BELLA II
Building the Europe Link to
Latin America and the Caribbean

BELLA II Webinars: Allies for the Construction of a Digital Ecosystem

OUTCOMES REPORT

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Outcomes Report

BELLA II Webinars: Allies for the Construction of a Digital Ecosystem

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Background

Between 22 and 24 May 2023, RedCLARA conducted three webinars within the framework of the BELLA II Project, one for South America, one for Mesoamerica, the third for the Caribbean. The activity was organized with the following purposes:

1. To present the BELLA II Project, its general and specific objectives, and the roadmap to be followed by the agents interested and involved in its implementation.
2. To request participants' contribution to the generation of a set of ideas that will prove useful in both the preparatory phase of the strategic dialogues as well as in their execution.
3. To invite interested agents to participate in the process of conducting the open strategic dialogues, which will take place during the first year of project implementation, as well as in the execution of other projects needed to achieve the general objective and specific objectives of BELLA II over a period of four years.

Under the title "BELLA II Webinar: Allies for the Construction of a Digital Ecosystem," each session had a duration of 90 minutes. A total of 117 people participated, 37.60% of which attended the session organized for South America, 37.60% the session for Mesoamerica, and the remaining 24.80% the session for the Caribbean.

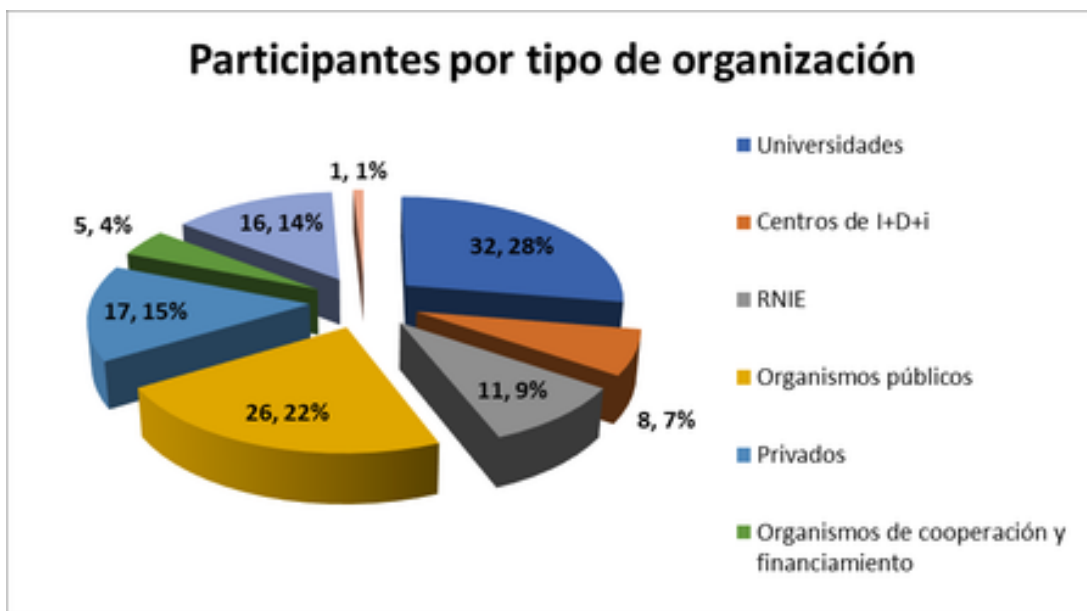Figure 1 shows the distribution of participating organizations by type.

Fig. 1: Distribution of participants by type of organization, institution, or sector they represent.

As Figure 1 shows, the activity was attended by representatives of the triple helix: government organizations, the private sector, and academia. Figure 2 shows participant distribution by country of origin.
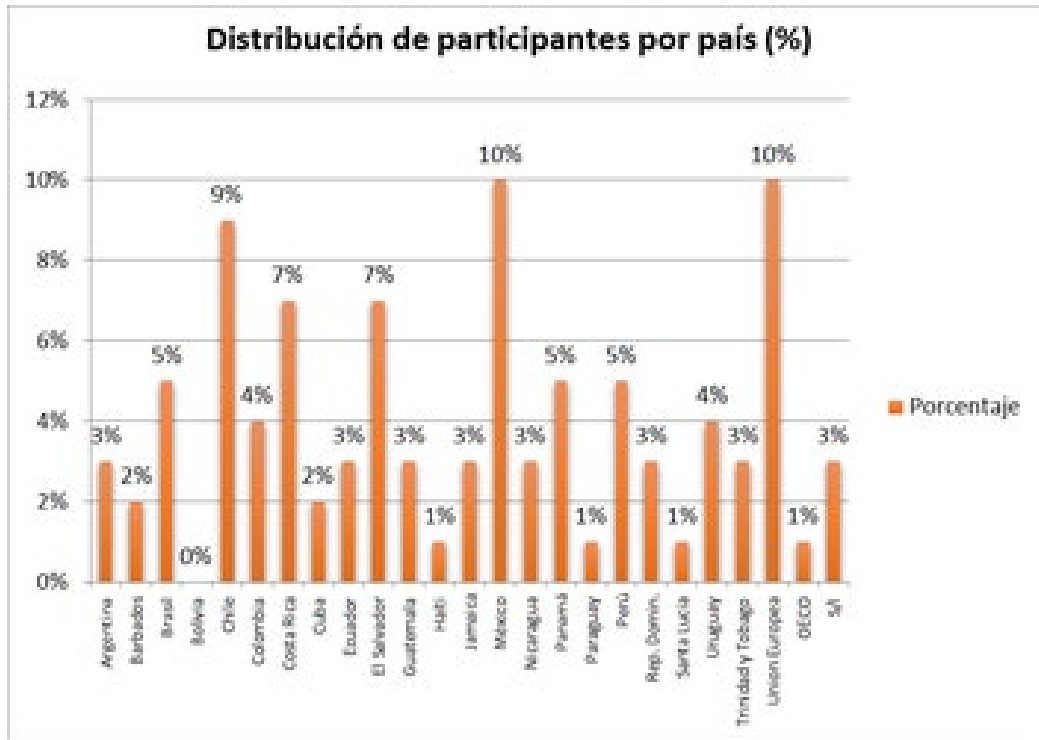
Fig. 2: Participant distribution by country.

The purpose of this document is to consolidate the main ideas raised by the speakers who participated in the three webinar sessions, and to capture the questions and comments shared by the audience.

In addition to this introductory section, the summary includes seven sections: (i) Webinar program, (ii) context in which the BELLA II Project is immersed, (iii) general and specific objectives of BELLA II, (iv) the digital ecosystem RedCLARA is building to support the interactions between the agents involved in BELLA II, (v) a digital platform that will serve as the infrastructure enabling relationships between the various interested agents, (vi) the roadmap for the execution of BELLA II, and (vii) participants' questions and comments.

Program

The webinars were attended by representatives of the organizations and institutions that make up the EU-LAC Digital Alliance. These included:

United Nations Economic Commission for Latin America and the Caribbean (ECLAC): A United Nations commission that promotes economic and social development in the region. ECLAC conducts research, provides policy recommendations, and supports member countries in various areas, including trade, investments, technology, and sustainable development.

German Cooperation Agency (GIZ): A development agency created by the German government, with the mission of providing technical assistance and support to projects and programs in various sectors, including sustainable development, economic development, governance, and capacity building.

e-Governance Academy (eGA): e-Governance Academy engages in high-level political dialogue on digital policy and regulations and helps the public sector and civil society organizations to make digital transformation a reality, through consulting, training, networking, and research and assistance in the implementation of its technical e-government solutions.

International and Ibero-American Foundation for Administration and Public Policies (FIAPP): The entity responsible for high-level political dialogues on data governance.

Copernicus Programme: The European Union's Earth Observation program, which collects and processes data from multiple sources, including satellites and ground sensors, to provide information and services related to the environment and climate.

TECNALIA Research Centre: Located in the Basque Country, Spain, TECNALIA is one of the largest R&D organizations in the European Union. It is known for its ability to contribute to knowledge management and innovation management processes at the service of regional economic development, productivity, and competitiveness.

RedCLARA: Meta-organization that seeks to contribute to the development of science, education, technology, and innovation in the region, through the articulation, connection, and strengthening of National Research and Education Networks (NRENs).

The EU-LAC Digital Alliance is an initiative that seeks to promote cooperation and collaboration between the European Union (EU) and the countries of Latin America and the Caribbean (LAC) to improve connectivity, inclusion, and digital sovereignty in both regions. The Alliance focuses on promoting dialogue, sharing best practices, and implementing joint initiatives to address the challenges and leverage the opportunities for digital transformation. Examples include strengthening cooperation in areas related to the digital age, among them the digital economy, digital infrastructure, digital skills, e-government, cybersecurity, data protection, and innovation.

In their presentations, participants briefly described the four pillars of the EU-LAC Digital Alliance — *connectivity, investment acceleration, political dialogues, and the Copernicus Programme*— which are closely related to the objectives of the BELLA II Project.

