



# EUROPEAN POLICY BRIEF



## POLICY BRIEF ON SPIDER

Policy feedback to advance **EU-LAC dialogues for a human-centred and inclusive digital transformation**

January 2025

### SCENE SETTER: Bridging digital gaps to foster EU-LAC collaboration on digital transformation and R&I

The longstanding tradition of EU-LAC cooperation on digital transformation led to the design and deployment of the BELLA network<sup>1</sup> that provides high-capacity interconnectivity between both regions, enabling relations and exchanges between companies, research centres, educational institutions and national research and education networks (NRENs). Nevertheless, despite the high-capacity data connection and long-term interconnectivity between European and Latin American and the Caribbean R&I communities, the full potential of the BELLA network has not yet been fully exploited, which hinders the potential for digital transformation in the LAC region.

At the same time, a number of digital dialogues between the EU and key partners like Brazil, Mexico and Argentina were held in the last few years, alongside bilateral and multilateral dialogues on Science, Technology and Innovations between European and Latin America and the Caribbean countries that increase cooperation in the area of R&I. However, a gap persists between the political agreements and commitments emerging from these dialogues and their practical implementation to effectively increase digital cooperation in R&I.

Thus, in alignment with the EU's commitment to make digital cooperation central to its relationship with Latin America and the Caribbean<sup>2</sup>, **SPIDER aims to align digital dialogues' commitments with national policies and strategies, and grounding actions for dialogues' outcomes implementation across the BELLA countries in LAC.** This policy brief outlines actionable strategies to enable the development of digital partnerships for R&I cooperation in areas that can benefit from the high-capacity interconnectivity provided by BELLA, such as AI/ML, 5G, Blockchain, Cloud Computing, HPC, Cybersecurity and VRE, while promoting dialogues to advance a human-centred and inclusive digital transformation.

### EVIDENCE AND ANALYSIS

In the policy context described above, **the most policy-relevant findings** of SPIDER are the following:

#### a) **Framework for EU-LAC cooperation on digital transformation.**

SPIDER provides a concept note that outlines the framework underpinning the basis to implement the political outcomes of digital dialogues in view to increase EU-LAC cooperation on digital transformation. Through a participatory process involving data collection and co-creation workshops, the concept note identifies synergies and commonalities across geographic and strategic technology areas supported by BELLA's infrastructure, which is critical for bridging the digital gap between the EU and LAC regions.

<sup>1</sup> [BELLA - Building the Europe Link to Latin America and the Caribbean](#)

<sup>2</sup> [Americas | Shaping Europe's digital future \(europa.eu\)](#)

## b) Mapping of dialogues' commitments and thematic priorities for digital transformation.

The mapping outlines the digital transformation landscape, analysing commitments resulting from bilateral, regional, and multilateral dialogues between Europe and Latin America and the Caribbean. It focuses on common bi-regional thematic priorities related to digital transformation technologies, including AI/ML, 5G, Blockchain, Cloud Computing, HPC, Cybersecurity and VRE among others.

Through a screening process, SPIDER examines key commitments arising from digital dialogues between Europe and Brazil, Mexico, and Argentina, among others. Additionally, commitments from the Pacific Alliance, MERCOSUR Digital, EU-LAC Digital Economy Dialogue, EU-LAC Digital Alliance, Digital Agenda for LAC (2024), EU-CELAC Strategic Roadmap on STI (2021-2023), and BELLA's Open Dialogues Sessions (ODS) are considered.

SPIDER interim version of the mapping analyses 18 EU-LAC dialogues; 27 EU – LAC agreements; 10 bilateral dialogues; 4 multilateral dialogues; and 5 in depth outcome agreements.

## c) Actionable insights

**SPIDER survey**<sup>3</sup> evaluated the current state of the digital ecosystem interconnectivity between Europe and LAC, as well as the potential of the BELLA for digital transformation. The survey results highlight the critical role of high-speed internet connectivity and identify regional disparities in national research and education networks (NRENs) awareness and utilization. It showed that telecommunications providers dominate the general connectivity and cloud services, yet NRENs play a critical role in academic and research services. It also underlines the growing importance of the use of computing resources hosted by cloud providers, particularly in LAC, against research organizations hosts. The survey concluded that despite challenges like low NREN awareness and budget constraints, BELLA's potential to bridge the digital divide and foster R&I collaboration is significant.

