SPIDER

EU-LAC Digital Partnership

Dialogue Forum events' report

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LIST OF ABBREVIATIONS

DIF	EU-LAC Digital Dialogues Implementation Forum
EU	European Union
LAC	Latin America and the Caribbean
R&I	Research and Innovation
WGs	Working Groups
CoP	Community of Practice
NRENs	National Research and Education Networks
RFOs	Research Funding Organisations
RPOs	Research Performing Organisations
ICT	Information and Communication Technologies
EC	European Commission
DPAs	Data Processing Agreements
BELLA	Building the Europe Link to Latin America
STEM	Science, Technology, Engineering, and Mathematics
SEGIB	Ibero-American General Secretariat
INPACE	EU–Indo-Pacific Digital Partnership
SEADE	EU–Africa Digital Partnership
INSTAR	USA Digital Partnership

NGI Enrichers	Next Generation Internet (NGI) Transatlantic Fellowship Programme

EXECUTIVE SUMMARY

This deliverable presents the set-up of the EU–LAC Digital Dialogues Implementation Forum (DIF) within the SPIDER project. Its purpose is to document how the DIF and its two Working Groups (WGs) have been organised and operated in practice, to capture their main outcomes, and to consolidate their contribution to the implementation of EU-LAC digital dialogue commitments. The deliverable also translates these outcomes into a set of strategic recommendations that will feed directly into the Roadmap for EU-LAC digital transformation.

The DIF has been implemented as a multi-stakeholder mechanism combining continuous expert work with high-level dialogue moments. Two thematic WGs (WG1 on Human-Centric Digital Transformation, and WG2 on Diversity, Equity and Inclusion) were established to support in-depth discussion and knowledge co-creation. The WGs brought together experts from Europe (EU) and Latin America and the Caribbean (LAC) including representatives from public administrations, National Research and Education Networks (NRENs), innovation actors, the digital ecosystem and civil society. They operated through a structured series of online meetings, using a common methodology based on guided discussions, breakout sessions and collaborative tools. This approach ensured sustained engagement, allowed themes to evolve progressively, and enabled the transformation of qualitative dialogue into concrete, policy-relevant insights.

In parallel, the DIF was materialised through high-level events embedded in major regional conferences. Two DIF events were successfully organised at TICAL 2024 in Rio de Janeiro (Brazil) and TICAL 2025 in San José (Costa Rica), providing a broader space for multi-actor exchange and engagement with policymakers and institutional leaders.

The combined work of the WGs and the DIF events generated a coherent set of outcomes that contribute directly to EU-LAC digital dialogue commitments. Discussions consistently highlighted the need to move from fragmented initiatives towards more coordinated and impact-oriented cooperation frameworks. Key themes included governance and regulatory alignment in areas such as data, AI and cloud computing; the activation of digital infrastructures, notably BELLA, as enablers of concrete research and innovation use cases; and the importance of human-centric approaches that place citizens, skills, trust and institutional capacity at the centre of digital transformation. Across all activities, diversity, equity and inclusion emerged not as a transversal add-on but as a structural condition for sustainable and legitimate digital policies and technologies.

Building on these outcomes, the deliverable consolidates a set of key recommendations that will feed the EU-LAC Digital Transformation Roadmap. These recommendations address: the development of shared yet adaptable governance frameworks; stronger monitoring mechanisms to ensure continuity of commitments; strategic prioritisation of high-impact cooperation areas; improved visibility and activation of enabling infrastructures; support for multi-actor collaboration models and matchmaking mechanisms; investment in skills and institutional change; and the systematic integration of DEI principles throughout digital policy, research and innovation processes.

Overall, the DIF has demonstrated its strategic value within SPIDER as a bridge between expert-level analysis and high-level policy dialogue. By combining sustained WGs collaboration with visible and well-positioned annual events, the DIF has contributed to translating EU-LAC digital dialogues into actionable insights and forward-looking recommendations. This positions the DIF as a key instrument for supporting long-term, inclusive and human-centric digital cooperation between EU and LAC, both within SPIDER and beyond the project's duration.

1. Introduction

The EU-LAC Digital Dialogues Implementation Forum (DIF) provides a structured platform for stakeholders from Europe and Latin America and the Caribbean (LAC) to engage in policy discussions, exchange experiences, and jointly identify priorities to advance the implementation of digital transformation initiatives. It connects policy makers, research institutions, actors from the digital ecosystem, and other relevant stakeholders to foster transatlantic collaboration and support the implementation of Research and Innovation (R&I) commitments arising from EU-LAC digital dialogues. The DIF is at the core of SPIDER's strategy and contributes directly to Objective 3 of the project:

#O3. *Launch the DIF that will act 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.*

This deliverable builds upon the previous D3.1 "Terms of Reference of the EU-LAC Digital Dialogues Implementation Forum", which described the initial concept, membership, and operational structure of the DIF and its Working Groups (WGs). While D3.1 focused on the conceptual foundations and planning, D3.2 provides a detailed account of the organisation, implementation, and results of the DIF and its WGs. It documents how the WGs have functioned in practice, how the DIF events were prepared and executed, and the outcomes generated through these activities, including contributions to the SPIDER Community of Practice (CoP) and inputs for the Roadmap for future EU-LAC cooperation on digital transformation (D3.3).