The organizations also reported on their respective responsibilities in relation to these pillars. ECLAC and GIZ, for example, are responsible for organizing political dialogues to define the regulatory framework within which cooperation, collaboration, connectivity, and inclusion actions will be circumscribed. GIZ represented "Team Europe," also comprised of Expertise France, which is working in the field of cybersecurity; FIAPP, on the subject of data governance; and eGA, on the subject of digital governance.

The webinar programme is summarized in the box below.

Welcome (5 minutes), **Luis Eliécer Cadenas**, Executive Director of RedCLARA.
BELLA II video (2 minutes - watch).
Remarks by DG-INTPA representative (5 minutes): **Emma Clua**, Team Leader for Mexico, Central America, Caribbean, and Regional Operations 2 (INTPA.B.2).
Remarks by ECLAC representative (5 minutes): **Sebastián Rovira**, Economic Affairs Officer and the Officer in Charge of the Innovation and New Technologies Unit at the Division of Production and Business Development, and **Valeria Jordán,** Economic Affairs Officer.
Remarks by GIZ representative (5 minutes): **Romina Laumann** and **Katharina Arndt**, Advisors for the ECLAC-BMZ/GIZ Cooperation Program.
Remarks by TECNALIA representative (5 minutes): **Sergio Bandinelli**, Business Development Director at TECNALIA Ventures; **Juan Gárate**, ICT-ESI Area, International Director; and **Maika Gorostidi Pérez**, International Relations Director.
Remarks by Copernicus Programme representative (5 minutes): **Florencio Utreras**, General Director of the Copernicus Programme in Chile, and **Laura Castellana**, Coordinator of Academic Projects at RedCLARA.
Remarks by academic network representatives (5 minutes): **Paola Arellano**, Executive Director of REUNA (Chile), and **Carlos Gamboa**, Executive Director of RedCONARE (Costa Rica).
BELLA II Presentation (20 minutes): **Luis Eliécer Cadenas**, Executive Director of RedCLARA.
Q&A (35 minutes).

Closing remarks (5 minutes).

Current Context

The various presentations made during the webinar allow us to conclude that our society is immersed in a world that is undergoing transition, where extraordinary and unprecedented changes are occurring in technology, demographics, the environment, culture, the way we innovate, and how business processes are conducted. These changes are having a profound impact, not only on the way we live and work, but also on the knowledge economy and the digital economy.

At the frontiers of this profound evolutionary process, such changes are ushering in new organizational, economic, and political structures, and the transformation of the communities, organizations, and institutions that share the responsibility for the planet's sustainability. In their efforts to find solutions that will allow them to stay at the forefront, advanced nations are launching innovative policies and implementing ambitious programs to build the capacities needed to manage the profound processes of change associated with sustainable global development. This is the case of programs such as (i) the

Network of European Digital Innovation Hubs, (ii) the European Union Industry 5.0 manifesto, (iii) Japan's 5.0 Society, (iv) Canada's Digital Superclusters, (v) the Digital Silk Road promoted by China, and (vi) the Digital Catapult promoted by England.

Together, such initiatives provide not only a conceptual framework, but also empirical evidence of the major efforts that are being made to combine the **cyber-physical systems revolution** with the practices of human-centred digital transformation, in the search for solutions to the world's daunting socio-economic challenges.

Latin America and the Caribbean are lagging behind in all areas, not only because the available infrastructure is obsolete, but also because of a lack of a strategic vision regarding what countries must do to tackle current and future challenges. The EU-LAC Digital Alliance represents a window of opportunity, and BELLA II, through open strategic dialogues, represents a space for the exploration of innovative solutions that must be deployed to bridge the gap that currently hinders the region's incorporation into the knowledge economy and the digital economy. Representatives of specialized agencies, European delegations in the region of Latin America and the Caribbean, who are responsible for cooperation programs with the countries of our region.

The BELLA II Project

Executed by RedCLARA, the BELLA II Project is part of the *connectivity pillar* of the EU-LAC Digital Alliance. The general and specific objectives of the project are described in the box below.

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

Specific objectives
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. In addition, subject to the feasibility analysis, community priorities, and the availability of economic resources, the project will allow further 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 good

practices, and the creation of the dialogue spaces necessary for the design, formulation, and execution of innovative research and education projects.

4. To commit to European Union initiatives, particularly those of 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 developing this pillar, RedCLARA will follow an innovative strategy geared towards generating meaningful connectivity.

Meaningful connectivity will play a key role in achieving the general and the specific objectives of BELLA II from a dual perspective. The first perspective has to do with the technological notion of connectivity and refers to the infrastructure needed to build a dedicated and secure network that will facilitate access to the data, information, and knowledge required for the regional transformation, in other words, the infrastructure that will connect the countries of Latin America and the Caribbean to **RedCLARA's digital ecosystem**, which is comprised of universities, research centres and large infrastructures, national research and education networks, businesses, and other Latin American and European organizations.

The second perspective has to do with the social dimension of connectivity and refers to an infrastructure that will enable the connections between the digital resources, capacities, and competences that interested agents will contribute to achieve the objectives of the BELLA II Project. In this context, connectivity relates to the interactions between action-oriented social systems, capable of producing networks of social, economic, scientific, and technological values in accordance with their visions and aligned with the missions that commit them to the search for solutions to today's challenges.

RedCLARA's expectation is that an approach from both perspectives will allow us to go beyond mere technical or technological connectivity, strengthening the social dimension that enables the relationships and interactions necessary for interested agents to co-produce value and co-create innovations. For example, open innovation among participants and smart research and education networks capable of driving continuous learning, innovative research solutions, and sustainable socioeconomic growth.

The investment that will be made in BELLA II represents a fraction of the investments needed to bridge the connectivity gap but will seek to complement the significant efforts undertaken by governments, multilateral banks, international organizations, and the private sector.

Despite the limited investment, this interconnection will grant preferential access to an extensive range of resources already available in the digital ecosystem at a marginal cost compared to the significant investments mentioned above. Within the framework of the Digital Alliance, these resources can be leveraged by the different countries to promote the development of capacities, which would otherwise be more difficult.

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The RedCLARA Digital Ecosystem

Digital ecosystems are at the origin of all international experiences regarded as benchmarks thanks to the efficiency and effectiveness of the solutions undertaken to address the challenges of digital transformation. At RedCLARA, we have generated a first version of what would be our definition of a digital ecosystem, which is being built to support the execution of the BELLA II Project. It is described in the box below.

> RedCLARA's digital ecosystem will be an open, inclusive, and neutral socio-technical domain, where the interested parties, acting as agents of open social systems, will actively participate in the design and establishment of a self-organized digital infrastructure environment that will support the operation of an intelligent system of actors (individuals, communities, and organizations) engaged in cooperation processes, knowledge exchange, innovation management, and the development of socioeconomic solutions to address the challenges faced by the countries in the LAC region.

RedCLARA is currently in the process of building the first definition of its digital ecosystem, which reflects our intentionality and commitment to the design and construction of a sociotechnical domain capable of operating as a sustainable space, created as a result of the interactions that will take place during the process of open strategic dialogues between agents interested and engaged in the BELLA II Project. In this context, design refers to a creative, disciplined, and decision-oriented exploration aimed at formulating the expectations, aspirations, and requirements for the ecosystem to be designed, clarifying ideas, and producing images representative of potential solutions that will generate the highest levels of efficiency and effectiveness in the processes of value co-production and innovation co-creation by the agents involved.

In other words, it is a "living definition," the implications of which are presented in the white book we have produced and which is available at bit.ly/BELLAII_WhiteBook. The notion of "living definition" implies that it will evolve as we make progress in the execution of the project and as the voices and ideas of interested agents contribute to its enrichment. The final outcome of this process will be an agreed-upon definition and a final representation of our digital ecosystem.

Thus, the representation of the digital ecosystem will be the result of a participative process, where the interested agents involved in the execution of the BELLA II Project can envision themselves, identify their roles, define the value they would contribute and would like to receive, and develop, negotiate, and execute projects that will catalyse processes for the application of digital transformation technologies to the socioeconomic development of Latin America and the Caribbean.

Figure 3 shows a preliminary or tentative version of RedCLARA's digital ecosystem and was prepared based on primary and secondary research activities.

