

Terms of Reference for the Provision of Consultancy Services for the Design and Management of Investment Consortia for the BELLA II Project

Background and Context

Over the course of its twenty years of existence, together with the national networks comprising its membership, RedCLARA has contributed to the construction and deployment of a powerful digital platform to support the work of universities and research centres across the region. The individuals and institutions who both individually and collectively have contributed to this effort strongly believe in the *primus inter pares* role of education, science, and innovation in sustaining and promoting the economic and social development of our countries. Multiple accomplishments have been achieved over the years, such as the successful implementation of over twelve major projects supported by various institutions and organizations such as the European Commission, the Inter-American Development Bank, ECLAC, and the OAS, as well as the creation and support of organizations that now independently but significantly complement the role of RedCLARA, such as SCALAC, La Referencia, and LACNET.

Nevertheless, despite the significance of these achievements, the most important one has been the ability to establish and maintain enduring cooperation among the majority of countries in the region. With a great diversity of conditions and resources, these countries have managed to forge a common agenda and a governance model that have served as the foundation and support for their work.

In recent years, we have significantly expanded our infrastructure with very strong support from the European Commission for the BELLA project. With BELLA we have reached a very important milestone, guaranteeing a direct high-capacity connection through the EllaLink cable that directly connects Europe to Latin America. It should be noted that the significance of this connectivity is not the infrastructure itself, but what this infrastructure represents in terms of the willingness and openness to cooperation between both continents. The digital divide that concerns us so deeply is not only an infrastructure gap, but also primarily a knowledge gap.

This knowledge is essential to mobilize creativity and innovation in all areas of society. In this sense, RedCLARA is expanding its scope, aspiring to play a central role in leveraging digital transformation technologies to address and find solutions to some of the problems and major challenges we face today.

BELLA II is the project currently being implemented by RedCLARA with the support and co-financing of the Directorate of International Alliances of the European Union (DG-INTPA). The general objective of the BELLA II project is ***to strengthen and expand the Latin American and Caribbean***

digital ecosystem, facilitating relationships and sharing among Latin American, Caribbean, and European companies, research centres, educational institutions, and academic networks, to contribute to the achievement of the region's strategic goals, with a focus on strengthening education, science, technology, and innovation.

Its specific goals are:

1. To design, build, and operate digital infrastructure capable of guaranteeing the proper connectivity of Peru, Costa Rica, Guatemala, El Salvador, and Honduras with the rest of the BELLA infrastructure, particularly with the submarine cable connecting Europe with Latin America since 2021. Depending on a feasibility analysis, community priorities, and the availability of economic resources, the project also considers the possibility of its expansion to some of the following countries: Caribbean nations, Mexico, Belize, Bolivia, Paraguay, and Uruguay.
2. To increase the adoption and use of digital transformation technologies to develop digital research and education solutions.
3. To intensify cooperative relations with European digital education and research ecosystems to promote the exchange of knowledge, access to best practices, and the creation of the dialogue spaces necessary for the design, formulation, and execution of innovative research and education projects.
4. To collaborate with European Union initiatives such as the EU-LAC Digital Alliance to develop capabilities in the application of digital transformation technologies to foster innovation in the public and private sectors.

In this context, BELLA II must undertake a series of procurement and investment processes to maximize the use of available resources in accordance with the methods and procedures accepted by the European Union.

Expected Connectivity Results of the BELLA II Project

The BELLA II project plans to invest a total budget of 28 million euros towards, among other objectives, developing a secure and resilient optical backbone network capable of supporting links of at least 20 Gbps in Latin America and the Caribbean, connecting Peru, San Salvador (El Salvador), Tegucigalpa (Honduras), Guatemala City (Guatemala), and San José (Costa Rica) with the rest of the BELLA infrastructure, and the possibility of its extension to the Caribbean (such as Dominican Republic, Trinidad and Tobago, and Jamaica), Paraguay, Bolivia, Mexico, Belize, and Uruguay.

The new BELLA Project proposal (BELLA II) seeks to extend the current digital backbone connecting Latin America with the European Union at least to Peru, Costa Rica, Guatemala, El Salvador, and Honduras, offering low-cost high-speed connectivity to foster economic growth, better services, and greater commitment to the private sector, while promoting innovation, education, and the strengthening of research. Depending on the availability of economic resources or third-party contributions, the connection may be extended to include some of the following countries:

Dominican Republic, Jamaica, Cuba, Trinidad and Tobago, Mexico, Belize, Bolivia, Paraguay, and Uruguay. The final scope will depend on the amount of third-party investment we are able to secure during the first year of the project.

One of the major challenges of the project is the lack of infrastructure in several of the target countries. In Central America and the Caribbean, for instance, the existing ICT infrastructure is insufficient to support the social and economic development of their countries. Specifically, the fibre optic infrastructure is inadequate and highly concentrated, leading to higher prices and a market dominated by a handful of companies. Additionally, these few major companies lack incentives to collaborate with smaller companies to expand coverage and capillarity.