The DIF is structured around two complementary and result-oriented WGs (WG1 on Human-Centric Digital Transformation, and WG2 on Diversity, Equity and Inclusion), which bring together high-level experts and key actors from both regions. WG1 and WG2 have been operational throughout the project, discussing themes related to EU–LAC cooperation, producing inputs to support DIF events, and engaging actively with the SPIDER CoP. Together, the WGs have created a dynamic multi-stakeholder environment to facilitate dialogue, knowledge exchange, and the co-creation of actionable insights that feed into policy and strategic planning.

The scope of this deliverable covers two completed DIF events: the first, held on 5 December 2024 at TICAL Conference in Rio de Janeiro (Brazil) organised in collaboration with RedCLARA and RNP; and the second, held on 13 November 2025 also at TICAL Conference in San José (Costa Rica) organised with RedCLARA and RedCONARE. In parallel, the WGs have met in four online sessions, each lasting approximately one and a half to two hours, to discuss key topics, exchange knowledge, and provide inputs for the DIF events. A final WGs online meeting is planned before the end of the project to consolidate insights and final recommendations.

This report is structured to present first the progress and current functioning of the DIF and its WGs, followed by a detailed description of the preparation, execution and outcomes of each DIF event. Then, it is explained how the outputs of the WGs and events feed into the EU–LAC digital transformation roadmap and present actionable recommendations derived from these activities. The report also includes a dedicated section on the groundwork undertaken to ensure the sustainability of the DIF beyond the project's lifetime, reflecting ongoing efforts to consolidate networks, strengthen engagement mechanisms and establish long-term structures for cooperation. The document concludes with a synthesis of the main achievements and the strategic value of the DIF in fostering EU–LAC cooperation in digital transformation.

2. DIF Working Groups: progress and current functioning

2.1. Working Groups membership and profiles

For the establishment of the SPIDER WGs, invitations were sent to more than 90 experts from a wide range of relevant stakeholder categories. These included decision-makers involved in the EU–LAC Dialogues, representatives from National Research and Education Networks (NRENs), Research Organisations (RFOs), Research Performing Organisations (RPOs), as well as digital and Information and Communication Technologies (ICT) companies, among others. As a result of this outreach, a total of 74 experts formally accepted the invitation to join the WGs, with 38 members initially assigned to WG1 (Human-Centric Digital Transformation) and 36 to WG2 (Diversity, Equity and Inclusion).

As the project progressed, the composition of both WGs evolved. New members joined in response to emerging needs, thematic extensions, and recommendations from existing participants, while some members discontinued their participation. In particular, six members left WG1 and four left WG2, mainly due to changes in institutional representation, especially among ministry-level stakeholders. As of the latest update, WG1 comprises 46 active members, while WG2 includes 45 active members.

An analysis of the institutional profiles of the WG members (Figure 1) shows a strong representation from public administrations, policy-oriented institutions, academia and research organisations, complemented by stakeholders from the private sector and digital innovation ecosystems. This diversity of institutional backgrounds has contributed to rich, multi-perspective discussions aligned with the objectives of the SPIDER project.

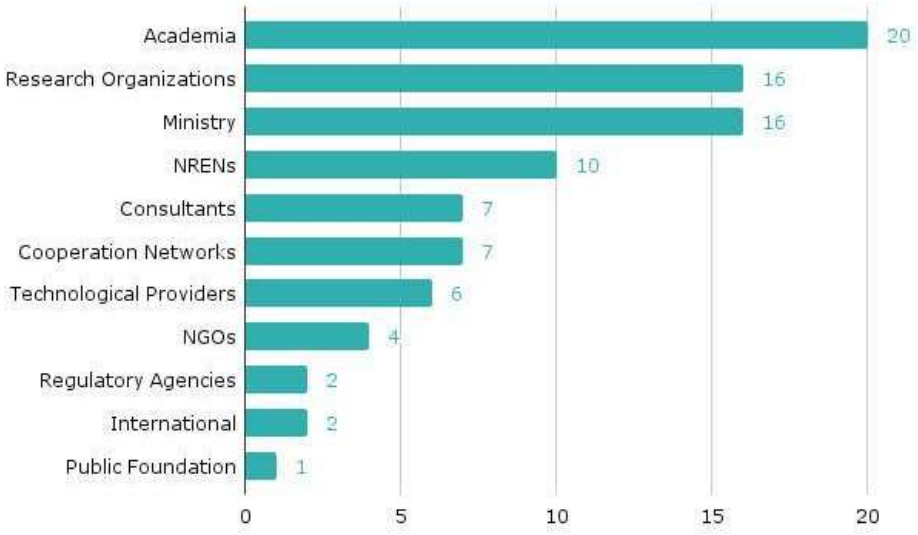

Figure 1: Institutional profiles of the WG members

From a geographic perspective, there are a total of 33 members from European countries and 58 from Latin America and the Caribbean (LAC) region (Figure 2). Gender distribution across both groups includes 57 women and 34 men.

