with Ubuntu operating system and 64 GB for dual boot Ubuntu/Windows devices (see requirement 7.5.10 operating system). Specify connection interface from the card to the motherboard (mPCle, M.2). External devices shall not be accepted as massive storage solution. |  |  |  |
| 7.5.4 | SCREEN | Minimum: 10''. Desirable size 11.6''. |  |  |  |
| Minimum resolution in the smallest dimension of the screen. 720p. |  |  |  |
| 7.5.5 | MULTIMEDIA | 3.5 mm jack connector for headphones output. |  |  |  |
| External microphone input. |  |  |  |
| Built-in microphone and speakers. |  |  |  |
| Camera: Minimum 1MP. |  |  |  |
| 7.5.6 | INPUT METHODS | QWERTY keyboard with distribution in Spanish. |  |  |  |
| Touchpad. |  |  |  |
| 7.5.7 | PORTS | USB: Minimum 2 ports USB 2.0. Desirable: 2 ports with at least one USB 3.0. |  |  |  |
| Video output: HDMI or VGA. |  |  |  |
| 7.5.8 | CONNECTIVITY | Minimum WiFi: 802.11 a/b/g/n 1x1 network card. Specify connection interface of the card to the Motherboard. |  |  |  |
| 7.5.9 | CHARGER | Europlug connector (CEE 7/16). |  |  |  |
| Minimum length of the DC cable 1,5mts. |  |  |  |
| Indication of voltage and current or full-rated power should be clearly visible. |  |  |  |
| Sealed. The charger may only be opened in case of breaking. |  |  |  |
| 7.5.10 | OPERATING SYSTEM | Ubuntu 16.04 LTS or Dual Boot Ubuntu 16.04 LTS/Windows 10 |  |  |  |
| 7.5.11 | LANGUAGE | Operating system and all interfaces and setting options in Spanish. |  |  |  |
| 7.5.12 | CERTIFICATIONS | RoHS, Restriction of Hazardous Substances |  |  |  |
| FCC: Federal Communications Committee Declaration of Conformity |  |  |  |
| 7.5.13 | CEIBAL LOGOTYPE | Clearly visible in the case. |  |  |  |
| Indelible if applying alcohol. |  |  |  |
| Non-removable when sticking and unsticking sealing tape. |  |  |  |
| Specification of printing method. |  |  |  |
| 7.5.14 | SERIES NUMBER, BARCODE AND IDENTIFIER OBTAINABLE THROUGH SOFTWARE | Sole series number (SN) and its corresponding barcode printed on the case. |  |  |  |
| Specify printing method on case. |  |  |  |
| Sole identifier (Id) obtainable through software by means of a procedure to be indicated by the bidder. |  |  |  |
| Specify if the Id and SN match. |  |  |  |
| Specify if the id is customizable. |  |  |  |
| 7.5.15 | DISK IMAGE | Devices must be delivered with functional drivers. Ceibal may request the Canonical certification of the device (see Appendix I: QUOTE CHARTS) |  |  |  |
| 7.5.16 | ANTI-THEFT SECURITY SYSTEM (Ceibal may request a demo of the security system after the opening of the technical offers, date to be arranged. | It must allow blocking once the theft is reported and once the use term expired. |  |  |  |
| It must allow at least two levels of users with different privileges, for example, regular user and administrator user. |  |  |  |
| It must identify a device through a sole identifier that may be associated to the series number described in 7.5.14. |  |  |  |
| It must show the end user the security status of the device, such as, date of effectiveness of the security certificate. |  |  |  |
| It must enable unblocking through a web service to be accessed from Ceibal´s portal. |  |  |  |
| 7.5.17 | FIRMWARE SETTINGS | The possibility of customizing the firmware (BIOS/UEFI), especially disabling the possibility of setting any booting password and the possibility of setting any password for accessing the massive storage media. |  |  |  |
| DESIRABLES | | |  | | |
| 7.5.18 | LOGOTYPE IN THE CHARGERS | Chargers with included logotype. |  |  |  |
| 7.5.19 | CHARGER | Charging indicator light |  |  |  |
| Velcro fastener for cable |  |  |  |
| 7.5.20 | HANDLE | Built-in handle which eases grabbing and carrying the device. |  |  |  |
| 7.5.21 | HARDWARE TEST | Software or Firmware tools that enable the verification of built-in peripheral devices and ports of the device: ideally separate from the applications of the operating system, such as, through an external bootable device. |  |  |  |
| 7.5.22 | MOTHERBOARDS TEST BENCH | Equipment that enables to perform quality assurance controls of motherboards, easing the connection of the peripheral devices to the board and the execution of verification tests of the hardware status. To be quoted separately from the base price. |  |  |  |
| 7.5.23 | USER GUIDE | User guide designed by Ceibal and consisting of 20 pages approximately in dimensions similar to the device, delivered in print together with the device. To be quoted separately from the base price. |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SPECIFICATION OF SPARE PARTS(\*)** | | | | | |
| Spare part | Part number | Estimate percentage of Manufacturer fault | Minimum  Batch | Lead time | Comments (\*\*) |
| Screen |  |  |  |  |  |
| Keyboard |  |  |  |  |  |
| Battery |  |  |  |  |  |
| Motherboards |  |  |  |  |  |
| Charger |  |  |  |  |  |
| Cover A |  |  |  |  |  |
| Cover C |  |  |  |  |  |
| Cover D |  |  |  |  |  |
| RAM MEMORY |  |  |  |  |  |
| Storage |  |  |  |  |  |
| WiFi card |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
|  |  |  |  |  |  |