The BELLA II project wishes to establish a new model based on the design of a set of incentives that can transform this non-cooperative and zero-sum situation into a positive-sum scenario. We are convinced that establishing a neutral space where all stakeholders can derive additional benefits will ultimately reduce the risks of exploitation by a dominant player.

The project will promote the development of a shared infrastructure involving various stakeholders (the dominant telecommunications providers, but also the multiple smaller companies that own infrastructure and provide services to local communities). We will explore and compare technical, legal, and organizational solutions applied in other regions, for example, the shared use of dark fibre owned by electricity companies and other facilities, connecting to existing Internet Exchange Points (IXPs) to distribute backbone connectivity to end users, the use of other complementary technologies such as Wi-Fi 6, 5G or satellite, the deployment of sub-river cables, and many others. With this approach, we hope to ensure that a greater number of end users will benefit from the investment, contributing to an increase in capillarity and coverage, which is essential for extending the projects' benefits to a larger population.

To achieve this goal, we will use the open strategic dialogues (OSD) methodology to conduct a collaborative design process involving all stakeholders. This process will establish the foundations for the creation of one or more neutral consortia including, among others, national research and education networks, universities, research centres, telecommunications operators, infrastructure owners, investors, development banks, national public institutions, regional agencies, and communities.

During the design process, we will identify the risks, challenges, and difficulties perceived by participants and how to solve them. This process will serve as the basis for obtaining additional contributions to the project and guaranteeing the sustainability and expansion of the initial infrastructure. The first phase will conclude with the signing of consortium agreements with all shareholders and stakeholders, establishing governance and participation rules. The partners who sign the consortium agreement will define and establish a steering committee to provide governance throughout the project's duration and to establish governance rules for the operation and maintenance of the new infrastructure beyond its completion.

The consortium coordinated by RedCLARA will manage all investment strategies for creating and expanding the new connectivity infrastructure that this project wishes to produce. The connectivity backbone will connect Lima (Peru), Guatemala City (Guatemala), Tegucigalpa (Honduras), San Salvador (El Salvador), San José (Costa Rica), and Panama City (Panama), and, depending on the analysis of priorities and availability of resources, will incorporate some of the following countries: Santo Domingo (Dominican Republic), other Caribbean Islands, Mexico, Belize, Paraguay, Bolivia, and Uruguay.

The final topology will depend on the availability of infrastructure, but in all cases, it will provide a resilient connectivity service based on fibre optic IRU agreements (default solution), with BELLA's current infrastructure and with the submarine cable point of presence in Fortaleza.

The network of the default solution will be comprised of fibre optic infrastructure. RedCLARA and its consortium partners will provide a capacity IRU with at least 20 Gbps and scalable. The initial capacity will be used to connect the target countries with Europe via the BELLA submarine cable. As capacity scales over time, partners and investors of the consortium will be responsible for allocating additional capacities based on future needs and projects. After its implementation, the infrastructure will be operated and maintained by the consortia. In addition to capacity, RedCLARA and its consortium partners will oversee the deployment of layer 2 and 3 equipment to offer IP services.

The consortium aims to facilitate collaboration among governments, academia, and the private sector for the development of projects funded through their participation. This initiative seeks to leverage participants' various experiences and resources to promote innovation and sustainable development.

Consortium partners will explore alternative connectivity solutions in cases where the available infrastructure is unable to provide a cost-effective service. This assessment may include other technologies, operating models, and contractual agreements that may provide the best second option for a capacity IRU. The reason for this open model is the lack of infrastructure in the target countries. Whatever the case, the acquired solution must be as close as possible to the level of service, security, and resiliency provided through a fibre optic IRU.

In the consortium agreements, RedCLARA will reserve part of the deployed infrastructure to be used exclusively by National Research and Education Networks (NRENs) and their members (universities and research centres). The consortium will guarantee the maintenance and operation of the infrastructure in compliance with the corresponding service level agreements, and, in compensation for the funding provided through the project, will provide these services to RedCLARA and the NRENs at no cost during the lifespan of the deployed infrastructure.

The project will seek to build a consortium-maintained telecommunications infrastructure, as described above, ideally involving one or more telecommunications operators and other investors and stakeholders, guaranteeing fast response times and a high Mean Time Between Failures (MTBF). Maintenance costs will be included in the initial acquisition/agreement and will support the

sustainability of the Caribbean and Latin American countries targeted by this project. The project will be responsible for procuring the necessary equipment to use the infrastructure, as well as the best solution that is selected. A redundant service is required to guarantee resilience, given that all institutions currently rely on the use of ICT infrastructure and any interruption can lead to dissatisfaction among students/researchers.

The selected operators/partners will be encouraged to expand their infrastructure in the region. Thus, in addition to generating connectivity between education and research networks, operators will have the possibility of interconnecting and exchanging services with other operators across borders, therefore generating new business options.

Synergy with Latin American and Caribbean operators will generate the necessary capillarity by allowing alternative ways to interconnect current operators, increasing regional infrastructure and therefore increasing competitiveness.