Costa Rica	22
Ecuador	20
Spain	11
Mexico	7
Portugal	4
Brazil	3
Colombia	3
Italy	3
Argentina	2
UK	2
Germany	2
Austria	2
Chile	1
Uruguay	1
France	1
Finland	1
Norway	1
Poland	1
Belgium	4

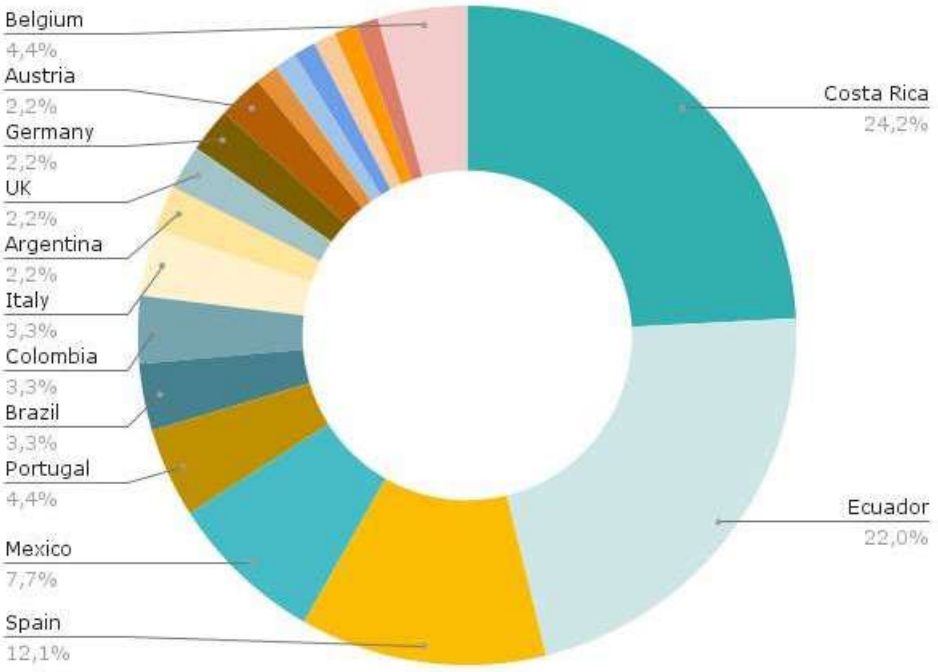

Figure 2: Geographical distribution of the WG members

The SPIDER project website (Figure 3) includes a dedicated section presenting the list of WG members who consented to share their personal and professional information[1]. In addition, a consolidated document is provided with extended biographies for each WG (see Annex 1: WG members lists published in SPIDER's website), offering greater visibility to their expertise and fostering transparency and recognition within the community.

[1]WG1 members list available at https://spidernetwork.org/working-group-1/ and WG2 members list available at https://spidernetwork.org/working-group-2/ .

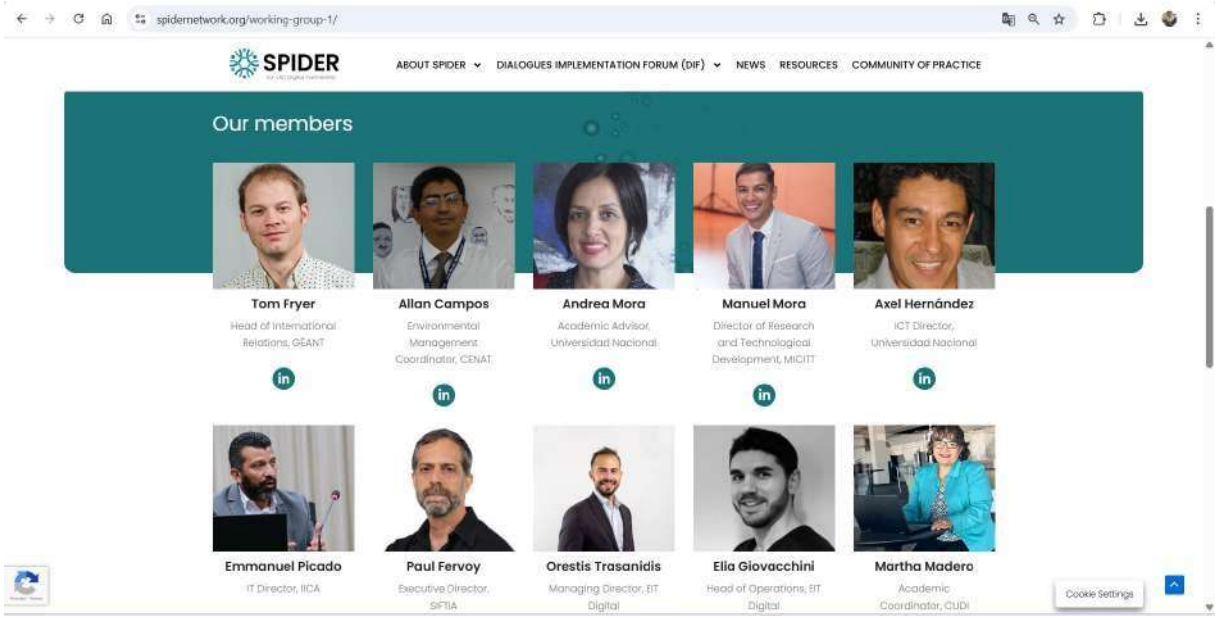

Figure 3: SPIDER's DIF website with the list of the WG members

Throughout the project, communication with WG members has been consistently conducted via email, which has served as the main channel to convene meetings, share preparatory materials, and disseminate the outcomes reports with key results from the discussions.

Finally, all members of the WGs were invited to join the SPIDER Community of Practice (CoP). A significant number became active participants, motivated by their interest in closely following the project's activities, contributing to ongoing discussions, and engaging with a broader network of stakeholders. Furthermore, several WG members were invited to participate as panelists in DIF events, in recognition of their relevant institutional roles, expertise, and strategic positioning within the EU–LAC digital transformation landscape.

