

LPI - DIGITAL LIBRARY

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2. AIM

The aim of this call for bids is to acquire a Digital Library as a “finished product” aimed at students and teachers of the Uruguayan educational system. This Digital Library will replace the [Ceibal Digital Library](#) (see section 3. BACKGROUND). Customized development offers will not be accepted.

Assessment will prioritize web experience quality, especially resource browsing, search and recovery through interaction with the catalogue.

3. BACKGROUND

Plan Ceibal has a [Digital Library](#) which offers digital resources such as books, audio material, videos, images, links to external sites, etc. Some of the file formats used include: epub, pdf, ogg, mp3, mp4, m4v, avi, ogv and jpg, among others. The target audience of this Library consists of teachers and students of all educational subsystems (Initial, Primary and Middle Education).

Most resources have open access, but some contents are protected. Currently, Ceibal has its own DRM scheme, where encrypted files can only be opened with a specific reader integrated to software images of Ceibal devices.

4. FUNCTIONAL REQUIREMENTS

This section describes functional requirements for the platform. These are divided into mandatory, desirable and optional requirements. Mandatory requirements are eliminatory; desirable and optional requirements are not.

Desirable requirements are requirements that we are especially interested in, while optional requirements are requirements which will be assessed by Ceibal to see whether they are of interest or not, and they must be quoted separately (see section 7. BID).

4.1. MANDATORY

4.1.1. Search Engine

Search engine which allows finding content easily and quickly, ordering results according to their relevance in terms of the search words entered, and which allows faceted browsing of results (restriction of results based on filters).

4.1.2. Cataloging

In order to standardize the formal and content description of resources, and to facilitate interoperability with other systems, the platform must support bibliographic standards, preferably MARC and/or Dublin Core.

4.1.3. Users

4.1.3.1. Categories and permits

The platform must support the following user categories and associated permits:

- Anonymous Users:
 - Access to the catalogue and resources fact sheets.
 - Specify what other activities will be allowed to anonymous users.
- Registered Users:
 - Online reading/viewing of open resources.
 - Online reading/viewing and download of encrypted resources.
 - Possibility to rate resources (star system or the like).
 - Possibility to comment on resources and possibility to moderate such comments.
 - Specify other 2.0 features available, such as adding content to favorites and organizing such content in categories or lists.

4.1.3.2. Management

4.1.3.2.1. Centralized Authentication

Log-in to the system will be carried out through the Ceibal Unique Log-in; therefore the platform must support integration with CAS (Central Authentication Server) (<https://www.apereo.org/projects/cas>).

4.1.3.2.2. Massive Loading

A mechanism must be provided to allow the massive addition, removal and modification of platform users: API (preferably REST services), possibility of importing a .csv, or other. Please Specify.

Currently, Ceibal has approximately 500,000 users, which should be loaded through the abovementioned mechanism.

4.1.4. Access to Content

As mentioned in section 3. BACKGROUND, Ceibal has its own DRM scheme, where encrypted files can only be opened with a specific reader integrated to software images of Ceibal devices.

The bidder must provide a mechanism for protected on-line display and which allows downloading contents protected by the Ceibal DRM.

The bidder may propose a solution for online and offline display of resources protected by a DRM other than the Ceibal DRM.

4.1.5. Analytics

The platform must provide use statistics **at the user level**, in the form of a log of interactions with the site. As an example, a (non-restrictive) list is provided below with some desirable indicators to be measured:

- Visited resources
- Downloaded resources
- Text books viewed on-line
- Time of display on-line
- Text books viewed as preview
- Comments made
- Resource rating

In addition, a mechanism must be provided to export this information: API (preferably REST services), possibility to export to .csv, or other. Specify.

4.2. DESIRABLE

4.2.1. Distribution

Allow administrator users to personalize the delivery of content, individually or by batch, to groups of users. For instance, sending users of each grade text books corresponding to that grade.

4.2.2. Recommendations

Possibility to automatically recommend resources to users based on criteria to be defined. For instance, recommend most downloaded resources, o better rated resources, or resources similar to the one downloaded by the user, or those accessed by other users with similar behavior in the platform.

4.2.3. Downloadable Catalogue

Possibility to download the entire catalogue of resources (the file format and content of the catalogue will be provided by Ceibal).

4.2.4. Controlled Vocabulary

Possibility to integrate or generate controlled vocabulary for the thematic description.

4.2.5. Notifications

Possibility to generate personalized notifications to users. For instance, “there is a new text book available for you”.

4.3. OPTIONAL

4.3.1. Loan System

System which allows implementing loans of digital editorial contents. Specify features.

4.3.2. Mobile App

Application for mobile devices which allows offline reading. In case of offering this item, it must work at least in Android. Multiplatform functioning and the possibility to adapt the look & feel to that of Ceibal will be appreciated.