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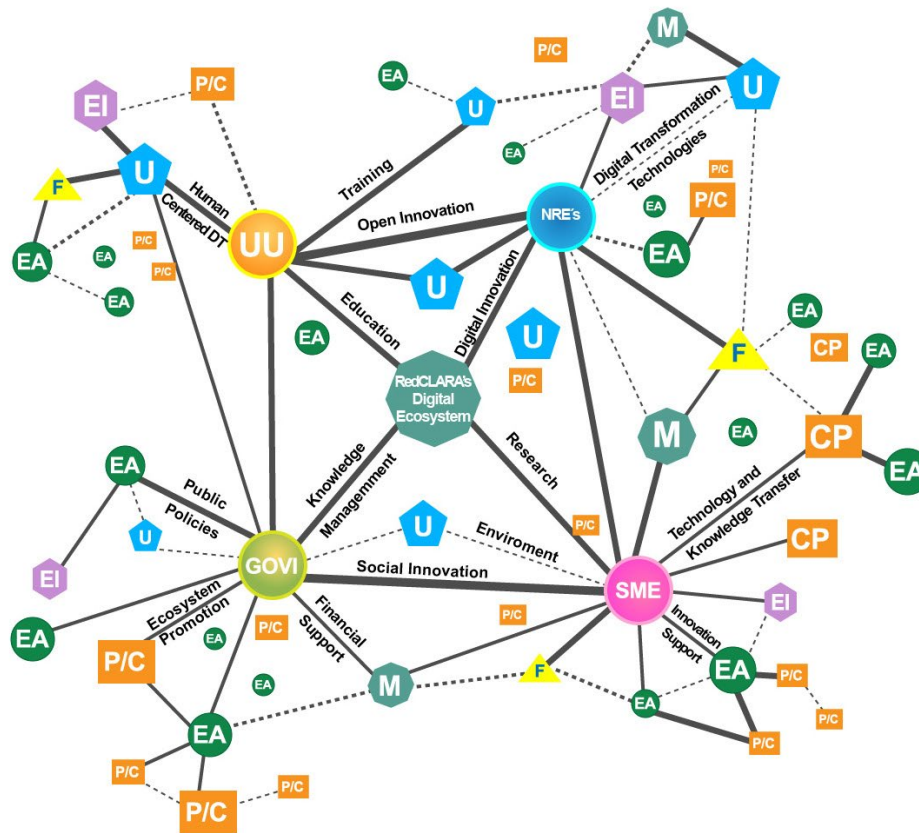
Fig. 3: Preliminary representation of RedCLARA's digital ecosystem.

Note that this image includes not only representatives of the quadruple helix —Government, Industry, Academia, and Civil Society— but also financial institutions, multilateral organizations, and the communities, individuals, and organizations whose resources, skills, and competences will be essential for the success of the BELLA II Project. These representatives include the National Research and Education Networks (NRENs) that created RedCLARA, universities, research centres, investors, telecommunications operators, owners of digital infrastructure, development banks, national public institutions, regional agencies, international organizations, and communities of interest and practice.

Also note the broad diversity of topics that will be part of the ongoing conversations during the process of open strategic dialogues. Examples include innovation management, knowledge management, technology transfer, access to financing sources, training based on the principles of human-centred connectivity, public policies that promote the desired transformations, and the role of National Research and Education Networks in the search for solutions to the challenges of Industry 5.0.

The digital platform that will serve as the infrastructure enabling relationships between the various interested agents

The interactions that must occur within RedCLARA's digital ecosystem to meet the general and the specific objectives of the BELLA II Project will begin with the operation of a digital platform such as the one shown in Figure 4.
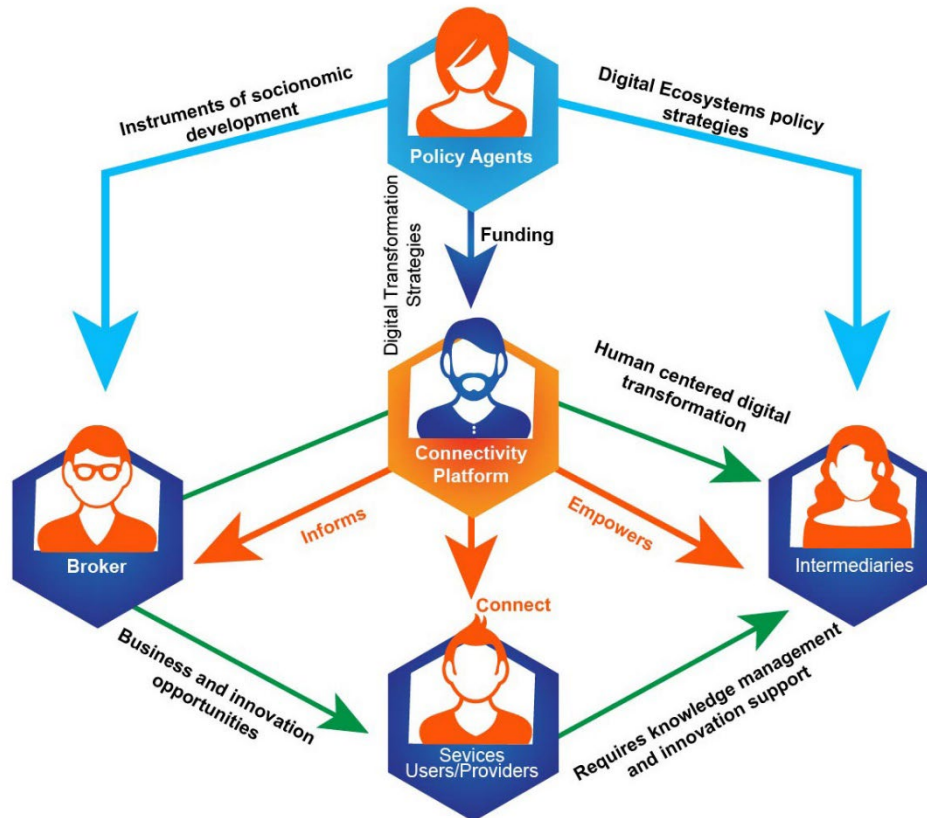
Fig. 4: Image representative of the platform that will support the digital ecosystem being built by RedCLARA.

In Figure 4 we can see a central area and a peripheral area.

The central area represents what we have termed the technological dimension of connectivity. This is the main objective of the BELLA II Project and requires approximately 80% of the allocated funding. This dimension will be implemented prioritizing the investment of BELLA II resources in the deployment of new connectivity and infrastructure, avoiding contracting already existing services whenever possible. To achieve this, BELLA II will seek to identify a portfolio of economically viable and socially relevant investment projects that will contribute to bridge the digital divide and that, through capacity sharing or by leveraging idle capacity (for example, unlit fibre), will allow the expansion of the availability of

connectivity infrastructure for underserved populations and regions and guarantee the necessary connectivity for the countries that the project aims to connect.

Through the creation of investment consortia, RedCLARA will reserve part of the deployed infrastructure to be used exclusively by National Research and Education Networks and their members (universities and research centres). The consortia will also guarantee its maintenance and operation, in compliance with the corresponding service level agreements, and will provide these services to RedCLARA and the NRENs at zero cost during the lifespan of the deployed infrastructure, in compensation for the financing provided through the project.

The second function has to do with cybersecurity, with guaranteeing the protection of data and information, and with the transformation of big data into structured data to support the knowledge management processes that produce solutions to the challenges of global sustainable development.

The peripheral area represents the digital platforms of the various interested agents who use the digital interfaces provided by RedCLARA to connect for the purpose of conducting knowledge management processes, co-production of value, and co-creation of innovations.

Roadmap for the execution of the BELLA II Project

Execution of the BELLA II Project will demand four years and will follow the roadmap shown in Figure 5.
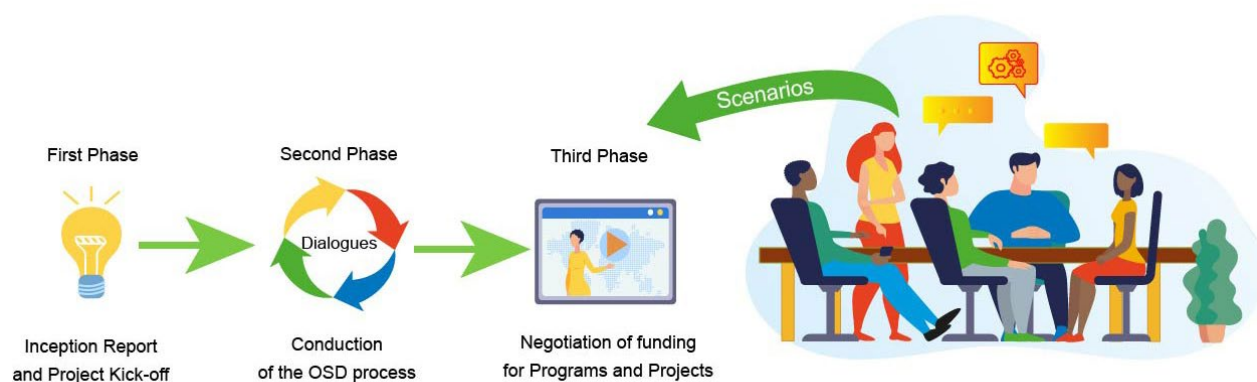
Fig. 5: Roadmap for the execution of the BELLA II Project.

As shown in Figure 5, the project will be executed in three stages, each of which will include the activities described below.

The three stages will have the following scope:

1.   **First Stage:** Identify and invite the interested agents who will participate in the execution of the BELLA II project. This stage will also include the production of the final version of the work methodology, as well as the design and development of the instruments needed to conduct the primary and secondary research for producing the final version of the White Paper about

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the design and construction of RedCLARA's digital ecosystem to support the execution of BELLA II.

2. **Second Stage:** Open strategic dialogues in Latin America, the Caribbean, and Europe. The outcomes of these dialogues will include a clear understanding of the primary challenges related to the digital divide; the specification of solutions to overcome these challenges from an economic, scientific, and technological perspective; and the formulation of value propositions that will guarantee the commitment of the interested agents involved in the process.