2.2. Organisation and operation of the WGs

Throughout the SPIDER project, four online meetings of the WGs were successfully conducted, following a consistent organisational and methodological approach. The meetings were held on the following dates, with sustained and balanced participation from both Working Groups:

- Launch Meeting - 26 June 2024: 51 participants (25 from WG1, 26 from WG2).
- Second Meeting - 4 November 2024: 50 participants (23 from WG1, 27 from WG2).
- Third Meeting - 14 April 2025: 36 participants (17 from WG1, 19 from WG2).
- Fourth Meeting - 21 October 2025: 35 participants (17 from WG1, 18 from WG2).

Overall, participation levels remained high across the project lifecycle, with a relatively even distribution between WG1 and WG2, demonstrating continued engagement and commitment from members.

All WG meetings were organised in an online format and convened via email. Invitations were sent in advance, followed by reminder emails to maximise participation. Each invitation included logistical information, the meeting agenda, and preparatory materials which consisted of the topics and guiding questions that were to be discussed in each WG breakout room, with the aim of supporting participants in preparing and reflecting in advance on the key issues.

The content and structure of each meeting were jointly prepared by the WP3 coordination team (UPM) in close collaboration with the leaders of both WGs: 28 Digital (former EIT Digital) for WG1 and INMARK for WG2. The allocation of 28DIGITAL and INMARK was based on their proven experience, with 28DIGITAL contributing its background in human-centred approaches and INMARK bringing strong expertise in diversity, equity, and inclusion (DEI). This collaborative planning process covered the definition of meeting objectives, thematic focus, guiding questions, agendas, and the design of collaborative materials, ensuring coherence between sessions while allowing flexibility to address emerging topics.

Given the high expected attendance, all meetings were structured around four breakout rooms, with two dedicated to WG1 and two to WG2, to facilitate in-depth discussion. The sessions started with a joint plenary meeting to welcome participants and introduce the objectives and structure of the session. In addition, at the end of each meeting all participants reconvened again in plenary, where the moderators of each breakout room reported back to the wider group on the main discussion points, insights, and emerging conclusions from their respective sessions.

A set of digital tools supported facilitation and collaborative work. Zoom was used as the videoconferencing platform (Figure 4), enabling plenary sessions and breakout rooms. Miro served as the primary collaborative workspace (Figure 5), where participants jointly documented ideas, reflected on guiding questions, and clustered insights in real time. In addition, WG leaders supported each session with a short PowerPoint presentation to set the context to the discussion and link it to previous outcomes. To foster a participatory and engaging atmosphere, icebreaker dynamics were occasionally introduced, such as informal prompts (e.g. "The most random thing I've learned from AI lately"), helping to stimulate interaction and openness among participants.

Figure 4: WGs meeting using Zoom

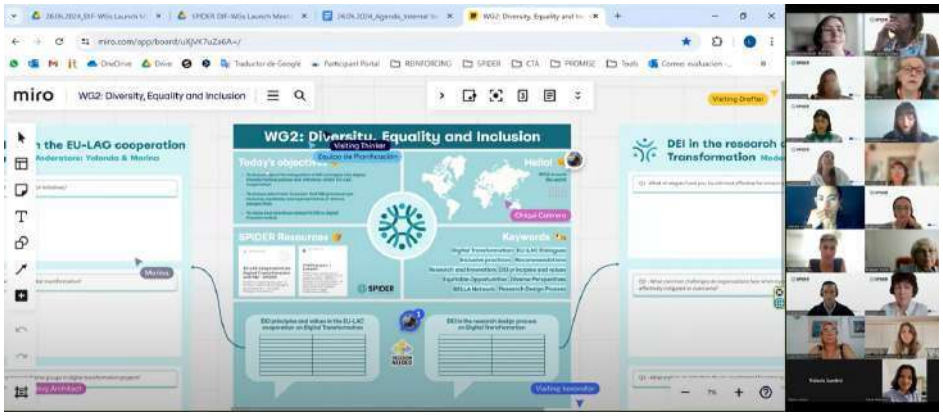

Figure 5: WGs meeting using Miro

Special consideration was given to accommodating the time difference between EU and LAC regions. All meetings were scheduled at time slots feasible for both places, typically in the morning for LAC participants and in the afternoon for EU participants. The duration of the meetings (ranging from 90 minutes to two hours), as well as the number and scope of guiding questions, were progressively adjusted based on feedback and experience from previous sessions. This iterative refinement aimed to allow deeper discussion while maintaining a manageable and engaging pace.

After each meeting, all insights and key discussion points filled into a dedicated report. These reports were shared with WG members via email and published on the SPIDER project website[2], ensuring transparency, continuity, and accessibility of results across the wider community. The four reports can be found in Annex 2: WG meeting reports.

Overall, the WG meetings were characterised by a constructive, open, and collaborative atmosphere, fostering trust and active participation among members. Building on this positive dynamic, at least one additional WG meeting is foreseen before the end of the project, further consolidating the collective work and contributions of such initiative.

2.3. Topics discussed and themes evolution

Across the four WGs meetings, discussions followed a clear thematic progression, allowing participants to move from broad conceptual reflections to more concrete, policy- and practice-oriented insights. While each meeting addressed specific topics, the overall evolution of themes reflects an increasing level of depth, specificity, and alignment with both project objectives and, in some cases, relevant European Commission (EC) policy recommendations emerging from previous SPIDER technical review meetings.