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**Focus Groups** insights emphasize the need for strategic alignment, increased visibility, and tailored interventions to maximize the potential of BELLA and foster meaningful EU-LAC digital collaborations. The focus groups gathered 24 experts to deep dive into the capabilities and awareness of BELLA infrastructure and technological priorities for EU-LAC collaboration. The findings revealed that the real challenge to unlock the potential of BELLA lies in understanding its full range of capabilities beyond basic internet connectivity. The unexploited potential is intensified by uneven national infrastructure development, particularly in Latin America, which limits the full utilization of the BELLA network across regions. The experts concluded that BELLA's capacity to foster cross-regional collaboration in emerging technologies remains significantly untapped.

The findings also highlighted Artificial Intelligence as the technology sparking the greatest interest and potential for EU-LAC collaboration, with particular emphasis on startups developing AI solutions in both regions. Cybersecurity emerged as another promising bridge-building domain, while the cleantech sector showed significant collaborative potential due to shared global challenges. Lastly, despite participants noticing minimal implementation challenges with BELLA itself, they emphasized the need for policy frameworks that promote its advanced capabilities and facilitate meaningful cross-regional partnerships in priority technological domains.

## d) EU-LAC Digital Dialogues Implementation Forum (DIF)

DIF has been established as a multi-stakeholder platform to stimulate dialogues and policy debate, and to support the implementation of R&I commitments resulting from EU-LAC digital dialogues. **DIF Working Groups on Human-Centred Digital Transformation and DEI - Diversity, Equality and Inclusion**, come together to decisively tackle digital transformation related problems and to provide opinions and recommendations to EU-LAC digital dialogues. More than 75 members joined the WGs, including dialogues' decision-makers, NRENs, RFOs, RPOs, digital and ICT companies, among others.

<sup>3</sup> The survey was carried out in April-May 2024, and received 357 responses (284 from LAC and 73 from Europe).

The first DIF Annual Meeting took place in Rio de Janeiro jointly with TICAL 2024 around the theme "Connecting knowledge: AI and data as catalysts for academic and social transformation." This RedCLARA's flagship conference attracted more than 200 scientists, policymakers, entrepreneurs, and other stakeholders across LAC and Europe. DIF's session was dedicated to discussing, sharing, and collaborating on strategies and solutions to promote "Dialogues between LAC and Europe" in view to transform policies into action. DIF's discussions are central to strengthening collaboration in digital transformation and integrating DEI in international cooperation as a bridge to solve global challenges.

#### e) **SPIDER Community of Practice**

Our Community of Practice (CoP) unites members as ambassadors of inclusive digital transformation, promoting diversity, equity, and inclusion (DEI), while champion human-centred and sustainable digital solutions through collaboration and knowledge sharing. The CoP is open to individuals and organizations who are passionate about driving digital transformation in an inclusive, sustainable, and human-centred way. This dynamic network connects a vibrant mix of professionals from academia, industry, and policymaking as we advance EU-LAC digital dialogues, unlock the potential of the BELLA network, and advocate for a more inclusive digital transformation.

#### f) **Twinning Programme for digital innovation hubs**

Our Twinning Programme has established a model for digital innovation cooperation between EU-LAC organisations. After an exhaustive process to map and invite 176 hubs to apply for an open call, the Twinning Programme created 5 strategic partnerships between 10 organisations providing services on emerging technologies such as AI, 5G, and cybersecurity. These partnerships are supported by structured collaboration frameworks including detailed MoUs and Action Plans, ensuring clear accountability and measurable progress.