(\*)The bidder may specify other support and maintenance methods, for which it should detail involved operating procedures, the characteristics of the service and its scope, especially the type of fault and the maximum failure rate supported per type of fault. Some alternative services may be extended warranty, maintenance of these devices performed by Ceibal, etc.

(\*\*)Specify if the spare part includes other parts of the device. For instance, touchscreen with/without frame, motherboard with/without peripheral devices, etc.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MANDATORY WARRANTY** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| Dead On Arrival for a 90-day period upon its arrival | Warranty to replace new devices with faults on DOA. Tablets. 10 devices every 1000, Laptops. 5 devices every 1000. |  |  |  |
| Systemic failures for a 365-day period from the delivery to the user | The provider must provide the necessary spare parts or replace the device if the number of faults attributable to the Factory or design flaw is greater than 10 times the percentage specified in charts SPECIFICATION OF SPARE PARTS in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS. Costs arising from the execution of this warranty shall be solely bore by the provider. |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **LEAD TIME** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| 50% of the awarded batch | Arrival at Uruguay in the second fortnight of February 2018 |  |  |  |
| Remaining 50% of the awarded batch | Maximum 60 days after the arrival of the first batch. |  |  |  |
| **Indicate the DEADLINE for the software image/specific settings to be available for its installation in the Factory.** | |  | | |