From the outset, topics were intentionally framed to support structured dialogue while remaining flexible enough to incorporate emerging issues identified by participants or highlighted in EC strategic agendas. Over time, this approach enabled the WGs to refine their focus, respond to evolving regulatory and socio-technical contexts, and progressively

[2]Launch meeting report: https://spidernetwork.org/wp-content/uploads/2024/07/Insights-of-DIF-WGs-Launch-Meeting-1.pdf
2nd meeting report: https://spidernetwork.org/wp-content/uploads/2025/04/Insights-of-2nd-WGs-Meeting-1.pdf
3rd meeting report: https://spidernetwork.org/wp-content/uploads/2025/06/Insights-of-3rd-WGs-Meeting.pdf
4th meeting report: https://spidernetwork.org/wp-content/uploads/2025/12/Insights-of-4th-WGs-Meeting-.pdf

generate actionable insights. The Table 1 below summarises the main topics addressed by each WG across the four meetings.

Table 1: Overview of WGs topics for each meeting

Meeting	WG1 – Human-Centric Digital Transformation	WG2 – Diversity, Equity and Inclusion
Launch Meeting (June 2024)	• Policy, Regulation and Stakeholder Engagement • Implementation, Security and Measurement	• Principles and Values • DEI in the Research Design Process
Second Meeting (Nov 2024)	• Ethics and Data Ownership • Education and Global Collaboration	• Effective Integration of DEI • Actionable Efforts
Third Meeting (Apr 2025)	• Foundations of the AI Act • Cloud Adoption and Data Sovereignty in Open Innovation	• Involvement of Women in the Use of Digital Technologies • Stereotypes and Biases in Artificial Intelligence
Fourth Meeting (Oct 2025)	• Reimagining Public Services: Putting Citizens First in the Digital Era • AgriTech for the People: Satellite and AI Innovations	• Making Multimodal AI Work in Spanish and Portuguese • Building Culturally Sensitive and Inclusive AI across EU & LAC

For WG1, discussions evolved from high-level considerations around policy alignment, regulatory frameworks, and implementation challenges towards more concrete applications of human-centric digital transformation. This included a growing focus on AI regulation, data sovereignty, public service design, and sector-specific use cases such as cloud computing and AgriTech.

For WG2, the thematic progression moved from foundational DEI principles to more applied discussions on gender inclusion, cultural barriers, and systemic biases embedded in digital technologies. Over time, conversations increasingly addressed AI-related challenges, linguistic and cultural diversity, and the need for inclusive design approaches that are sensitive to regional, social, and cultural contexts. This evolution mirrors broader EC priorities related to gender equality, inclusive innovation, and responsible AI.

The main insights and takeaways from each meeting are presented in the next section (2.4), together with an outline of how these discussions are shaping preliminary recommendations.

2.4. Key points and takeaways

As described in Section 2.2, each WG meeting resulted in a dedicated report documenting the discussions, key insights, and emerging conclusions. These reports served both as a record of the dialogue and as a working basis for subsequent internal analysis within the consortium, feeding into ongoing activities and informing the preparation of the remaining project deliverables. Below is a high-level synthesis of the main insights emerging from each meeting, structured by Working Group.

Insights from the Launch Meeting

WG1 - Human-Centric Digital Transformation: Discussions highlighted the importance of sustained digital leadership within institutions to ensure continuity despite political or

organisational changes. Participants emphasised the need for
secure and transparent data governance through mechanisms such as data processing agreements (DPAs), provenance protocols, and data curation tools. The group also stressed the relevance of aligning digital infrastructure development with human needs, updating educational curricula to integrate digital, cyber, and soft skills, and planning for long-term social sustainability beyond individual projects.

WG2 - Diversity, Equity and Inclusion: WG2 focused on embedding DEI principles from the earliest stages of research and innovation. Key insights included the role of local stakeholder engagement, the positive impact of Gender Equality Plans promoted by the European Commission, and the necessity of quotas and institutional change to accelerate progress. Participants also highlighted the potential of AI and data analytics to identify and mitigate bias, and the importance of incorporating DEI considerations into EU–LAC policy dialogues.

Insights from the Second Meeting

WG1 - Human-Centric Digital Transformation: The discussion deepened around ethical AI, adaptive regulatory frameworks, and cross-border data governance. Participants advocated for innovation sandboxes, algorithm auditing, and privacy-by-design approaches. Education emerged as a central enabler, with a strong emphasis on interdisciplinary, project-based learning and social impact. EU–LAC collaboration was framed as requiring shared governance models, interoperability frameworks, and capacity building alongside infrastructure investments.

WG2 - Diversity, Equity and Inclusion: WG2 identified cultural barriers, structural inequalities, and limited outreach as persistent challenges to DEI integration. Participants underlined the link between inclusion, innovation, and economic growth, and stressed the importance of inclusive design. Concrete mechanisms such as accountability frameworks, knowledge-sharing platforms, and joint EU–LAC funding schemes were discussed as levers to support long-term impact, particularly for women entrepreneurs and underrepresented groups.

Insights from the Third Meeting

WG1 - Human-Centric Digital Transformation: Discussions focused around the EU AI Act and its relevance for the LAC region, highlighting the need for contextual adaptation rather than one-size-fits-all regulation. Digital sovereignty, ethical alignment, and trust-building were identified as strategic priorities. Participants also addressed cloud adoption challenges, data value governance, and the role of open innovation ecosystems involving startups and academia.