Beyond Connectivity

BELLA II also seeks to identify and develop capabilities that leverage connectivity to allow the development of other platforms and services within its digital ecosystem. These other services or platforms create added value that integrates other technologies such as high-performance computing, artificial intelligence, and cloud services, as well as applications and services that use these platforms for their operation. The role of the investment consortium is to catalyse the economic value of these initiatives and allow their use to attract additional resources and investments from all sectors of society.

With the objective of identifying projects and initiatives of regional interest that can take advantage of BELLA connectivity for their implementation and deployment, RedCLARA has been identifying innovative projects that integrate the use of technologies such as blockchain, Earth observation data, high-performance computing, the Internet of Things, and others, to provide solutions to the enormous challenges faced by the region. Throughout this process, we discovered community initiatives for agricultural management, tools, and technologies to manage fish farming, projects and initiatives aimed at providing education and training in rural areas, and many others, which have been integrated into the portfolio of projects that are being developed by BELLA and take connectivity far beyond the notion of meaningful connectivity to what we have termed “connectivity with meaning.”

In a similar vein, we have started to organize ideathons and hackathons that will allow us to systematically produce innovations that enhance the value of the investment consortia we intend to implement. This will allow us to build a broad menu of actions that will address the interests of all stakeholders.

Objectives

- To benchmark consortium investment models to identify the best practices in this area.
- To analyse different alternatives or consortium models that might be used in the Bella II project, considering its intention to promote cooperation efforts between the private sector, governments, multilateral banks, academia, and communities.
- To design the communication and marketing strategy required to inform and invite potential stakeholders to participate in the investment consortium or consortia.
- To encourage and promote alliances between governments, academia, and the private sector in the context of, and through their participation in, these consortia.
- To identify funding strategies for the consortium or consortia.
- To support in an initial pilot phase during which an investment consortium will be created based on the criteria specified above.

Scope of the Consultancy

- To conduct a review of best practices regarding the establishment or creation of investment consortia for both public and private funding of projects aimed at promoting digital transformation processes in Latin America and the Caribbean in alliance with Europe.
- Using these best practices as a foundation, to prepare a report with recommendations on the alternatives for the establishment of these consortia and potential governance structures and funding mechanisms.
- To analyse and propose the most convenient strategy regarding the number of consortia to be created and the variables to be considered for making these decisions.
- To support in the identification of potential consortia participants (globally and with special emphasis on Europe and Latin America and the Caribbean).
- To support in the development and implementation of an open strategic dialogue on the proposed investment consortia model.
- To support in the negotiation process with the stakeholders interested in participating in the consortium or consortia for their incorporation.
- To support in the process for the creation of the consortium or consortia.
- To support in the design and deployment of a marketing and communication strategy to promote awareness of the consortia model and the possible participation options for potential consortia members.
- To ensure effective coordination and communication between consortium members.
- To support in the consortia model's pilot phase.

Deliverables

- A report on best practices for the creation of public-private investment consortia and a report on a strategy for approaching potential investors.

- A report on possible models for the establishment, funding, and governance of the consortia.
- Recommendations on the number of consortia and variables to be considered when defining the number and scope of these consortia.
- A report on possible participants in the various consortia and an engagement model.
- A document for conducting interviews, dialogues, and other similar activities aimed at clarifying and completing the design of the investment consortium model.
- A communication and marketing strategy.
- A final report on the process for the creation of the consortia.
- A final report on the pilot phase of the consortia.

Methodology

The methodology is based on the open strategic dialogues (OSD) strategy. The open strategic dialogue methodology is available at the following [link](#).

The research on best practices must include primary and secondary sources of information, in a proportion to be defined by the consultant or consulting firm.

Timeline

The consultancy will have a duration of 6 months. The timeline to be followed in the development of the activities will be included in the consulting firm's proposal, and its quality and detail will be considered in the selection of the winning proposal.

Reports and Communication

The project executing team and the consulting firm are expected to collaborate closely, so continuous communication is expected between both parties throughout the duration of the consultancy. Both parties will agree on the corresponding reports and their delivery dates once the project has started.

Evaluation Criteria

Proposals for the provision of these consultancy services will be evaluated based on:

- Experience of the consultant or the consulting firm and the consulting team in the design of governance models for co-investment projects.
- Quality of the proposal submitted for its evaluation.
- A competitive dialogue between bidders will be conducted to facilitate a standardized comparison between them.

Confidentiality

All information to be handled by this consultancy will be treated in strict confidentiality.

Terms and Conditions

Even though the project will involve continuous communication between the consulting firm and RedCLARA, the deliverables will be reviewed and must be accepted. The aim is to ensure that RedCLARA is satisfied with the quality and completeness of the results. The consultancy will be paid in three instalments, as described below:

- 30% of the total amount at the start of the consultancy.
- 30% three months after the start of the consultancy.
- 40% at the closing of the consultancy and once all its products have been formally accepted.

Submission of Proposals

Proposals must be submitted via email before midnight (23:59 GMT-4), 28 May 2024.

Send your proposal to BELLAII.Consultorias@redclara.net. Please include the following text in the email subject line: TdR-BELLAII-A003.

Questions will be received until May 23 at 23:59 GMT-4.