3. **Third Stage:** Negotiation between interested agents to devise and deploy the infrastructure, resources, and competences needed for the implementation of the innovative solutions that are identified. The main outcomes of this stage will include the expansion of RedCLARA's connectivity, the development of a service portfolio to meet the needs of the project's beneficiaries, the definition of a governance model and an organizational structure to ensure the successful execution of the remaining three years of the BELLA II project, as well as strategies to secure the additional funding required.

Summary of participants' concerns, comments, and questions
Questions

The questions participants asked during the Webinar can be summarized as follows:

1. How can we participate in the BELLA II Project?
2. What funding sources are available for projects within the framework of BELLA II?
3. Is it possible to support the information gathering process to propose management strategies and technology with a person-centred humanistic approach?
4. Can the BELLA II Project contribute to the search for solutions to the issue of regional border integration?
5. How can Governments participate in the initiatives related to the Digital Accelerator?

A summary of the speakers' answers to these questions is included below.

First question: According to the speakers, there are three ways to participate in the execution of the BELLA II Project:

*   By engaging in the open strategic dialogues conducted for the purpose of generating ideas, data, information, and knowledge that will allow preparing a portfolio of programs and projects that can be carried out in the next four years.
*   By participating in the execution of the programs and projects selected when conducting the open strategic dialogues.
*   By contributing to fund the programs and projects, both by the public and the private entities that share the responsibility of promoting the application of digital transformation technologies to the search for solutions to the challenges faced by contemporary society.

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RedCLARA will facilitate this participation process within the framework of the dialogues.

Second question: The funding sources available for projects have not been clearly defined, as they will depend on the commitments acquired during the strategic dialogues. In principle, however, it is expected that these opportunities might include:

- Funds contributed by the EU-LAC Digital Alliance for initiatives that share the objectives of the four pillars described above.
- Public funds created by national and regional governments to invigorate the digital ecosystems for social and digital innovation, as well as digital business ecosystems.
- Private funds contributed by regional business leaders who recognize the importance of incorporating their companies into the Industry 5.0 era as an essential strategy for their medium and long-term sustainability and growth.

Third question: Person-centred humanism is a key aspect within the strategies that all countries are implementing as they adapt to the digital age. The fundamental precept behind the Japanese proposal known as Society 5.0 and the European Union's Industry 5.0 proposal is based on the fact that technologies must be put at the service of people, their needs, dreams, and expectations, not vice versa. According to the speakers, this motivation must be supported by:

- Exploring, experimenting with, and developing inclusive governance models in which the voice of each interested agent can be heard, and spaces are enabled so they can become involved —each with their various resources, capacities, and competences— in the processes of co-production of value and co-creation of the necessary social and technological innovations.
- Training individuals so that they can acquire the skills, abilities, and competences that will allow them not only to adapt, but also to innovate in their ways of living and working.
- Exploring infrastructures such as the Basic Digital Basket proposed by ECLAC to contribute to the development of the minimum viable systems to support the preparation of citizens so that they can adapt to the digital age.
- RedCLARA's design and implementation of test beds for systematically experimenting with spaces for the execution of projects from the perspective of human-centred digital transformation.
- Led by ECLAC and GIZ, the political dialogue is taking place at a time when there OECD countries are talking about the need to design and implement third generation public policies, i.e., policies that do not focus on the promotion of science, technology, and economic development, but rather on the development of a regulatory framework that focuses on social concerns as the main strategic axis for the construction of the desired society.
- The need for universities to promote initiatives that will strengthen their role as proactive, adaptable, and forward-looking organizations in the face of the challenges of digital transformation. This requires investing in digital infrastructures that support R+D+i, both in terms of the development of new professionals and the inclusive industrial and technological development processes.

Person-centred humanism is one of the strategic axes of the BELLA II Project and the main key success factor in its execution.

Fourth question: Connectivity is essential for border integration. At the end of the BELLA II project, this connectivity will have been consolidated through alliances between the connectivity providers involved in the provision of the digital infrastructure. Strategic dialogues are the space for exploring the possibilities offered by BELLA II. In this sense, if national, regional, and meta-national governments consider this to be a strategic issue, these actors are invited to participate in the execution of the project.

Fifth question: The Digital Accelerator initiative has been initially conceived as a purely commercial space that seeks to promote open innovation, the co-production of value based on leveraging business opportunities between different companies, and access to new markets for Latin American, Caribbean, and European companies. It is not an incubation process, but rather about enhancing the growth possibilities of sustainable companies with consolidated markets.

Because of the above, the existence of a direct relationship for government actions on the process of accelerating digital businesses has not been considered. However, there is an indirect relationship that could significantly contribute to the impact of the accelerator within the framework of the Digital Alliance. To that effect, research on public regulatory policies is specifically proposed, including the development of instruments that facilitate access to funding sources and the soft aspects that are key to the promotion of synergies among the interested actors involved.

Concern: The concern expressed by Dr. Carlos Barboza of the Uruguayan Ministry of Health can be summarized as follows.

In his opinion, the BELLA II Project appears to be an excellent initiative with the potential to reduce the digital divide in the region. He points out that it is necessary to think in terms of ecology and ecosystems, as this allows characterizing the various interested agents involved, appreciating the various speeds they can access, and designing strategies that optimize the use of digital technologies that are open but not free. This is at the heart of his concern, which he presents as follows:
"…I don't see any connection points with the end users of the ecosystem, I believe there should be pathways that allow the solutions to reach and be utilized by these users, and I suggest the establishment of a universal basic income of information." Otherwise, Dr. Barboza concluded, we will increase the digital divide.

Each of the speakers thanked Dr. Barboza for his profound reflection, both for the opportunity it gave them to go into details of the project that could not be addressed in a five-minute presentation, and for contributing ideas that will help achieve the general and specific objectives of the BELLA II Project.

The speakers then addressed general and specific aspects which demonstrated that the concern expressed by Dr. Barboza was being addressed in the methodology and in the actions and activities that will be deployed during the four years of the project's execution.

The general aspects and then the specific aspects will be addressed below.

General aspects

In natural sciences, ecology is the discipline that deals with the relations of organisms to one another and to their physical environment, and the term ecosystem refers to a specific ecological community and its

surrounding physical environment. Ecology provides the framework and concepts needed to study ecosystems and to understand the dynamics and functioning of the natural world.

In social sciences, the ecology of social systems focuses on the relations and interactions between individuals, groups, organizations, and institutions within a social context. In this sense, the ecology of social systems considers factors such as social networks, cultural norms, economic systems, political structures, and environmental influences to analyse the dynamics and resilience of social systems.

From the point of view of the BELLA II Project, the ecological framework will allow us to examine how social systems adapt, evolve, and respond to changes in their environment, and how they interact with other social and ecological systems. In this context, our first step was to recognize that social systems are complex and comprised of interdependent elements, and that their operation and development is linked to value creation and co-production processes, and the co-creation of innovations to modify and adapt to their environment.

Likewise, within the framework of the BELLA II Project, digital ecosystem refers to a specific social community of organizations, institutions, communities, and individuals interacting within a cyber environment, shaping a dynamic and interconnected system that enables and strengthens the relationships necessary to produce organizational and social changes based on digital transformation technologies.

Open strategic dialogues are the methodology selected to invigorate the biotic and abiotic relationships. This methodology creates a space where ideas, needs, expectations, knowledge, and opportunities can serve as a springboard for the generation of a shared vision and for the construction of a transformation process in which all users can participate.

Digital connectivity is the architecture that supports this transformation process, and meaningful digital connectivity guarantees the improvement of each of the users that come together in the ecosystem.

Specific aspects

Copernicus Programme: A powerful infrastructure for processing big data already exists, and the Copernicus Programme is building a private cloud infrastructure. Anyone utilizing a standard school computer will be able to access this infrastructure. The object is that IT infrastructure will not be an obstacle. Not only the infrastructure to access the data but also the software to process it will be available free of charge in the immediate future. All these initiatives are indicators that show that the project is advancing in the right direction.

GIZ: This concern is shared by all members of the Digital Alliance. In the case of political dialogues regarding the definition and implementation of a regulatory framework, there is a clear intention to guide the instruments and mechanisms so that the resulting cooperation and collaboration processes ensure that connectivity is available and accessible to all users. For example, providing connectivity solely to large cities while excluding millions of users on the periphery is not acceptable.

ECLAC: ECLAC stresses the importance of training as a process that not only contributes to the acquisition of digital skills, but also of abilities that are critical for using this type of technology, otherwise we will not

reach our objectives. In this sense, it is important to design and implement mechanisms and incentives that contribute to the appropriation of such technologies. From this perspective, it is necessary to go beyond mere connectivity, promoting synergies not only among the four pillars but also with the ongoing efforts of the regional governments in addressing this problem. Political dialogue provides this space. It provides a regulatory framework as well as the hard and soft technology instruments that will not only allow avoiding the expansion of the digital divide, but the organizational agility to respond to the challenges of a rapidly evolving landscape of digital transformation technologies.