## 7.6 Category 6 - Chromebooks

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **REQUIREMENTS** | | | **COMPLIES** | | **SPECIFICATIONS and COMMENTS** |
| MANDATORY | | | **Yes** | **No** |
| 7.6.1 | PROCESSOR | Minimum: Dual Core, 64 bits. Specify. |  |  |  |
| 7.6.2 | RAM MEMORY | Minimum: 2GB DDR3. |  |  |  |
| 7.6.3 | INTERNAL STORAGE | Minimum: 32GB. Specify connection interface from the card to the motherboard (mPCle, M.2). External devices shall not be accepted as massive storage solution. |  |  |  |
| 7.6.4 | SCREEN | Minimum: 10''. Desirable size 11.6''. |  |  |  |
| Minimum dimensión in the smallest dimension of the screen; 720 p. |  |  |  |
| 7.6.5 | MULTIMEDIA | 3.5 mm jack connector for headphones output. |  |  |  |
| Input for external microphone. |  |  |  |
| Built-in microphone and speakers. |  |  |  |
| Camera: Minimum 1MP. |  |  |  |
| 7.6.6 | ENTRY METHODS | QWERTY keyboard with language distribution in Spanish. |  |  |  |
| Touchpad. |  |  |  |
| 7.6.7 | PORTS | USB: Minimum 2 ports USB 2.0. Desirable: 2 ports with at least one USB 3.0. |  |  |  |
| Video output: HDMI or VGA. |  |  |  |
| 7.6.8 | CONNECTIVITY | At least WiFi: 802.11 a/b/g/n 1x1 network card. Specify connection interface of the card to Motherboards. |  |  |  |
| 7.6.9 | CHARGER | Connector Europlug (CEE 7/16). |  |  |  |
| Minimum length of DC cable: 1,5mts. |  |  |  |
| Indication of voltage and current or full-rated power should be clearly visible. |  |  |  |
| Sealed. The charger may only be opened in case of breaking. |  |  |  |
| 7.6.10 | OPERATING SYSTEM | ChromeOS |  |  |  |
| 7.6.11 | LANGUAGE | Operating system and all its interfaces and settings option in Spanish language |  |  |  |
| 7.6.12 | CERTIFICATIONS | RoHS, Restriction of Hazardous Substances |  |  |  |
| FCC: Federal Communications Committee Declaration of Conformity |  |  |  |
| 7.6.13 | CEIBAL LOGOTYPE | Clearly visible in the case. |  |  |  |
| Indelible if applying alcohol. |  |  |  |
| Non-removable when sticking and unsticking sealing tape. |  |  |  |
| Specification of printing method. |  |  |  |
| 7.6.14 | SERIES NUMBER, BARCODE AND IDENTIFIER OBTAINABLE THROUGH SOFTWARE | Sole series number (SN) and its corresponding barcode printed on the case. |  |  |  |
| Specify printing method on case. |  |  |  |
| Sole identifier (Id) obtainable through software by means of a procedure to be indicated by the bidder. |  |  |  |
| Specify if the Id and SN match. |  |  |  |
| Specify if the id is customizable. |  |  |  |
| 7.6.15 | ASSOCIATION OF DEVICE TO CEIBAL DOMAIN | Association of devices, during the production process in the Factory to Ceibal´s domain for its management through Chromebook Management Console (see requirement 7.6.16) |  |  |  |
| 7.6.16 | MANAGEMENT CONSOLE | Chromebook Management Console |  |  |  |
| 7.6.17 | FIRMWARE SETTINGS | If access to the device firmware is available, firmware must be configurable. Particularly, disabling the possibility of setting any booting password and the possibility of setting any password for accessing the massive storage media. |  |  |  |
| DESIRABLES | | |  | | |
| 7.6.18 | LOGOTYPE IN THE CHARGERS | Chargers with included logotype. |  |  |  |
| 7.6.19 | CHARGER | Charging indicator light |  |  |  |
| Velcro fastener for cable. |  |  |  |
| 7.6.20 | HANDLE | Built-in handle which eases grabbing and carrying the device. |  |  |  |
| 7.6.21 | HARDWARE TEST | Software or Firmware tools that enable the verification of built-in peripheral devices and ports of the device: ideally separate from the applications of the operating system, such as, through an external bootable device. |  |  |  |
| 7.6.22 | MOTHERBOARDS TEST BENCH | Equipment that enables to perform quality assurance controls of motherboards, easing the connection of the peripheral devices to the board and the execution of verification tests of the hardware status. To be quoted separately from the base price. |  |  |  |
| 7.6.23 | USER GUIDE | User guide designed by Ceibal and consisting of 20 pages approximately in dimensions similar to the device, delivered in print together with the device. To be quoted separately from the base price. |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SPECIFICATION OF SPARE PARTS(\*)** | | | | | |
| Spare part | Part number | Estimate percentage of Manufacturer fault | Minimum batch | Lead time | Comments (\*\*) |
| Screen |  |  |  |  |  |
| Keyboard |  |  |  |  |  |
| Battery |  |  |  |  |  |
| Motherboards |  |  |  |  |  |
| Charger |  |  |  |  |  |
| Cover A |  |  |  |  |  |
| Cover C |  |  |  |  |  |
| Cover D |  |  |  |  |  |
| RAM MEMORY |  |  |  |  |  |
| Storage |  |  |  |  |  |
| WiFi card |  |  |  |  |  |
| ... |  |  |  |  |  |
| ... |  |  |  |  |  |
|  |  |  |  |  |  |

(\*)The bidder may specify other support and maintenance methods, for which it should detail involved operating procedures, the characteristics of the service and its scope, especially the type of fault and the maximum failure rate supported per type of fault. Some alternative services may be extended warranty, maintenance of these devices performed by Ceibal, etc.