WG2 - Diversity, Equity and Inclusion: WG2 explored persistent gender gaps in digital access, skills, and representation, as well as the reinforcing effects of bias in AI systems. Confidence gaps, online safety concerns, and technology-facilitated violence were identified as critical barriers to women's participation. Solutions discussed included mentorship, role models, explainable AI, diverse datasets, and stronger human oversight to ensure accountability.

Insights from the Fourth Meeting

WG1 - Human-Centric Digital Transformation: Discussions highlighted the central role of civil servants in enabling citizen-centred digital transformation when equipped with the right skills, autonomy, and technological infrastructure. Participants emphasized the importance of co-creation spaces and collaborative governance, enabling public institutions to work with startups, researchers, and citizens to test innovative solutions. Key points included enhancing transparency, accountability, and citizen engagement in AI-enabled public services, and ensuring continuous training, ethical frameworks, and institutional support to sustain innovation. In addition, the group explored how Earth Observation data and AI can transform agriculture, stressing the need for local adaptation, participatory

approaches, and inclusive access to create practical, sustainable, and regionally relevant solutions.

WG2 - Diversity, Equity and Inclusion: WG2 focused on the challenges of building inclusive AI systems that reflect linguistic and cultural diversity across the EU and LAC regions. Discussions emphasized the structural and technical barriers affecting multimodal AI in Spanish and Portuguese, including limited data quality, connectivity gaps, and algorithmic bias. Participants highlighted the need for community involvement, diversified datasets, ethical governance, and digital literacy initiatives to increase trust and accessibility. The conversation also addressed culturally sensitive AI, stressing the importance of integrating inclusion from the design stage, representing minoritized languages, and ensuring transparency and accountability to avoid reproducing existing inequalities.

Beyond documenting the discussions held within the WGs, the insights generated across the four meetings were analysed through internal consortium work. This process aimed to identify recurring patterns, converging priorities, and critical gaps, translating rich qualitative dialogue into structured, actionable recommendations. These preliminary recommendations form the basis of the outputs presented in Section 4 of this deliverable. In addition, they provide essential input for the Roadmap for Future EU–LAC Cooperation on Digital Transformation, ensuring that it is grounded in stakeholder-driven insights, regional perspectives, and practical experience. By linking participatory dialogue with strategic policy development, the WGs contribute directly to shaping a forward-looking, inclusive, and human-centric EU–LAC digital transformation agenda.

3. Organisation of the DIF events

3.1. First DIF event at TICAL 2024

3.1.1. Preparatory work and materials

The first annual DIF event was held as part of the TICAL 2024 Conference, organised in collaboration with RedCLARA. The session, titled "SPIDER DIF: Dialogues between LAC and Europe", was integrated into the official TICAL programme[3] and designed as a key space for dialogue between Europe and Latin America and the Caribbean on digital transformation.

The initial coordination for organising the DIF event at TICAL was prompted by UPM and INMARK together with RedCLARA, and facilitated by the NRENs involved in the SPIDER project. For the TICAL 2024 edition, RNP hosted the Conference in Rio de Janeiro. Several coordination meetings were held to align on logistics, format, and programme integration, ensuring that the DIF session was fully embedded within the broader TICAL agenda. In addition to the event itself, TICAL provided valuable opportunities for SPIDER to strengthen relationships with local and regional stakeholders, including a dedicated coordination meeting between SPIDER, RedCLARA, and GÉANT.

The objective of this first DIF annual event was to reflect on and reinforce collaboration commitments between Latin America, the Caribbean, and Europe, with the aim of promoting joint initiatives with tangible impact in both regions. Given its role as the inaugural DIF event, the agenda (Figure 6) was designed to introduce the SPIDER project, the DIF, its WGs, and the CoP, before moving into thematic discussions. The session was structured around two panels, directly aligned with the focus areas of the WGs:

- Panel 1: Strengthening Collaboration in Digital Transformation between EU-LAC.
- Panel 2: Diversity, Equality and Inclusion (DEI) in Digital Transformation.

Each panel included three experts with complementary profiles and background related to the panel's overarching theme. Panelists were identified with the support of the full SPIDER consortium, prioritising strategic actors relevant to EU–LAC digital cooperation such as the Building the Europe Link to Latin America (BELLA) programme. All potential panelists were contacted and invited via email.

Panel moderation was coordinated with project partners: RedCONARE moderated Panel 1, while UPM moderated Panel 2. In close collaboration with them, a set of guiding questions was prepared for each panelist to ensure focused and dynamic discussions. A single supporting PowerPoint presentation was used throughout the session to introduce the agenda, present the panelists, and support the opening and closing segments of the event.

A last-minute cancellation by one invited panelist (Herik Vallés) required rapid adaptation. This challenge was addressed positively by identifying a replacement directly among TICAL attendees. Martha Ávila (from CUDI, the Mexico's NREN) who is a member of SPIDER's WG2, kindly agreed to join the panel, ensuring continuity and enriching the discussion with a relevant regional perspective.