4.3.3. Collaborative Reading Platform

Feature or module which allows creating readers communities moderated by an administrator user, who can monitor the reading and make it more dynamic.

4.3.4. Integration with CREA2 (LMS [Schoology](#))

Integration with the existing content management platform. Specify precisely the level and form of integration with Schoology, indicating if data feedback to the platform is included.

- For LTI see <https://support.schoology.com/hc/en-us/articles/204377963-A-How-to-Guide-for-Schoology-s-LTI-Integration>)
- For API see <https://developers.schoology.com/app-platform>

4.3.5. Additional Services

Any additional service considered by the bidder to add value to the bid must be quoted **separately** in this item.

5. NON-FUNCTIONAL REQUIREMENTS

This section describes non-functional requirements of the platform.

5.1. MANDATORY

5.1.1. Compatibility

The platform must work correctly in the latest versions of the three most popular browsers: Chrome, Firefox and Internet Explorer.

5.1.2. Design

The product must be customized to the look & feel of Ceibal.

5.2. DESIRABLE

5.2.1. Usability

5.2.1.1. Three-Click Depth

It will be appreciated if the user does not need more than three clicks to carry out a desired action.

5.2.1.2. Ease of Use

An interactive and simple design facilitating the use of the platform will be appreciated.

5.2.2. Accessibility

5.2.2.1. Responsive Design

Availability of a responsive design for mobile devices will be appreciated.

5.2.2.2. Best Practices

The implementation of best practices in terms of accessibility according to the World Wide Web Consortium (W3C): <http://www.sidar.org/traducciones/wcag20/es/> will be appreciated.

6. PROJECT

The bid must include a project plan for the start-up of the library, as well as training on the management and operation of the platform.

6.1. DEMAND ESTIMATION

The Ceibal Digital Library had approximately 450,000 visits in 2015, an average of 37,500 monthly visits. This user flow is not distributed uniformly, but rather fluctuates according to the school calendar.

The Library currently has about 2100 resources including

- 1000 books in epub format
- 650 books or didactic fact sheets in pdf format
- 120 images in jpg format
- 100 videos in ogg, ogv, avi and m4v format
- 200 audio files in mp3 and ogg format
- 50 links to external web resources

The current content occupies a storage space of approximately 20 GB. An increase in the storage capacity required is expected as a result of new contents; therefore, specify the storage capacity provided by the platform offered.

6.2. TRAINING

A training plan must be proposed, for managers, technicians and staff Ceibal deems proper, so as to acquire knowledge for the correct operation of the platform.

A maximum of 10 people are expected to receive training, throughout the various profiles. Training may be on-site or remote.

6.3. PROJECT PLAN

The bid must include a Project Plan including the following items:

- Work methodology
- Detailed Schedule
- Content migration plan
- Testing plan
- Training plan

- Risks plan

6.4. SLA

The bid must include a description of the service level proposed, including incident response times, platform availability percentage, back-up policies, among other things.

Ceibal may negotiate the characteristics of this agreement with the awardee.

7. BID

To facilitate assessment, it will be appreciated if bids are presented according to what is specified in sections 7.1 LAYOUT and 7.2 QUOTATION. In addition, Ceibal will request a DEMO according to what is specified in section 7.3 DEMO.

For the purpose of ensuring completeness of information provided in the bid, in Annex III there is a check-list with everything that needs to be included.

7.1. QUOTATION

The aim of Ceibal is for products and services offered to be used by all beneficiaries (students, teachers, etc.). Therefore, **all Ceibal users will be loaded to the system**, regardless of the use they make of the platform.

However, Ceibal will only pay ACTIVE LICENSES, which are licenses associated to users who exceed a certain usage level. A license is considered to be active if it corresponds to a user that downloads or views at least 5 contents per year.

Ceibal can guarantee a minimum term of 3 years for the contract, provided that the project is successful during its first year of implementation.

7.1.1. Active User Licenses

The bidder must quote annual active user licenses according to the SaaS (Software as a Service) model, which means that the cost must include, apart from the use license, the hosting and back-up services,

updates, maintenance and support. If the bidder works with several levels of support, any service level not included in the value of licenses must be detailed, described and quoted separately.

User licenses are quoted according to the following volume tiers:

- Tier 1: Up to 10,000
- Tier 2: more than 10,000, up to 25,000
- Tier 3: more than 25,000, up to 50,000
- Tier 4: more than 50,000, up to 100,000
- Tier 5: more than 100,000

7.1.2. Development Hours

The bidder must quote development hours. Ceibal will request development hours in case it considers that adjustments are necessary for the adaptation and customization of the Platform.