RedCLARA: This is obviously a highly complex problem with multiple factors at play. Reducing this complexity requires a thorough process of differentiation in which the various social systems take on different roles and responsibilities, and where the transformation in the desired direction occurs as a consequence of the synergies built on the processes for the co-production of value and the co-creation of innovations. In this sense, Dr. Barboza's concern is very relevant: digital life in most of the big cities of our region differs significantly from digital life in smaller towns and rural areas. We believe that dialogues offer the appropriate space to build the processes that will make it possible to share the resources, capacities, and competences required to generate meaningful connectivity, considering the differentiation described above. We invite you to participate in the various stages planned for the execution of the BELLA II Project.

DG-INTPA: The DG-INTPA representative stressed the need for substantial collective reflection within EU-LAC, particularly regarding major issues such as climate change, the long-term sustainability of actions, how to build a digital agenda that will lead to positive transformations, and a third aspect that has not been discussed in technical conversations but is nevertheless important: how these transitions can also contribute to the ongoing social transition in terms of gender equality and the correction of inequalities. It is essential to triangulate between these aspects in a way that truly allows us to move towards the type of transition we are looking for. Finding synergies and establishing connection points is important to demonstrate the feasibility of the proposed solutions. This webinar is an example of how to conduct interactions between social systems that serve not only as demonstrations, but also as models for future interactions. It seems to us that 'meaningful connectivity' as proposed by RedCLARA is a well-chosen term and we advocate increasingly impactful interactions that will foster synergies among the social and the technological dimensions at the service of a more inclusive society.

Transcription of participants' concerns, comments, and questions

The questions and comments made by the participants and panellists in each webinar focused on the following topics:

1.   Is it possible to support the gathering of information to propose management strategies and technology with a person-centred humanistic approach?

- RedCLARA: It is not only possible, but also absolutely necessary. Without considering this component and seeking a way to contribute to this type of study and approach, it is impossible to build a solution that integrates all the actors in the region. It is therefore an essential need.
- ECLAC: From the public policy point of view and the perspective of the instruments that states and governments must generate to try to reduce existing divides —both in terms of access, as well as in the use and appropriation of these technologies— it is absolutely key and essential to understand the needs of individuals and their situation. As an example, for the last couple of years, ECLAC has been promoting the possibility of establishing basic digital baskets comprising not only connectivity and devices, but also the skills and abilities that must be developed in order to use these technologies. Likewise, when thinking about or talking about the type of governance or the type of regulations required to advance in the digital transformation, the focus must be on people. In this sense, the European Union's experience can be absolutely essential to define the regulatory and normative areas we wish to develop to promote the digital transformation we want.

2.   BELLA II appears to be an excellent project. But there are several speeds, one for companies, another one for users. Data is open, but not free. So, for this entire ecosystem, we should talk about ecology of the systems, as companies advance at a speed that is not the speed of users. If the elderly continue to receive mobile phones with small keyboards or systems in other languages, inclusion or utilization will not be achieved. We understand what you are saying about humanism, but much like McDonald's when they took school children to visit their kitchen so that they would later consume their hamburgers, all this infrastructure and speed must be brought to individuals, not only to academia. The concern is that we see no connection points with the end-users. And why do we mention ecology? Because there will be many startups, many applications, but the ecology of all this is that only those that people use or worry about will work. There are thousands of information systems, there are millions of terabytes of data already available, but they are not free, they are open. The excellent BELLA II Project must have pathways that allow the solutions to reach and be used by the communities. Otherwise, the divide will continue to widen. If we do not establish a universal basic income of information and use, we will widen the divide, and this is part of what worries me here, in Latin America.

- Copernicus Program: Providing infrastructure is essential, although I don't know what kind of computers will be needed to use this data. Relatively powerful computers will be required that are not accessible to everyone. However, with the private cloud infrastructure that will be installed, these computers may indeed be available. In other words, by using a regular school computer, it will be possible to access adequate computational infrastructure to utilize the data. Thus, our proposal also points in that direction, which is to strengthen this infrastructure so that basic computing infrastructure will not be an obstacle. As has also been mentioned, QGIS, SNAP have cost a lot of money, but they are available for free, which is a

step in the proposed direction. Today, with these infrastructures and levels of access, not only the data, but also the software and the infrastructure to process the data will be available, even for those schools that wish to use it. In line with this, training should also be considered, as it is another key issue. Hopefully this can reach schools, because then people, for example, can have the possibility of monitoring greenhouse gases or land use. It is essential for all of us to participate in what is going on in our continent. With some of these initiatives, the project is pointing in the right direction.

- GIZ: It is good to have critical thinkers who question things, we need them. As we said, we are currently in the early stages of development across all pillars, so it is good to know what has been done and what has not. In addition, I would like to point out that everything that has been mentioned is very relevant for political dialogues. For example, channelling and raising awareness, building capacities, and shaping public policy frameworks that ensure speedy connectivity and access to digital technologies for all. A super-connected mega-city is worthless if other communities are completely unconnected and have no access to the potential benefits. For this reason, in my presentation I mentioned the digital gender divide, which is intersectional, i.e., it affects some groups more than others simply because of their origin and current location. This is a very important topic for us, and I quite like what has been said, the universal basic income of information, of data. This platform provides good momentum to see what can emerge from collaborations that also point in this direction.

- ECLAC: A key point that must be understood and that is precisely in line with what has been proposed is how to ensure and how to try to generate capacity, going beyond the issue of connectivity or infrastructure and also focusing on the development of both the digital and critical thinking abilities required for using this type of technology, otherwise we will not reach our objectives. Infrastructure is undoubtedly one of the foundations on which everything must be supported. This, however, does not mean that other aspects should be relegated, but rather that the need to develop a number of mechanisms and incentives for the use and appropriation of these technologies must also be identified and understood. In this we see that BELLA and the other pillars complement each other as well as what the countries in the region are doing. What Peru has done in recent years with "Internet para todo el Perú" (Internet for All of Peru) shows that there is a lot of potential and that this has to be promoted much more strongly in the region, where it is necessary to design such policies, promote technology-based startups, generate value-added companies in this area or niche, but at the same time, we have to respond to a society in which approximately 17 million people still do not have access to electricity. So, what is it we are talking about? Yet this does not mean that we are not making progress in this area. We should view it as a possibility. While it may not be "the regional solution," we can try to develop a number of mechanisms, instruments, and policies that will mitigate the negative impact of these technologies —which might otherwise lead to widening the divides and polarization— while at the same time ensuring that they are people-centred and forward-thinking. And this is very difficult because we are in a process, in this digital transformation, we say we have a plan, and we are aiming at a rapidly moving target. In this sense, many elements need to be tackled. Infrastructure is undoubtedly merely one of these elements, and there are many others. I think this is what has been stated.

- RedCLARA: Using the metaphor above, I don't know if I would use 'basic information income' or rather something like 'basic knowledge or skills income'. This might make it a bit more complex to define but perhaps more relevant, because information alone may not be enough. Indeed, this is an extremely complex problem with multiple factors at play and, like all problems of a similar nature, the only way to address this complexity is to break it down into pieces and structure something that ends up moving in a certain direction. Dialogues are part of the methodology that the project is following, and we would like them to permeate much more significantly in terms of defining, developing, and using the capacities as we build them, as this is essential for achieving this inclusion. Without a doubt, we will encounter such cases and surely some of ours will suffer from the same problem. For example, we might bring connectivity to a certain location and manage to connect some schools, yet it might turn out that there is no electricity or that the teacher lacks the necessary skills or has no interest. There are so many factors that we must try to limit them. It is important that we begin to move, as far as possible, in a reasonable direction and with an eye on the fact that things should be used and leveraged for what each individual needs. Capillarity, this digital divide that I mentioned, is also important within each country, particularly in Latin America. Many people do not have access. Life in smaller towns and rural areas is one thing, life in most big cities is quite another, with the exception of Uruguay, which has the advantage of having a much higher level of equality than other countries. In most cases it is a major challenge, which is why we are inviting everyone to contribute. And we obviously love the different vision of what things might look like, as it is extremely enriching.

3.   Does the BELLA II Project plan to include the Brazilian Amazon region in its integration initiative, to promote sustainable development and connectivity in this important area? This region borders with important countries such as Peru, Bolivia, and Colombia.

- RedCLARA: Resources are limited, and everything depends on the priorities we manage to identify in each of the countries that are the object of the project. There is a very important project, "Norte Conectado" (Connected North) promoted and developed by the Brazilian government, RNP and other actors to provide connectivity to the area through underwater cables in the Amazon River, which leads to a border point with Colombia, Peru, and Bolivia. This eventually makes it possible to integrate communities that are also part of the Amazon region, but in those countries, to a connectivity that is being achieved through innovation in infrastructure. This is very interesting, because it is a project where the Brazilian government contributes, the National Network proposes an innovative model, and an alliance with telecommunications providers is contracted and developed to deploy and maintain the infrastructure. We have been working on identifying opportunities, needs, and developments. We have identified many that are important, for example, one of the South American countries where many people are not connected is Bolivia, another is Paraguay. We can provide Bolivia with connectivity through Paraguay and to Paraguay through Brazil, but there are also other alternatives for Bolivia via Chile. Each case is different, we are going to try to prioritize projects in a way that is consistent with the objectives of BELLA II but, at the same time, considering each action's level of impact and importance in terms of connectivity for the

community. We aspire to obtain much more than 15 million euros. If we manage to obtain more, we will be able to do much more.