(\*\*)Specify if the spare part includes other parts of the device. For instance, touchscreen with/without frame, motherboard with/without built-in frame, etc

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MANDATORY WARRANTY** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| Dead On Arrival for a 90-day period upon its arrival | Warranty to replace new devices with faults on DOA. Tablets. 10 devices every 1000, Laptops. 5 devices every 1000. |  |  |  |
| Systemic failures for a 365-day period from the delivery to the user | The provider must provide the necessary spare parts or replace the device if the number of faults attributable to the Factory or design flaw is greater than 10 times the percentage specified in charts SPECIFICATION OF SPARE PARTS in section 7. REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS. Costs arising from the execution of this warranty shall be solely bore by the provider. |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **LEAD TIME** | | **COMPLIES** | | **COMMENTS** |
| **YES** | **NO** |
| 50% of the awarded batch | Arrival at Uruguay in the second fortnight of February 2018 |  |  |  |
| Remaining 50% of the awarded batch | Maximum 60 days after the arrival of the first batch. |  |  |  |
| **Indicate the DEADLINE for the software image/specific settings to be available for its installation in the Factory.** | |  | | |

# Criteria for technical assessment of the device

The assessment of the technical bid includes the following assessment criteria for devices:

* Assessment of compliance with mandatory requirements.
* Assessment of compliance with desirable requirements.
* Assessment of the capacity of the bidder to comply with the requirements of development of the software image.
* Assessment of samples.
  + Assessment of performance
  + Assessment of user experience
  + Assessment of maintenance

## 

## 8.1 Compliance with mandatory requirements

Every offer that does not comply with the mandatory requirements requested in the corresponding category of section 7 REQUIREMENTS, WARRANTY AND LEAD TIME CHARTS, will be discarded.

## 8.2 Compliance with desirable requirements

The compliance with desirable requirements will be assessed by considering the documentation submitted and the delivery of samples of all accessories and/or desirable requirements offered.

## 8.3 Compliance with requirements for the development of the software image.

The degree of customization of the software image will be assessesed, as well as the compatibility of the devices with the interfaces of the user, installation procedures, operational aspects depending on the series number and ID obtainable through software and the previous experience working with the provider, in case there was any.

## 8.4 Assessment of samples

### 8.4.1 Performance and user experience

The experience of global use of the device and its performance under stresses conditions will be assessed. The assessed aspects are: camera, definition of screen, audio, video, WiFI (throughput and roaming), answer of the device to the interaction with the user, (swipe, scroll, physical buttons, transition between screens, etc.), autonomy of the device regarding battery, reading/writing in memory, CPU performance, among others.

### 8.4.2 Maintenance

The maintenance is an essential aspect in the life cycle of the device, having important consequences in the effective procedures of repair and its associated costs, and in the availability timings of the device when in hands of the final user.

The maintenance assessment analyses the adaptation of the device to the user and to the characteristics of the support device offered by Ceibal, and the quality of the documentation associated to the maintenance that is required in section 3.2 DOCUMENTATION, for instance, description of the disassemble procedures, specification of compatibility of motherboards if any, and the procedures for the installation and setup of the firmware and OPERATING system. Besides, the maintenance of the devices also requires the submission of additional documentation, which will be requested in the moment of production of devices, which is detailed in Appendix IV: AGREEMENT (BOM, Exploded-view drawing, schematics, etc.)

**As overall characteristics, we are looking for a robust and easy to repair device, both in the time the repairing takes and the technical complexity.**

The following are some of the most relevant aspects to be assessed:

**Availability of hardware test**

Software or firmware tool that enables the verification of the built in peripheral devices and ports of the device, ideally independently from the application of the OPERATING system, for example, through a device of a bootable external device (see desirable requirements in section 7. REQUIREMENTS CHART, WARRANTY AND LEAD TIME.)

**Customization of Laptops firmware**

Flexibility for setting up parameters of BIOS/UEFI, for instance, through an administration platform provided to the firmware provider.

**Presence of internal battery in *Laptops***

Independent feeding source to preserve certain manufacturing data, even when battery is without charge, which loss may affect the regular operation of the device, for example, the setting up data of the security system.

**Assembly of fragile modules**

Ability to disassemble fragile modules, for example, screen, internal battery, keyboard, antenna, etc. to minimize the breaking risk. It is desirable that the assembly of these modules is not made with adhesive materials.

**Assembly and disassembly complexity**

Design that enables a simple assembly and disassembly process, with minimum risks on the components which are renewed and replaced, for instance, the following considerations contribute to make the process easier:

* Presence of guides for the conduction of internal wires that avoid the use of adhesive tapes.
* Not too much diversity and easily to identify screws, for instance, through colours codes and/or printing of the size of the screw in PCB.
* Modules: design that enables the removal and replacement of modules with no need of removing other modules.