Development hours will be quoted according to the following volume tiers:

- Tier 1: up to 250 hours.
- Tier 2: more than 250, up to 500.
- Tier 3: more than 500, up to 1,000.
- Tier 4: more than 1,000.

The bidder may indicate if there is an additional cost for deployment and parameterization as part of the implementation process of the first year. If there is an additional price, the equivalent cost in development hours must be indicated. For instance, if the implementation cost is of \$100 and the development hour is quoted at \$1, the cost of implementation will be indicated as 100 development hours.

7.2. SUBMISSION

The bidder must submit the bid divided in folders, according to the following guidelines:

1. Folder with Annex I: COMPLIANCE TABLE, and Annex II: QUOTATION, **complete**.
2. Folder with functional description and technical specifications of the platform.
3. Folder with functional description, technical specifications and quotation for optional functional requirements requested in section 4.3 OPTIONAL.
4. Folder with project plan according to specifications in section 6. PROJECT.

5. Folder with complementary technical information deemed appropriate by the bidder.
6. Folder with description of bidder's background.

Ceibal reserves the right to dismiss any bids that are not submitted according to these guidelines.

7.3. DEMO

Centro Ceibal will request a demo of the solution, on-site or remote, after the bid-opening date and to be coordinated with the bidder, not later than October 9th, 2016.

The demo will be used to assess, among other aspects, the features presented by the platform (mandatory, desirable and optional) and user experience with Ceibal devices. Contents for the demo will be provided by Ceibal in due time.

8. INTELLECTUAL PROPERTY

The Company awarded undertakes to grant Centro Ceibal a free, non-territorial, non-exclusive authorization for use, for the term of the contract, to access the platform, developments, materials, etc. in the terms provided in section 7.1, as well as to reproduce, distribute, publish, communicate to the public, modify and create work arising from such platform and materials and the preexisting work, for the sole purpose of complying with requirements of the agreement between the parties.

The awardee guarantees Centro Ceibal that the platform, developments, materials, etc. acquired will be original and will not violate any Intellectual or Industrial Property rights of third parties, including without limitation copyrights, trademarks and other distinctive signs, patents, utility models, industrial designs, commercial names, Internet domain names, trade secrets, or non-disclosed information, image rights or similar legal rights, and that they are not encumbered, subject to inhibition or affected in any way which affects the unrestricted use thereof by Centro Ceibal. In addition, the Company undertakes whole responsibility for legal actions and/or claims of any nature – including without limitation, claims in or out of court, civil, criminal or administrative claims – that may arise from the use of the offered software, and will respond for damages, fines, court costs, costs, attorney fees, expenses and any other loss incurred by Centro Ceibal for such reason.

Together with the bid, the bidder must submit the terms and conditions for the use of the platform offered, and the privacy and personal data management policy.

9. CONFIDENTIALITY AND PERSONAL DATA PROTECTION

The awardee expressly undertakes to keep under strict confidentiality all confidential information processed or used during its relation with Centro Ceibal. Confidential information includes, among others and by way of example, the following information: any commercial strategy, plan and procedure, proprietary information, software, tools, processes, images, personal data, methodologies, information and trade secrets and any other information and material of Ceibal, as well as of the students, beneficiaries, educational centers, that may be obtained by the Company from any source or that may be developed as a result of the present agreement.

The Company undertakes to treat personal data accessed by virtue of this agreement in accordance with Law No. 18.331, of August 11th, 2008 and Decree No. 414/2009, of August 31st, 2009, only for the provision and within the framework of the services hired, and not for any other purpose; not for its own benefit, gratuitous or onerous, or to assign, communicate or transfer them to third parties, unless previously authorized by Centro Ceibal.

Under no circumstance shall the access to personal data be understood as an assignment or authorization for the free use of such data by the Company.

The Company undertakes to adopt security measures required to guarantee security and confidentiality of personal data and to avoid tampering, loss, unauthorized consultation or use thereof, as well as to detect information deviations.

If personal data are kept, temporarily, outside national territory, the Company undertakes to use importers in countries that are considered to have adequate levels according to European data protection standards, in accordance with Directive 95/46/CE, of the European Parliament and the Council, its amendments and related and complementary regulations. Otherwise, the Company undertakes to use an importer that adheres to the Privacy Shield framework, that has subscribed standard contractual clauses with the exporter or which has a registered Code of Conduct, with the resulting authorization for international transfer of data by a Personal Data Control and Regulatory Unit, in the last two cases.

Upon termination of this agreement, the Company undertakes to return or delete from all its systems and physical and logic files, owned by it or hired from third parties, all personal data accessed, obtained or handled by virtue of the present agreement, as well as associated metadata, if applicable.