- INTPA.B.2: Important reflections are taking place in both Latin America and the Caribbean as well as in the European Union in relation to major issues, collective challenges such as climate change and the sustainability of many actions, a digital agenda that will truly lead to positive transformations, and a third aspect that is often absent in technical conversations but is nevertheless important: how these transitions can also contribute to the social transition, what is going on in terms of gender equality, the correction of inequalities, and also how to triangulate all these aspects in a way that really allows us to move towards the kind of transitions we are looking for. Above all, it is important to look for synergies, connection points. What I think is being done in this webinar, which is precisely to look for actions that serve to demonstrate that it is possible, that there are convergences, and that, with certain lines of work, elements can be found both in the digital sphere and in terms of sustainable development or social policies, such as e-Governance or connectivity. I like talking about meaningful connectivity, showing that vulnerable groups can be included and that we can work to reduce the gender divide and on other important issues. I would just like to insist on interconnectivity, particularly for the initiatives related to the major transformations —green, digital, and social— because some transformations in this field are strengthening rights and, as I mentioned earlier, the fight against inequalities.

4.   Is the objective basically for the Internet services of RedCLARA to be used at the government level and by end users such as low-income households and those that are difficult to access? Would the services for this social group be publicly funded?

- RedCLARA: No, that is not the objective. The objective is to connect those needs with an ecosystem of stakeholders that are already connected to each other through the BELLA infrastructure. In other words, this might be seen as an Intranet. I am using a technical term, but what I mean is a private connection between universities, research centres, resources, and research infrastructures, both in Europe and in Latin America. The connection of this ecosystem with actors who are connecting through the Internet can produce a significant transformation. This does not solve a connectivity issue similar to the commercial Internet, which has its market, its providers, its structure, and the programs of Latin American governments that seek to expand those levels of connectivity. What we want is to build an ecosystem that, because it connects existing knowledge in Europe and Latin America, supports the application of this knowledge to solve problems in the region and to enrich the type of resources and capacities to which the people who are connected to the commercial Internet can access.

5.   What should we as a country (El Salvador) have or do to collaborate with the various programs that are being shown?

- INTPA.B.2: First of all, it should be noted that in addition to the regional programs and actions discussed during the webinar, efforts are being made in El Salvador to monitor these issues, through the European Union Delegation. In this specific case, I suggest contacting the Delegation to request information on the organizations that might be working in this area. It

is important for governments to be involved in the policy dialogues and in the technical work that one wishes to carry out through the components that have been presented and explained by the representatives of GIZ and ECLAC. Also, to present proposals to explore different paths in terms of technology and connectivity. Regarding connectivity, I will defer to RedCLARA for a response because they have specific proposals for El Salvador. The same applies to other programs, such as the Digital Accelerator. Motivating companies potentially interested in the type of partnerships that have been explained might be a good starting point to begin working on innovation, addressing specific and tangible development issues with potential implications in other areas such as terrestrial observation, the use of digital services and, why not, other proposals that may be of interest.

- ECLAC: The invitation is open for all the countries of the region to participate in the eLAC Digital Agenda, a space for political and technical dialogue involving government representatives and members of the technical community. Within the framework of eLAC, countries can express their concerns regarding the definition of objectives or priorities in digital development issues, as well as identify, share, and exchange good practices with others. We are going to nurture this dialogue with experts from Europe who can advise us and share their experiences of good practices from their own perspective. From the eLAC platform, countries can participate by requesting technical assistance from ECLAC related to the implementation or definition of their digital agenda or the assessment of standards or regulations they identify as necessary to advance in their digitalization. And we also have a school for policymakers where each country's policy experts can participate in various courses on specific topics that have to do with connectivity, cybersecurity, data protection, etc. So, I invite you to follow the eLAC website and the eLAC Twitter account, where we always announce the different initiatives and events so that you can participate.

- GIZ: Team Europe is very interested and in recent weeks we have been exploring additional activities with a greater focus on the Central American region. In addition, the European Union Delegation is always a good starting point. We also had some initial conversations with SICA, for example, exploring potential synergies with SICA's Regional Digital Strategy (ERDI). So, we find it very interesting and are very open to discuss with you the four thematic areas and explore together the possibilities for cooperation.

- Digital Accelerator: In the specific case of El Salvador, as previously mentioned, you have the European Union Delegation. We have already taken the first steps, as we have been working in El Salvador for a few years already and know some of the actors involved, recently with the Salvadoran Association of Industrialists so that they will give us their opinion on the country's subsectors where it might be interesting to promote joint ventures, including textiles, bonded assembly plants, and the agriculture sector. In the case of the Secretariat for Innovation, we would be interested in reconnecting as they have the guidelines for where the country is heading in this topic, as well as information on startups and initiatives in this area.

- RedCONARE: I would like to stress that, in order for a country to begin to be aware of everything that having access to services and this type of project involves, the political willingness is definitely important. Decision makers must feel that these projects do indeed work for society, for academia, for industry. Thus, academia must clearly understand the benefits that a project like BELLA II and having a research and education network will offer.

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Because sometimes it is not clear what these benefits are and, if these benefits were known, we could then map the needs of a society —for example, those of the populations most in need— to the work that is being done by academics, in universities, in research, in education and the resources, advanced services that a project such as BELLA II generates.

- RedCLARA-Copernicus: Specifically, for the Copernicus Academy in Central America they have actually done a great job. If El Salvador wishes to join the initiative, they can start with CSUCA (the Central American Higher University Council), with whom we have been working from RedCLARA to articulate the Regional Copernicus Academy. As for access to the data, this is possible directly from the Copernicus website. As we already mentioned, this data is available free of charge, and we can also support you with whatever you need.

- RedCLARA: The question allows us to comment on the progress we have been making with El Salvador. There is something very interesting in El Salvador, which is that it has had a well-defined, pretty clear digital agenda for some time. This digital agenda was designed and is led by the Secretariat for Innovation, which reports directly to the Presidency of the Republic. In this project, in this digital agenda, three main pillars are very clear: the management of identity; the management of the National Innovation System, i.e., the integration of universities with research centres and communities, civil society, and the government to produce and promote the development of innovations and the expansion of knowledge; and a third area, which I believe relates to the digital aspect of government. However, this clarity, the existence of certain projects, and the work that the European Union Delegation in that country has also been doing are the reasons why we have been able to advance. We have managed to assemble a proposal that complements what is already being done in El Salvador. At this moment, a loan from the Inter-American Development Bank (IDB) of around US$85 million is being executed for the purpose of increasing connectivity in the country and, particularly, in Salvadoran schools, with a specific goal and a significant number of schools to be connected to each other and to the Internet. This project can greatly benefit from connectivity with the BELLA digital ecosystem. For example, in areas that can leverage content, skills, and knowledge of this digital ecosystem and put them at the service of connected schools in El Salvador. This is a very direct example of a specific type of application being generated through BELLA's contributions. This same IDB project is supported by the European Union Delegation, which has contributed US$15 million in funds. Together with the Secretariat of Innovation itself, we are identifying the areas of development they are interested in advancing and we have discussed topics such as managing and monitoring agricultural production with the help of IoT technologies and monitoring the Earth with the help of Copernicus. So, combining the Salvadoran government's need with the capabilities of the Copernicus and RedCLARA satellites, bringing IoT specialists into the digital ecosystem, fostering their collaboration to develop solutions that combine Earth monitoring with IoT technologies to facilitate El Salvador's goal of having better control of its agricultural productivity and its territory. That's an area in which we have made much progress, we have the capacity to provide significant connectivity relatively quickly and strengthen it even more in the future. But what Carlos Gamboa said is important: the political commitment and the call to all sectors of society to join and participate in this collaborative work. When I said that the digital ecosystem that we are proposing is open and inclusive, I meant it literally. In other

words, anyone with the will and desire to contribute and who would like to build digital solutions together with us and develop this digital ecosystem to strengthen the country is more than welcome to do so. The framework for action is the work that we will be carrying out through the dialogues and the gateway can be any of the actors that are present here, i.e., the European Union Delegation in the country or RedCLARA. Whatever the gateway, you will have access to a consistent, synergistic, and collaborative effort that seeks to develop the best for each situation, in each country.

6.   I understand that the three stages of each project (engage, match & build) would be repeated during the project's five-year duration. What are the mechanics used to determine the type of participation organizations or institutions such as the Universidad Veracruzana would have? Is there a more detailed project plan, even if it is for the short term?

- Digital Accelerator: Indeed, these three stages will be repeated over the five years. Regarding the participation of universities as stakeholders, while they have not been included in the slides, the idea is to consider those that have a relationship with the innovation ecosystem of their respective regions, as some universities manage incubator or accelerator programs and have access to corporations and startups. This would be the potential participation of a university with these characteristics. They would also be able to participate as a catalyst for synergies between companies that are outside the country, in this case, Mexico and Mexican companies, and participate as part of the project. As for the second question, i.e., whether there is a more detailed project plan, the answer is that a detailed plan does exist for the short term, from now and until the end of the year, to launch the first three phases so that at the end of 2023 we will already have the first series of events.