**Screw Anchor**

A robust screw anchor that supports the ware of multiple removals.

**Security**

Design that prioritizes the security of the user. For example, that the glasses are retained in the device if the touchscreen is broken, and security mechanisms if the temperature of the battery is exceeded.

**Length of internal wires**

Appropriate length of internal wires so as to avoid unnecessary tensions in the connection to the motherboard or excessive dispersion of wires in the interior of the device.

**Internal Connectors**

Connection of peripheral devices to the motherboards through removable connectors and NOT through welded devices, since it would complicate the repairing processes (see section 7. REQUIREMENTS, WARRANTIES AND LEAD TIME CHARTS). The equipment with welded peripheral devices may only be repaired in a centralized way, which prevents the type of distributed repairs mentioned in section 2. LIFE CYCLE OF THE DEVICE.

**External Connectors**

Users will have access to the external connectors, so it is important for such connectors to be robust enough to support the external pressure. Some aspects to be considered are:

* Connectors that are totally contained in the interior of the device to avoid more pressure than needed, or even reinforced by the plastic of the case.
* Assembly of the connectors in independent boards which are connected to the Motherboards, so in case of breakdown of a connector, it won´t be necessary to remove and replace the whole motherboard.
* Small SMD connectors such as micro USB, the audio connectors the micro HDMI, etc, with appropriate anchor in the Motherboard.
* Assembled connectors in board cut displayed in the rear part of the connector, which provides an additional support to the connector.
* Reinforced structure of the metallic body of micro USB connectors, for example, through welding of point.
* Reversible connectors, such as micro USB type C (see desirable requirements in section 7. REQUIREMENT, WARRANTY AND LEAD TIME CHARTS).

**External Buttons**

Especially for tablets, external buttons are easily broken, so it is desirable that buttons are not assembled to the motherboard but to a separate module.

On the other hand, it is desirable that the external plastic parts, such as power and volume buttons are assembled to the plastic case of the device to avoid being lost while repaired.

**Touchpads of laptops**

Independent left and right buttons of touchpad.

**Repair and maintenance of motherboards**

Motherboards testing benches (see desirable requirements in section 7 REQUIREMENT CHARTS, WARRANTY AND LEAD TIME) and provision of electronic components of the motherboard for replacements in repairs.

**External Batteries of *Laptops***

External batteries of laptops for them to be replaced without need of disassembling the equipment. At the same time, that the module is fixed to the external case of the device so that the user finds the removal difficult. It is desirable that connections are through screws instead of mechanical solutions.

**Internal Assembly of Tablets**

In order to avoid breaking during the repair processes of tablets, it is desirable that:

* Speakers which are not assembled on removable parts of the case. This avoids tension of wires when the devices are opened.
* Components of motherboards separate from the opening spots of the device, in order to avoid risks of components when using the tools to open the equipment.
* Shielding of PCB not-welded to the board in order to be able to be removed while repaired.

**SIM and microSD Cards**

Some tablets have plastic parts that can be disassembled in the case to hide the SIM or microSD cards, which are usually adhered to an RF antenna. In this case, the plastic piece is easily broken or lost, which causes a direct impact in the operation of the equipment.