For the purpose of this agreement, personal data refers to any type of information regarding individuals or legal entities, determined or to be determined, including without limitation, any numeric, alphabetic, graphic, photographic, acoustic information or any other type of information referring to them directly or indirectly, according to provisions in article 4 of Law No. 18.331 and articles 1 and 4 of Decree No. 414/009.

10. ANNEX I: BID COMPLIANCE TABLE

The bidder must complete the compliance table for **all** requirements. For the assessment team’s reference, it must also indicate where to find in the bid the information corresponding to each requirement.

The column COMPLIANCE will be completed with options **Yes/No/Partial**. In case compliance is partial, this will be clarified in the COMMENTS column.

FUNCTIONAL REQUIREMENTS			REFERENCE IN BID	COMPLIANCE	COMMENTS
<i>MANDATORY</i>					
4.1	SEARCH ENGINE	Quick and easy access to contents			
		Results ordered by relevance			
		Faceted browsing of results			
4.2	CATALOGING	Bibliographic standards support			
4.1.3.1	ANONYMOUS USERS	Access to catalogue and resources fact sheets			
		Specification of other activities			
	REGISTERED USERS	Online reading/viewing and downloading of open resources			
		Online reading/viewing and downloading of encrypted resources			
		Resource rating (star system or the like)			
		Commenting resources and possibility for moderation			

		Specification of other 2.0 features (favorites, lists, etc.)			
4.1.3.2.1	CENTRALIZED AUTHENTICATION	Integration with CAS			
4.1.3.2.2	MASSIVE LOADING	Loading mechanism specification (API, import .csv, etc.)			
4.1.4	ACCESS TO CONTENTS	Online protected display mechanism			
		Possibility to download contents with Ceibal DRM			
		(Optional) Online and offline display solution with another DRM			
4.1.5	ANALYTICS	User level statistics			
		Specification of loading mechanism (API, import .csv, etc.)			
DESIRABLE					
4.2.1	DISTRIBUTION	Sending of content by admin users			
4.2.2	RECOMMENDATIONS	Sending of automatic recommendations to the user			
4.2.3	DOWNLOADABLE CATALOGUE	Downloading entire catalogue in format provided by Ceibal			
4.2.4	CONTROLLED VOCABULARY	Integration or generation of controlled vocabulary for description			
4.2.5	NOTIFICATIONS	Personalized notifications to			

		users			
OPTIONAL					
4.3.1	LOAN SYSTEM	Specification of loan system feature			
4.3.2	MOBILE APP	Operation with Android			
		Multiplatform operation			
		Customization of look & feel for Ceibal			
4.3.3	COLLABORATIVE READING PLATFORM	Feature which allows creating reader communities moderated by an administrator			
4.3.4	INTEGRATION WITH CREA2 (LMS SCHOOLGY)	Specification of form and level of integration with Schoology			
		Data feedback to platform			
4.3.5	ADDITIONAL SERVICES	Include in this item other services quoted separately			
NON-FUNCTIONAL REQUIREMENTS					
MANDATORY					
5.1.1	COMPATIBILITY	Correct operation in Chrome, Firefox and Internet Explorer			
5.1.2	DESIGN	Customization to Ceibal's look & feel			
DESIRABLE					
5.2.1.1	THREE-CLICK DEPTH	No more than 3 clicks required to perform an action			
5.2.1.2	EASE OF USE	Interactive and simple design			
5.2.2.1	RESPONSIVE DESIGN	Responsive design for mobile devices			

5.2.2.2	BEST ACCESSIBILITY PRACTICES	implementation of best practices according to W3C			
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11. ANNEX II: QUOTATION

ACTIVE LICENSES QUOTATION				
Tier 1	Tier 2	Tier 3	Tier 4	Tier 5

Quotation Tiers:

- 1 Up to 10,000.
- 2 More than 10,000, up to 25.000.
- 3 More than 25,000, up to 50.000.
- 4 More than 50,000, up to 100.000.
- 5 More than 100,000.

DEVELOPMENT HOURS QUOTATION				OPTIONAL
Tier 1	Tier 2	Tier 3	Tier 4	Deployment and parameterization (in hours)

Quotation Tiers:

- 1 Up to 250 hrs.
- 2 More than 250, up to 500 hrs.
- 3 More than 500, up to 1,000 hrs.
- 4 More than 1,000 hrs.

12. ANNEX III: BID VERIFICATION LIST

1. Complete ANNEX I: COMPLIANCE TABLE
2. Complete ANNEX II: QUOTATION TABLES
3. Submit TRAINING PLAN according to specifications in section 6.2
4. Submit PROJECT PLAN according to specification in section 6.3
5. Submit description of proposed SLA
6. Segment bid in six folders according to what is specified in section 7.2