Cross-regional knowledge exchange has proven highly effective through the events conducted, fostering enduring collaborative relationships between EU and LAC innovation hubs. This exchange, coupled with the high-impact activities to be designed by the hubs, such as mentoring, investor matchmaking, and capacity-building initiatives, will keep supporting the hubs to scale digital solutions, tackle regional innovation challenges and explore new opportunities with their EU or LAC counterparts. Building on the achievements of the already established partnership, the programme demonstrates significant potential as a policy model for advancing EU-LAC digital cooperation.

## POLICY IMPLICATIONS AND RECOMMENDATIONS

SPIDER findings have relevant policy implications to EU-LAC digital dialogues and to create a cohesive, human-centred and inclusive framework for EU-LAC cooperation on digital transformation. The following recommendations geared to align strategies, enhance BELLA infrastructure utilization, and foster stakeholder engagement, which can effectively bridge the digital gap and address shared challenges for EU-LAC collaboration.

**#R1 Institutionalize the integration of SPIDER findings into Policy Dialogues**, e.g. Digital Alliance High Level Policy Dialogues, EU-CELAC Dialogues in STI and BELLA's Open Dialogues. This requires the creation of a formal mechanism to align the thematic priorities (AI, 5G, Blockchain, etc.) identified in mapping and commitments with the goals of EU-LAC digital dialogues.

**#R2 Support Policy feedback loops and monitoring**. Develop key performance indicators (KPIs) to track the effectiveness of implementing findings in policy frameworks and dialogues.

**#R3 Promote BELLA's full capabilities**. Launch targeted dissemination campaigns to showcase BELLA's benefits beyond high-capacity interconnectivity, and design calls for scientific collaboration projects using the BELLA network.

**#R4 Incentivize DEI and Human-Centred approaches in policy frameworks**. This requires the adoption of DEI principles as a core policy related to digital transformation across EU and LAC regions, alongside further promotion of human-centred policies to prioritize policies that promote inclusive digital transformation, especially addressing gaps in access to high-speed connectivity and digital literacy.

**#R5 Build Bridges between Research, Practice, and Policymaking**. Establish a Taskforce comprising policymakers, researchers, and practitioners to evaluate the practical application of dialogues commitments and co-develop actionable policy responses.

**#R6 Promote regional convergence in Digital Transformation.** This implies to align policy goals and EU-LAC priorities in emerging technologies, such as HPC, Cloud Computing, VRE, AI ethics and Cybersecurity, leveraging the synergies between both regions through shared research agendas and coordinated policies. Also, to establish long-term collaboration frameworks and embedding successful practices into regional innovation strategies to scale inclusive and sustainable digital ecosystems across both regions.

## SUSTAINABILITY AND LEGACY

SPIDER has generated added value differentiated outputs, which makes the project unique and impactful. Taken together, the project results will provide a **unique toolkit for Dialogues and EU-LAC Cooperation on Digital Transformation**, ensuring that the use of technologies are guided by values and principles of a human-centred and inclusive approach.

**#1 Framework for EU-LAC cooperation on digital transformation.** This conceptual framework defines the basis to implement the political outcomes of digital dialogues, alongside qualitative indicators to assess and monitor the undertaking of dialogues' outcomes and commitments.

**#2. Mapping the digital transformation landscape.** Extensive mapping of EU-LAC digital dialogues and agreements. It comprises interlinked data collection related to digital transformation and analyses relevant commitments resulting from regional, bilateral and multilateral dialogues between Europe and LAC, including action plans, roadmaps, joint declarations and statements. It also identifies common bi-regional thematic priorities related to digital transformation technologies, such as AI, 5G, Blockchain, HPC, Cloud Computing, Cybersecurity and VRE.



**#3 EU-LAC Digital Dialogues Implementation Forum (DIF).** DIF is established as a multi-stakeholder mechanism to foster dialogues, promote policy debate and facilitate the exchange of information and best practices to support the implementation of R&I commitments resulting from EU-LAC digital dialogues. DIF's Working Groups on Human-centred Digital Transformation and Diversity, Equality and Inclusion, provide inputs to set up the roadmap and recommendations to support the implementation of EU-LAC dialogues' commitments.