# Appendix I: Quote Charts

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CATEGORY** | **1: ANDROID 8´´ TABLETS** | | | |
| **BASIC DEVICE** | **MODEL** | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
|  | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| **DESIRABLE REQUIREMENTS** | | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
| 7. 1. 17 | Barrel charge connector | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| 7. 1. 17 | Charger micro USB Type C | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| 7.1.18 | Connector micro USB magnetic installed by manufacturer | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| 7.1.19 | Protection element on touchscreen installed by manufacturer | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| 7.1.20 | Cover for tablet protection | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| 7.1.20 | Cover with built in lid in tablet | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| 7.1.22 | Motherboards test bench | Up to 10 |  |  |
| between 11 and 30 |  |  |
| between 31 and 100 |  |  |
| 7.1.24 | User guide | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| between 100.000 and 150.000 |  |  |
| more than 150.000 |  |  |
| **SPARE PARTS** | | **UNIT PRICE, US$ FOB MVD** | | **MINIMUM Batch** |
| Touchscreen | |  | |  |
| Screen | |  | |  |
| Battery | |  | |  |
| Motherboard | |  | |  |
| Charger | |  | |  |
| ... | |  | |  |
| ... | |  | |  |
| ... | |  | |  |
|  | |  | |  |
|  | |  | |  |
|  | |  | |  |
| **OPTIONALS** | | **PRICE, US$ CIF MVD** | | **QUOTATION Method** |
| Disposability Plan | |  | |  |
| Additional warranties (if offered) | |  | |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CATEGORY:** | **2: TABLETS ANDROID 8´´ LTE/3G** | | | |
| **BASIC DEVICE** | **MODEL:** | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **COMMENTS** |
|  | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| **DESIRABLE REQUIREMENTS** | | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **COMMENTS** |
| 7.2.17 | Barrel charge connector | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| 7.2.17 | C-type micro USB charge connector | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| 7.2.18 | Magnetic micro USB connector installed by manufacturer | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| 7.2.19 | Protection element on touchscreen installed by manufacturer | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| 7.2.20 | Cover for tablet protection | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| 7.1.20 | Built-in cover with lid for tablet | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| 7.2.22 | Motherboards test bench | Up to 10 |  |  |
| Between 11 and 30 |  |  |
| Between 31 and 100 |  |  |
| 7.2.24 | User guide | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| More than 10.000 |  |  |
| **SPARE PARTS** | | **UNIT PRICE, US$ FOB MVD** | | **MINIMUM BATCH** |
| Touchscreen | |  | |  |
| Screen | |  | |  |
| Battery | |  | |  |
| Motherboard | |  | |  |
| Charger | |  | |  |
| ... | |  | |  |
| ... | |  | |  |
| **OPTIONALS** | | **PRICE, US$ CIF MVD** | | **QUOTATION Method** |
| Disposability Plan | |  | |  |
| Additional warranties (if offered) | |  | |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CATEGORY:** | **3: TABLETS ANDROID 10´´** | | | |
| **BASIC DEVICE** | **MODEL:** | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **COMMENTS** |
|  | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| **DESIRABLE REQUIREMENTS** | | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **COMMENTS** |
| 7.3.17 | Barrel charge connector | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| 7.3.17 | C-type micro USB charge connector | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| 7.3.18 | Magnetic micro USB connector installed by manufacturer | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| 7.3.19 | Protection element on touchscreen installed by manufacturer | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| 7.3.20 | Cover for tablet protection | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| 7.3.20 | Built-in cover with lid for tablet | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| 7.3.22 | Motherboards test bench | Up to 10 |  |  |
| Between 11 and 30 |  |  |
| Between 31 and 100 |  |  |
| 7.3.24 | User guide | Up to 10.000 |  |  |
| between 10.001 and 50.000 |  |  |
| between 50.001 and 100.000 |  |  |
| More than 100.000 |  |  |
| **SPARE PARTS** | | **UNIT PRICE, US$ FOB MVD** | | **MINIMUM BATCH** |
| Touchscreen | |  | |  |
| Screen | |  | |  |
| Battery | |  | |  |
| Motherboard | |  | |  |
| Charger | |  | |  |
| ... | |  | |  |
| ... | |  | |  |
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|  | |  | |  |
| **OPTIONALS** | | **PRICE, US$ CIF MVD** | | **QUOTE METHOD** |
| Disposability plan | |  | |  |
| Additional warranties (if offered) | |  | |  |

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| --- | --- | --- | --- | --- |
| **CATEGORY** | **4:ANDROID 10´´ LTE/3G TABLETS** | | | |
| **BASIC DEVICE** | **MODEL** | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
|  | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| **DESIRABLE REQUIREMENTS** | | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
| 7.4.17 | Barrel charge connector | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| 7.4.17 | C-type micro USB charge connector | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| 7.4.18 | Magnetic micro USB connector installed by manufacturer | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| 7.4.19 | Protection element on touchscreen installed by manufacturer | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| 7.4.20 | Cover for tablet protection | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| 7.4.20 | Built-in cover with lid for tablet | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| 7.4.22 | Motherboards test bench | Up to 10 |  |  |
| between 11 and 30 |  |  |
| between 31 and 100 |  |  |
| 7.4.24 | User guide | Up to 1.000 |  |  |
| between 1.001 and 10.000 |  |  |
| more than 10.000 |  |  |
| **SPARE PARTS** | | **UNIT PRICE, US$ FOB MVD** | | **MINIMUM Batch** |
| touchscreen | |  | |  |
| screen | |  | |  |
| motherboard | |  | |  |
| charger | |  | |  |
| … | |  | |  |
| … | |  | |  |
| … | |  | |  |
| … | |  | |  |
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|  | |  | |  |
| **OPTIONALS** | | **PRICE, US$ CIF MVD** | | **QUOTATION Method** |
| Disposability Plan | |  | |  |
| Additional warranties (if offered) | |  | |  |