[3]TICAL 2024 programme available at https://tical2024.redclara.net/es/programa

SPIDER EU-LAC Digital Partnership

TICAL 2024

Diálogos entre América Latina, el Caribe y Europa

Jueves, 5 de Diciembre de 2024 de 13:30 a 15:30

Hotel Windsor Barra, Rio de Janeiro (Brasil)

La sesión tiene como objetivo reflexionar sobre los compromisos de colaboración entre América Latina, el Caribe y Europa, con el fin de promover e impulsar iniciativas conjuntas que generen impacto en ambas regiones

HORA	AGENDA
13:30	Presentación del proyecto SPIDER - *Luciana Ayciriex (INMARK)*
13:35	El Foro de implementación de Diálogos Digitales (DIF), los Grupos de Trabajo (WGs) y la Comunidad de Práctica (CoP) de SPIDER - *María F. Cabrera (UPM)*
13:40	**Panel 1: Fortaleciendo la Colaboración en Transformación Digital entre ALC y Europa** *Moderador : Carlos Gamboa (RedCONARE)*
	Transformando políticas en acción: IA y datos en la colaboración bi-regional — Juan Pablo Carvallo (CEDIA)
	Estrategias para promover la colaboración entre los sectores público, privado y académico — Eduardo Grizendi (RNP)
	Retos para la colaboración EU-ALC en iniciativas de Transofrmación Digital — Tom Fryer (GÉANT)
14:35	**Panel 2: Diversidad, Equidad e Inclusión (DEI) en la Transformación Digital** *Moderadora : María F. Cabrera (UPM)*
	La educación como impulsora de los principios de Diversidad, Equidad e Inclusión (DEI) — Herik Vallés (ANUIES)
	Integración de DEI en cooperación internacional como puente para resolver desafíos globables — Alice Abreu (URFJ)
	BELLA: Un mundo digital interconectado más centrado en el ser humano — Luis Cadenas (RedCLARA)
15:30	Conclusiones - *Luciana Ayciriex (INMARK) y María F. Cabrera (UPM)*

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Figure 6: Agenda of the first DIF event

3.1.2. Implementation

The DIF event took place on Thursday, 5 December 2024, from 13:30 to 15:30 (BRT) at Windsor Barra Hotel in Rio de Janeiro, the venue hosting TICAL 2024 Conference. The session was conducted primarily in Spanish, in line with the linguistic context of TICAL and most participants. Attendance was mainly in person, with 37 on-site participants, including policymakers, researchers, NREN representatives, and other key stakeholders attending TICAL. To manage room capacity, participants were asked to register by email in advance for the DIF session. In addition, announcements were made on the main TICAL stage by RedCLARA during the first days of the Conference (Figure 7) to raise awareness and encourage participation. The event was also live-streamed online with the support of RNP, allowing the DIF to reach a broader audience beyond on-site attendees, and it was also recorded for internal analysis and reporting purposes.

Figure 7: Announcement of the DIF event in the main TICAL stage

Clear roles were defined among the organising actors. The entire SPIDER consortium was involved in the process, coordinated by UPM. All the NRENs (RedCONARE, CEDIA, RNP and REUNA) together with INMARK and DLR, participated in person and actively contributed to the organization and implementation. RedCLARA played a central role in programme integration and local coordination, ensuring the smooth execution of the event within the TICAL framework.

Overall, the DIF event at TICAL 2024 was successfully implemented (Figure 8), providing a high-level, participatory space for EU–LAC dialogue on digital transformation and setting a strong foundation for subsequent DIF activities.

Figure 8: Pictures from the first DIF event

3.1.3. Results and lessons learned

Key insights and messages from the discussion

Panel 1: Strengthening Collaboration in Digital Transformation between LAC and Europe

- Common regulatory frameworks are critical to facilitating collaboration between Latin America and Europe, particularly regarding data governance and AI.
- Greater alignment on ethical AI principles such as transparency, accountability, and fairness in algorithm design and deployment, is necessary.
- Cloud adoption in Europe is considered strategic, with emphasis on data sovereignty and controlled infrastructures, including national and EU-compliant clouds.
- LAC countries face challenges due to fragmented regulatory environments, making regional collaboration and joint digital initiatives more difficult.

- Shared digital ecosystems involving government, academia, and private sector actors are essential for enabling effective collaboration.
- Innovation consortia were highlighted as a mechanism to ensure inclusive development and equitable access to digital infrastructure.
- The potential of collective intelligence approaches, such as ideathons, was recognized to generate solutions to complex digital transformation challenges.
- Stronger cooperation mechanisms and regional agreements in LAC are needed to match European structures and foster deeper partnerships.

Panel 2: Diversity, Equality, and Inclusion (DEI) in Digital Transformation

- DEI principles should be embedded from the outset in digital transformation projects, rather than treated as an afterthought.
- Structural change in institutions is key to advancing gender equality and inclusion, going beyond merely increasing numbers.
- Rethinking knowledge production is crucial to addressing gender biases in both basic and applied research.
- Advanced technologies, including AI, quantum computing, and cybersecurity, must integrate DEI principles at design and research stages.
- Metrics and indicators are needed to measure the impact of inclusion initiatives, with examples such as EU She Figures and UNESCO SAGA.
- LAC networks should implement gender policies and track progress beyond policy creation to ensure meaningful change.
- Local capacity building and leadership development are essential to empower women and underrepresented groups in Science, Technology, Engineering, and Mathematics (STEM).
- Inclusion of marginalized communities requires systemic approaches that combine education, infrastructure, and targeted incentives.

A more extensive document[4] with the full insights from the discussion has been prepared and is available for reference in Annex 3: First DIF event report. This document serves as a useful resource for future events, WGs planning, and deeper analysis of bi-regional digital transformation and DEI initiatives.

Lessons learned for future events

Several lessons were identified to improve future DIF events:

- Panel topics in this first DIF were heavily centered on SPIDER WGs, limiting the scope of discussions. Future events could broaden topics to include emerging challenges beyond current project priorities.
- Involving experts beyond SPIDER's close partners can bring fresh perspectives, strengthen knowledge exchange, and foster new collaborations.
- Structuring panels to balance technical, policy, and social perspectives enhances the depth and applicability of discussions.
- Allocate more time for the audience to interact with panelists, allowing for questions and open dialogue to enrich the discussions and capture more diverse perspectives.