**#4. SPIDER Community of Practice (CoP).** The CoP will bring together relevant actors from both sides of the Atlantic, including stakeholders from academia (NRENs, Universities, Research centres, centres of excellence) and industry, policy makers, investors, etc. Members of the CoP will serve as ambassadors to disseminate the benefits of adopting an inclusive and human-centred digital approach to build strategic partnerships for transatlantic cooperation and help scale up the experience on the use of BELLA across LAC and Europe.

SPIDER contributes to EU-LAC High-level Policy Dialogue by providing advice for the practical implementation of commitments emerging from these dialogues.

### #5 Twinning Programme for EU-LAC digital partnerships

The Twinning Programme brings together digital innovation hubs from EU and LAC to stimulate the development of digital partnerships and new business opportunities benefiting from the BELLA infrastructure. The programme supports Action Plans of twinned innovation hubs and provides a services portfolio with best practices, a mentoring programme to companies, SMEs and start-ups, as well as matchmaking between innovators and investors from both sides of the Atlantic.

## PROJECT OBJECTIVES AND METHODOLOGY

SPIDER supports the implementation of the outcomes of EU-LAC digital dialogues, alongside the use of digital transformation technologies. The project is being developed on the basis of four premises: (1) the **full potential of the BELLA** infrastructure, that provides long-term interconnectivity between Europe and Latin America, has not been fully exploited yet; (2) the **lack of a framework** to effectively implement and monitor the political outcomes and commitments resulting from existing EU-LAC digital dialogues hinders EU-LAC R&I cooperation; (3) the **lack of awareness of digital dialogues' commitments and outcomes** and incomplete alignment with national strategies make difficult their implementation on the ground; and (4) LAC has a considerable **digital gap** that impacts harder

in low-income population and vulnerable groups like women, especially in Central America countries where the economic, social, and infrastructure conditions differ from other neighbouring countries.

**SPIDER design thinking methods and co-creation workshops, combined with a human-centred approach, alongside an inclusive and intersectional perspective, make a difference.** Driven by the need to better address digital dialogues' implementation, and explore possible pathways to unlock the full potential of BELLA to attract users from both side of the Atlantic, SPIDER has put in place an orchestrated strategy with three pillars: the assessment of the potential of BELLA through surveys, focus groups and call for ideas; the Digital Dialogues Implementation Forum and its Working Groups; and the Twinning Programme for EU-LAC digital hubs collaboration.

SPIDER, RedCLARA and GÉANT have established a framework for collaboration and signed a Memorandum of Understanding (MoU) to maximise and promote the potential of the BELLA network.

## PROJECT IDENTITY

**PROJECT NAME** SPIDER - EU-LAC Strategic Partnership for the Implementation of Digital Dialogues in R&I Cooperation.

**COORDINATOR** Yolanda Ursa, INMARK, Spain

**CONSORTIUM**

- CEDIA - Corporación Ecuatoriana para el Desarrollo de la Investigación y la Academia, Ecuador.
- DLR - Deutsches Zentrum für Luft – und Raumfahrt ev, Germany.
- EIT Digital, Belgium.
- EurA PT - 3ura Unipessoal Lda, Portugal.
- INMARK - Grupo Empresarial Inmark, Spain.
- RedCONARE - Fundación Centro de Alta Tecnología, Costa Rica.
- REUNA - Corporación Red Universitaria Nacional, Chile.
- RNP - Rede Nacional de Ensino e Pesquisa, Brazil.
- UPM - Universidad Politécnica de Madrid, Spain.

**FUNDING SCHEME** HORIZON-CSA.

**DURATION** November 2023 – April 2026 (30 months).

**BUDGET** EU contribution: 1.996.450 €.

**WEBSITE** <https://spidernetwork.org/>

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**FURTHER READING** Public Deliverables at ZENODO [SPIDER EULAC Digital Partnership](#).  
Other relevant publications and resources related to SPIDER can be downloaded from <https://spidernetwork.org/resources/>.