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| --- | --- | --- | --- | --- |
| **CATEGORY** | **5: UBUNTU LAPTOPS (\*)** | | | |
| **BASIC DEVICE** | **MODEL** | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
|  | Up to 30.000 |  |  |
| between 30.001 and 60.000 |  |  |
| between 60.001 and 90.000 |  |  |
| more than 90.000 |  |  |
| **DESIRABLE REQUIREMENTS** | | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
| 7.5.22 | Motherboards test bench | Up to 10 |  |  |
| between 11 and 30 |  |  |
| between 31 and 100 |  |  |
| 7.5.23 | User guide | Up to 30.000 |  |  |
| between 30.001 and 60.000 |  |  |
| between 60.001 and 90.000 |  |  |
| more than 90.000 |  |  |
| **SPARE PARTS** | | **UNIT PRICE, US$ FOB MVD** | | **MINIMUM Batch** |
| Keyboard | |  | |  |
| Battery | |  | |  |
| Motherboards | |  | |  |
| Charger | |  | |  |
| Cover A | |  | |  |
| Cover C | |  | |  |
| Cover D | |  | |  |
| RAM MEMORY | |  | |  |
| Storage | |  | |  |
| WiFi card | |  | |  |
| ... | |  | |  |
| **COST OF CANONICAL CERTIFICATION** | | **CERTIFICATION Method (By DEVICE, By SKU, etc..)** | | |
| PRICE US$ |  |  | | |
| **OPTIONALS** | | **PRICE, US$ CIF MVD** | | **QUOTATION Method** |
| Disposability Plan | |  | |  |
| Additional warranties (if offered) | |  | |  |
|  |  |  |  |  |
| (\*) If bidding a dual boot device, include Windows license in the quote. | | | | |

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| **CATEGORY** | **6: CHROMEBOOKS** | | | |
| **BASIC DEVICE** | **MODEL** | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
|  | Up to 30.000 |  |  |
| between 30.001 and 60.000 |  |  |
| between 60.001 and 90.000 |  |  |
| more than 90.000 |  |  |
| **DESIRABLE REQUIREMENTS** | | **VOLUME** | **UNIT PRICE, US$ CIF MVD** | **OBSERVATIONS** |
| 7.6.22 | Motherboards test bench | Up to 10 |  |  |
| between 11 and 30 |  |  |
| between 31 and 100 |  |  |
| 7.6.23 | User guide | Up to 30.000 |  |  |
| between 30.001 and 60.000 |  |  |
| between 60.001 and 90.000 |  |  |
| more than 90.000 |  |  |
| **SPARE PARTS** | | **UNIT PRICE, US$ FOB MVD** | | **MINIMUM Batch** |
| Keyboard | |  | |  |
| Battery | |  | |  |
| Motherboards | |  | |  |
| Charger | |  | |  |
| Cover A | |  | |  |
| Cover C | |  | |  |
| Cover D | |  | |  |
| RAM MEMORY | |  | |  |
| Storage | |  | |  |
| WiFi card | |  | |  |
| ... | |  | |  |
| ... | |  | |  |
|  | |  | |  |
| **OPTIONALS** | | **PRICE, US$ CIF MVD** | | **QUOTATION Method** |
| Disposability Plan | |  | |  |
| Additional warranties (if offered) | |  | |  |

# Anexo II: Specification of samples

|  |  |  |  |
| --- | --- | --- | --- |
| **MODEL** | **CEIBAL HAS SAMPLES PRIOR TO THE PUBLICATION OF THE BIDDING DOCUMENT** | | **DATE OF ARRIVAL OF SAMPLES** |
| **YES** | **NO** |
|  |  |  |  |
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# Appendix III: Specifications of cellular networks

**GSM (EDGE/GPRS)**

Possible bands: EGSM (900 MHz)- DCS (1800 MHz)

**UMTS (HSPA+/HSPA)**

Possible bands: Band 1 (2100 MHz) and 5 (850 MHz).