- RedCLARA: This question allows me to further explain the value of the digital ecosystem. A digital ecosystem is a space where the different actors add and obtain value. Basically, and very briefly, that's the concept. It is an articulation space where each actor benefits but also contributes, and in this sense, Universidad Veracruzana can contribute its capacities, knowledge, infrastructure, teachers, specialists, and researchers, to enrich the knowledge available within the BELLA digital ecosystem and, at the same time, use any of the capabilities of this ecosystem, which also comprises universities and research centres in Latin America and Europe and data from both regions, to develop their own internal initiatives. The way to do this is by participating, in other words, by joining these dialogue processes, by contributing, by engaging the university in the various initiatives and the work we are carrying out. To the extent that each of the universities in the region articulates and produces while also receiving value through this platform or from this digital ecosystem, we will generate something very valuable for the entire region, for all of us.

7.   Do you have an established procedure for startups to access subsidized funds from the European Union?

- Digital Accelerator: That's not exactly how it works. The phases I explained include a phase to identify the challenges of corporations, to put these corporations in contact with those startups and, if the process advances, there is a final phase of what we call joint ventures. This includes an appeals process through which you will be able to access a series of services that

the programme will provide. But it is not direct financing. There is a maximum limit to the resources available within the programme and those joint ventures that need it will be able to access these resources up to a certain limit.

8.   Do you have any projects for Guatemala, which I believe is the Central American country that is yet to be reached?

- RedCLARA: Central America is included in the goals of the project. Part of the work we must do is precisely to bring these dialogues to Guatemala, so that they can help us create an interesting proposal for the country and all its stakeholders. That said, you have our commitment: this year we will hold at least one face-to-face dialogue in Guatemala and, surely, a very important collective construction process supported by our collaboration platform in order to articulate these actors in the process and the project. So, of course, Guatemala is very important in this phase of the project.

9.   A course was mentioned to learn how to correctly recover the data offered by the various Copernicus platforms. Is this a fact or is it something that is under consideration?

- RedCLARA-Copernicus: As I mentioned in my presentation, we have made progress in building various projects and training programs to begin to impact the different countries of the region. At this moment we have one on the agenda that will be for the people who participated in the BELLA Ideathon: the Copernicus Innovation Challenge, as part of the awards. But we are obviously going to implement more training programs and training, as this is the number one objective of the Copernicus Academy: capacity-building and providing visibility to the work of our researchers and professionals. So, soon we will have news for you about what we may be doing at the Central American level. Now the invitation is to participate in the Hackathon, where you will also have access to additional training.

10.   Will this database supported by Copernicus be agreed with actors and experts at the regional and the national levels? What are the criteria for the selection of the baseline indicators for the database?

- RedCONARE: This year, a Copernicus Hub will be created in Panama to allow access to Copernicus data worldwide, but closer to the region. So, the databases have already been created, they are Earth Observation satellite images, historical data obtained by Copernicus. What can be done, for example, to work on this free database is go to the Copernicus data page. The academy is another issue, as the intention is to have these guidelines for the region on how to provide training and use this data, as mentioned above.

11.   Within the framework of strengthening digital regulatory policies, have any actions been considered to enable governments to monitor the progress of their digital agendas, either by themselves or in collaboration with the private sector?

- ECLAC: Indicators have been defined within the framework of the eLAC Digital Agenda to identify the progress that countries make in different areas of digitization, connectivity, adoption of the use of solutions. These indicators show the degree of progress of the policies defined by each country and how these regulations are helping achieve these indicators. At

ECLAC, we are developing the Digital Development Observatory, which we hope to launch at the end of the year. The purpose of the Observatory is precisely to facilitate access to quantitative and qualitative indicators, to monitor the digital agendas of the countries, and the progress they are making in the different areas. On the other hand, we observe a weakness in the region: when defining their digital agendas, countries are often not including monitoring indicators that would allow assessing progress at the national level. We offer technical assistance to improve these digital agendas, including this measurement and quantification approach.

12.   How can the government join the EU-LAC Digital Accelerator to develop the initiative in the country?

- INTPA.B.2: Regarding the Digital Accelerator, it should be noted that it is an instrument designed to work with companies and to strengthen relations between them and joint ventures that include both regions. At the government and private sector level, a conversation is also taking place around the Global Gateway strategy which, as I initially mentioned, is precisely attempting to identify how private sector investments can contribute to the objectives of broader public policies and mobilize investments in digital issues that can actually have commercial value or value in the field of investments and innovation, but which also add social value in terms of sustainable development. In this sense, it is important to be part of the conversations, to promote the private sector's interest in working in the digital sphere from this perspective, which is what the Digital Alliance is promoting: a digital transformation that is based on values, on people-centred issues.

- RedCLARA: Yes. I think it is important to mention the link either with us at RedCLARA to try to work on connectivity, but also with the European Union Delegation in each country, as the Delegation has the full vision of the four pillars and can help to integrate government participation in the context of the Digital Alliance. So, we are available and will gladly start the desirable and necessary conversations.

13.   What are the ways to participate more actively in these projects?

- RedCLARA: Mexico requires greater connectivity to South America and to this European-Latin American digital ecosystem. Connectivity in Mexico is mainly to the North. Working together with the Mexican National Research and Education Network and the universities would be essential to achieve this objective. There are currently several projects that touch on the possibility of increasing connectivity in Mexico, and we are identifying and working with some of these providers. Particularly, the Yucatan Peninsula is key to reaching Mérida, for example, and from there the rest of South America using terrestrial connectivity. Connectivity between Mexico and Europe would be an interesting possibility. But we must analyse the situation, work with the stakeholders to build this participation.
I repeat the invitation for all of us to contribute to this effort. We will not achieve anything if we work alone. It is important that everyone takes ownership of what we are doing, because it has the potential to be a very important contribution to our region. For us it is a huge opportunity. What's important is that they are willing to put part of their energy, their efforts, their intelligence, and their capacities to help us think about this better, to develop it better

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so that it will have the impact that we are hoping to achieve. Every contribution is valuable.

Appendixes

BELLA II Webinar: "Allies for the Construction of a Latin American and Caribbean Digital Ecosystem"					
South America, 22 May 2023					
N°	Name	Surname	Organization	Position	Country/ Region
1	Ajda Gracia	Golob	DG International Partnerships	Programme officer at European Commission	European Union
2	Albert	Astudillo	REUNA		Chile
3	Alejandro	Liñayo	Centro de investigación en gestión integral de riesgos. CIGIR	Director	Spain
4	Alexandre	Silvério	Rolim Net	CEO / Diretor Executivo	Brazil
5	Alvise	Bolsi	Universidad de Chile	CTO	Chile
6	Andrés	Vinet	ESO	IT Group Head	Chile
7	Ariel José	Romero Fernández	Uniandes	Director de Investigación	Ecuador
8	Barbara	Barone	EC DG INTPA	Policy Officer	Belgium
9	Carlos	Oliveira	European Commission - DG CONNECT	Desk Officer	Belgium
10	Carlos	Barboza	Ministerio de Salud Pública	Especialista en Geomática División Ambiental y ocupacional y Cambio Climático y Salud	Uruguay
11	Carolina	Muñoz	REUNA	Subgerente de Comunicaciones y Posicionamiento	Chile
12	Claudia	Córdova	Concytec	Directora de Evaluación y Gestión del Conocimiento	Send survey
13	Claudia	Abreu	RNP	IT Analyst	Brazil
14	Carolina	Muñoz	Reuna		Chile
15	Daniel	Segovia			
16	Diego	Oyuela	Cancillería		Colombia

17	Doyle	Gallegos	Banco Mundial	Regional Manager- LAC	Colombia
18	Eduardo	Grizendi	RNP		Brazil
19	German	Benítez	Embassy of Paraguay	Consultant	Paraguay
20	Guillermo	Iglesias	ANTEL	Gerente de Área Desarrollo de Negocios Internacionales	Uruguay
21	Guillermo	Salazar	Universidad Nacional de Ingeniería (UNI)	Especialista	Nicaragua
22	Henry Javier	Machuca Ruiz	Instituto Nacional de Investigaciones en Salud Pública		
23	Hippolyte	GAVILAN	DG International Partnerships		
24	Javier	De Mingo	Silica Networks	Director	Chile
25	Jorge	Bustos	Universidad de Talca	Director de Tecnologías de Información (S)	Chile
26	Jorge Alberto	Del Carpio Salinas	Concytec		
27	Julio	Gereda	Universidad San Gregorio de Portoviejo	Comunicación	Ecuador
28	Luis	Constanzo	COPELCO	Asesor	Argentina
29	Luis	Cuervo Spottorno	Comisión Europea - DG DEFIS	Administrador Principal	Belgium
30	Luis	Buda	Grupo Datco	Gerente Comercial	Argentina
31	Luis Ampuero		Universidad Austral de Chile		
32	Luiz Cláudio	Soares	ITSOLUCAO		
33	Mario	Zegarra Valles	CONIDA	Asistente de Investigación	Peru
34	Martin	Sarango	Presidency of the Council of Ministers - The Office of the Prime Minister of PERU	Leader of National Digital Networks REDNACE/NREN and Smart Cities	Peru
35	Mónica	Gallardo	Universidad de Los Lagos	Académica	Chile
36	Pablo	Torres Carrión	UTPL	Coordinador General del Vicerrectorado de Investigación	Ecuador
37	Robert	Steinlechner	Delegación de la Unión Europea en Perú	Jefe de Cooperación	Peru