**LTE**

Possible bands: Band 4 (AWS), Band 5 (850 Mhz), Band 28 (APT 700), DCS (1800 MHz) and Band 1 (2100 MHZ.)

**We prefer for the device to also support CA (Carrier Aggregation) between bands 5** (850Mhz) and 4 (AWS), and between bands DCS (1800 MHz) and 1 (2100 MHz), and category 5 or superior to support CA between bands 28 (APT700) and 4 (AWS.).

# Appendix IV: Agreement

Ceibal will enter into an agreement with the awardee/s, which, apart from the commercial and legal aspects mentioned in the Bidding Document and in the agreement itself, it will include, among other things, the technical and operational aspects mentioned below:

* Delivery of samples (see item 4.3 of the Bidding Document):
  + 20 samples for the development of the software image
  + 20 samples for repair training
* Term for the development of the software image: maximum of 60 days as from notice of requirements by Centro Ceibal. This term includes the certification of the image (in case it is applicable for the device) and it will be extended if there is a justified reason, prior agreement between the parties.
* Centro Ceibal will require the development of all necessary software images for the devices to be delivered to beneficiaries and, exceptionally, mantainance images.
* Firmware setting capacity (For laptops only). The awardee must provide the setting capacity of the firmware of all motherboards delivered to Ceibal, in the devices or as spare parts. The awardee may perform the configuration procedures from origin or send all the necessary tools for Ceibal to perform the field configuration when replacing the Motherboard.
* Delivery of the following documentation before the first shipment (or before every shipment, whenever applicable). Ceibal may reject a batch if finds out this information is not available and the costs and expenses derived from it will be borne by the awardee.
  + RoHS and FCC Certificates in case these have not been delivered with the bid submission.
  + Bill of Materials (BOM): List of all hardware components making the device, each one with an identification code, including the case and any other individual component which may be replaced in case of breakdown.

Every device sent to Ceibal must be made up by the same components. In case of failure to do so, the awardee must send a written notice to Ceibal at least 60 days in advance. If Ceibal proves that there is equipment with incompatible spare parts with the BOM declared that has not complied with the 60 days’ notice, the awardee shall bear the costs of providing new components in an amount equivalent to 5% of the batch of modified equipment, as well as the logistic expenses in order to guarantee an expedited shipment.

* + Schematic, layout and Board Assembly Information (BAI) of the Motherboards in digital format. This information will be submitted before each shipment and every time the awardee gives notice of a modification in the hardware.
  + Exploded View Drawing: technical drawing of the assembly and connection among all atomized parts of the equipment, each one identified with a code. This information will be delivered before each shipment and every time the awardee gives notice of a modification in the hardware. Datasheet of main components of the device, such as battery, screen, camera, etc., and of main components of the Motherboard such as built-in circuits and connectors.
  + Material Safety Data Sheet (MSDS) of Batteries.
  + Sheet with the following information on every device:
    - Part number
    - Series number.
    - Pallet number / master box number in which the device is sent
    - MAC addresses of all network cards of the device. .
    - Part number and series number of the main components (Minimum: motherboards, screen and batteries).
    - Identifier obtained through the software with the method specified by the bidder (see requirements 7.1.13, 7.2.13, 7.3.13, and 7.4.13).
    - IMEI (if applicable).
  + Logistic information:
    - Measures of individual box.
    - Weight of individual box.
    - Measures of master box.
    - Weight of master box.
    - Individual boxes per master box.
    - Master boxes per pallet.
    - Height of the pallet.
* End Of Life. The awardee shall inform the End of Life (EOL) date of a spare part with 180 days prior notice.
* Spare Parts: During the life cycle of the device the awardee must provide spare parts, provided that the spare parts are available in the market.
* Centro Ceibal will perform three quality controls to the awarded products which may partially or totally reject the inspected batches. These three inspections are: 1) inspection in origin before shipment; 2) validation of golden samples the awardee shall send to be assessed in Centro Ceibal; and 3) final inspection in Ceibal after the reception of the shipment.
* Centro Ceibal or a representative appointed by it may be able to visit the manufacture’s location before and/or during the production of the batches for Ceibal, prior arrangement between the parties and independently from the quality controls. Centro Ceibal may also request the visit of the manufacturer to work jointly during the development process of the software image. These conditions will be considered accepted at the moment of submitting the offer.