38	Tiago	Melo	Rolim Net	Tiago	Brazil
39	Tom	Fryer	GÉANT	Head of International Relations	España
40	Ulrich	Weins	EU EEAS	Policy Officer	Belgium
41	Vera	Brudny	Ministerio de Ciencia, Tecnología e Innovación	Jefa de Gabinete - Secretaría de Articulación Científico Tecnológica	Argentina
42	Verónica	Suárez	Agencia Uruguaya de Cooperación Internacional (AUCI)	Responsable de Relacionamiento Institucional	Uruguay
43	Víctor	Velarde	Delegación Unión Europea	Project Manager	Peru
44	Yunessis	Sánchez	Oficina Gubernamental de Tecnologías de la Información y Comunicación		

BELLA II Webinar: "Allies for the Construction of a Latin American and Caribbean Digital Ecosystem"					
Mesoamerica, 23 May 2023					
N°	Name	Surname	Organization	Position	Country/ Region
1	Alejandro	Alvarado	Secretaría de Innovación	Especialista de Innovación	El Salvador
2	Andres	Pineda	Secretaria de Innovacion	Asesor	El Salvador
3	Ariel	Merlos	Presidencia de la República	Colaborador técnico	El Salvador
4	Aurisbel	Avila	IDIAP	Asistente de investigación	Panama
5	Azael	Fernández	UNAM		Mexico
6	Carlos	García	Secretaria de Innovacion	Técnico Informático	El Salvador
7	Daysi Guadalupe	Delgado Ramírez	Agencia de El Salvador para la Cooperación Internacional - ESCO	Técnico de Cooperación de la Coordinación de Alianzas y Diseño	El Salvador
8	Dimitru	Fornea	Comunidad Europea	Comité Económico y Social Europeo	Europe
9	Doyle	Gallegos	The World Bank	Regional Manager - LAC	Colombia

10	Erick	Hernandez	Instituto de Innovación Agropecuaria de Panamá	Investigador agropecuario	Panama
11	Ezequiel	Batista	IDIAP	Jefe de la Unidad de Informática	Panama
12	Fernanda	Luna	Renata	Comunicaciones	Colombia
13	Gabriela	Alcalá	BUAP	Jefa del área de Educación para el Desarrollo Sostenible	Mexico
14	Guillermo	Salazar	Universidad Nacional de Ingeniería (UNI)	Especialista	Nicaragua
15	Henry	Lizano	Universidad de Costa Rica	Director de Tecnologías de Información	Costa Rica
16	Jaime	Espinosa-Tasón	Instituto de Innovación Agropecuaria de Panamá (IDIAP)	Investigador, PhD Economía Agraria	Panama
17	Jairo	Bonilla Castro	UTN	Director de TI	Costa Rica
18	Jimena	Rico	Renata	Comunicaciones	Colombia
19	Jimenez Márquez	Juan Carlos	Universidad Veracruzana	Director General de Tecnologías de la Información	Mexico
20	Juan José	Contreras Castillo	Universidad de Colima	Coordinador General de Tecnologías de Información	Mexico
21	Juvenal	Salgado	Instituto de Investigaciones Científicas y Servicios de Alta Tecnologia (INDICASAT-AIP)	Jefe de Tecnología	Panama
22	Luis	Cuervo Spottorno	Comisión Europea	Administrador Principal	Belgium
23	Luis Diego	Fernandez Gonzalez	Universidad Tecnica Nacional	Jefe de Gestión Técnica	Costa Rica
24	Marco Antonio	Estrada Torres	Universidad Veracruzana	Jefe de Departamento	Mexico
25	María Dacia	González Cruz	Universidad Veracruzana	Directora General de Tecnología de Información	Mexico
26	Marisín	Pecchio	Instituto de Investigaciones Científicas y Servicios de Alta Tecnologia (INDICASAT-AIP)	Coordinador, Centro de Asuntos Académicos y Colaboración	Panama
27	Martha Yadira	Zeledón	Innova Ethic, LLC	Presidente	Nicaragua
28	Mayra	Corado	Universidad de San Carlos de Guatemala	Profesor	Guatemala

29	Metzi	Aguilar	Universidad Centroamericana José Simeón Cañas	docente e investigadora	El Salvador
30	Milton	Aldana Sánchez	Universidad Autónoma del Estado de México	Jefe del departamento de Gestión de Programas Internacionales	Mexico
31	Patricia	Avila	Unión de Universidades de América Latina y el Caribe (UDUALC)	Coordinadora del Espacio Común de Educación Superior en Línea (ECESELI)	Mexico
32	Pedro	Caldentey	Facility EUreCA	Team Leader	El Salvador
33	Roberto	Moreno	UVG	Rector	Guatemala
34	Ronald	Páez	Sinergía Comsultant	asesoría	Guatemala
35	Rosario	Rodríguez Gutiérrez	Universidad Nacional	Profesional Ejecutivo en Desarrollo Tecnológico	Costa Rica
36	Susan V.	Gudiel H.	Universidad de San Carlos de Guatemala	Profesor	Guatemala
37	Trini	Saona			Chile
38	Ulrich	Weins	EU EEAS	Policy Officer Digital	Belgium
39	Valeria	Dessolis	World Bank	Digital Development Specialist	
40	Verónica Adriana	Díaz Rosales	Benemérita Universidad Autónoma de Puebla	Encargado en Sistemas	Mexico
41	Vicky	Lozano	UNAB		Mexico
42	Wilmer	Vindas	Universidad Técnica Nacional	Jefe Estrategia de TI	Costa Rica
43	Wilmer	Vindas	Universidad Técnica Nacional	Jefe Estrategia de TI	Costa Rica
44	Yacine	Khelladi	EU	Consultant	Europe

BELLA II Webinar: "Allies for the Construction of a Latin American and Caribbean Digital Ecosystem"					
Caribbean, 24 May 2023					
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1	Alain	Lamadrid Vallina	REDUNIV (Cuba)	Presidente	Cuba

2	Carlos	Casasus	Consorcio para el intercambio de tráfico de internet a.c.	Presidente del Consorcio	Mexico
3	Davin	Jagessar	Ministry of Planning and Development	Assistant Programme Coordinator	Trinidad and Tobago
4	Dorgival	Guedes	Universidade Federal de Minas Gerais	IT Director	Brazil
5	Einar	Murillo	Telxius		
6	Emily	Carrera	CAF	Officer	
7	Federico	Lozano	ANTEL	International Business Development	Uruguay
8	Felipe	de la Mota	EU	Team Leader	Barbados
9	Guillermo	Salazar	Universidad Nacional de Ingeniería (UNI)-Nicaragua	Especialista	Nicaragua
10	Iris	Palma	NextLatam	Directora	El Salvador
11	Jacqueline	Emmanuel	OECS	Director, Economic Affairs and Regional Integration	Saint Lucia
12	Jorge	Villa	REDUNIV	CTO	Cuba
13	Lidia	Martínez	European Union	Private sector development and Digital Alliance focal point	Barbados
14	Mariana	Navarro	Telxius	Gerente Comercial	Uruguay
15	Mariela	Sosa			Argentina
16	Marolla	Haddad	Banco Mundial	Digital Development Specialist	Jamaica
17	Michelle Dayanna	Mejía	MICITT	Asesora	Costa Rica
18	Narcisse	Fievre	RUPE	Coordinator	Haiti
19	R. Asrtwell		Ministry of Science, Energy and Technology		Jamaica
20	Ruby	Castellanos	Ufinet	Country Manager	Chile
21	Sergio	Dávalos	Universidad de Guadalajara	Coordinador de Tecnologías para el Aprendizaje	Mexico
22	Shelley-Ann	Clarke-Hinds	Ministry of Digital Transformation	Snr Executive Manager, External Relations	Trinidad and Tobago

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23	Steffon	Lewis	Ministry of Digital Transformation	Digital Transformation Associate	Trinidad and Tobago
24	Wahkeen	Murray	Ministry of Science, Energy and Technology	Chief Technical Director	Jamaica
25	Yacine	Khelladi	EU Consultant	EU Consultant	Dominican Republic
26	Yunessi	Sánchez	Oficina Gubernamental de Tecnologías de la Información y Comunicación		Dominican Republic
27	Pablo	Montero	Ministerio de Ciencia, Innovación, Tecnología y Telecomunicaciones		Costa Rica
28	Kareem	Guiste	Organisation of Eastern Caribbean States		Eastern Caribbean