3.2. Second DIF event at TICAL 2025

3.2.1. Preparatory work and materials

[4] First DIF event report: https://spidernetwork.org/wp-content/uploads/2025/12/05.12.2024_Insights-of-1st-DIF-event.pdf

The second annual SPIDER DIF event was held on 11 November 2025 as a two-hour, in-person session conducted in Spanish, within the framework of the TICAL 2025 Conference, hosted in San José, Costa Rica. The event was organised again in close collaboration with RedCLARA, building on the positive experience and strong institutional cooperation established during the first DIF held at TICAL 2024.

Several adjustments were introduced in the preparation phase, directly informed by the lessons learned from the 2024 edition. In particular, the 2025 DIF was designed to move beyond discussions strictly aligned with SPIDER WGs and instead focus on the results of two mature and strategic project activities:

1. Mapping of EU–LAC digital dialogues and agreements and the development of the SPIDERHUB platform.
2. Survey and focus groups on the use and future potential of the BELLA infrastructure for EU–LAC digital transformation.

Expert identification was carried out collaboratively by all SPIDER partners, with a deliberate effort to engage panelists beyond the immediate geographical context of the event and to broaden the diversity of institutional perspectives. Most panelists were different from those participating in the first DIF, except for RedCLARA and GÉANT, whose continued involvement was considered essential due to their strategic role in EU-LAC connectivity and cooperation. All outreach and coordination with panelists were conducted via email.

Under the coordination of UPM, and in close coordination with the panel moderators (CEDIA for Panel 1 and REUNA for Panel 2), personalized guiding questions were defined for each panel, carefully aligned with the purpose of the session and the expertise of the invited speakers. As an additional improvement compared to the 2024 edition, panelists received not only the agenda (Figure 9) but also a comprehensive guidance document (see Annex 4: Guidance document for 2nd DIF event panelists), providing contextual information on the topics to be addressed and clarifying the expected focus of the discussion. In this way, supporting materials were adapted to reflect the increased maturity of the discussions. A single, consolidated PowerPoint presentation was prepared and used throughout the session, including: a brief introduction to the SPIDER project, contextual introductions for each panel, and the profiles of the panelists.

All these preparatory activities aimed to strengthen the relevance, accessibility, and impact of the DIF discussions, and set the stage for productive, action-oriented exchanges.

SPIDER EU-LAC Digital Partnership

TICAL 2025

Red CLARA

Digital Dialogues Implementation Forum (DIF)

Dialogues between Latin America, the Caribbean and Europe

Shaping the Future of EU-LAC Cooperation and Connectivity

EVENT DETAILS

Date & Time: 13 November 2025, from 14:30 to 16:30

Venue: Hotel DoubleTree by Hilton Cariari, San José, Costa Rica. Room Cocori.

Format: In-person event

DESCRIPTION

The Digital Dialogues Implementation Forum (DIF), organised in the framework of the SPIDER project and taking place alongside the TICAL 2025 Conference, brings together policymakers, institutional representatives, and leaders from research and education networks to strengthen cooperation between Europe, Latin America and the Caribbean in the field of digital transformation.

Through two complementary sessions, the Forum will present key findings that inform the future EU–LAC Digital Cooperation Roadmap, from policy insights and strategic recommendations to the technical opportunities offered by the BELLA network. Together, they aim to connect political vision and technological capacity, advancing a more sustainable, interconnected, and inclusive digital ecosystem between Europe, Latin America, and the Caribbean.

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DIF - Dialogues between Latin America, the Caribbean and Europe

SPIDER
EU-LAC Digital Partnership

AGENDA

Time	Session
14:30 - 14:40	**Welcome and objectives** *Cristina López, Universidad Politécnica de Madrid*
14:40 - 15:30	**From Vision to Action: Consolidating EU-LAC Digital Dialogues Towards a Future Roadmap for Cooperation** *This session will build on the results of the mapping of bi-regional agreements and dialogues carried out under the SPIDER project. Based on this evidence, panelists will discuss key findings and recommendations, identifying next steps towards a joint roadmap for digital transformation.* Insights from the mapping of EU-LAC digital dialogues and agreements through the AI SPIDERHUB platform, presented by CEDIA - *10 minutes* Roundtable with panelists - *30 minutes* • Willy Carvajal - Regional Project Officer, Delegation of EU to Costa Rica • Eliana Ulate Brenes - Ministry of Science, Innovation, Technology and Telecommunications of Costa Rica (MICITT) • Nicolás Trujillo - Ministry of Science, Technology, Knowledge and Innovation on Chile (MinCiencia) • Ruben Carrandi - EU-LAC Digital Accelerator and European Business and Innovation Centre Network (EBN) Open questions from the audience - *10 minutes*
15:30 - 16:20	**BELLA Beyond Borders: Unlocking the Future of EU-LAC Research and Innovation Connectivity** *This session will discuss the potential of BELLA high-speed connectivity to boost digital transformation, offering an updated perspective on its role as a key infrastructure to expand scientific and technological cooperation between the two regions.* Findings from the SPIDER survey and focus groups on the use and potential of BELLA for EU-LAC digital transformation, presented by REUNA - *10 minutes* Roundtable with panelists - *30 minutes* • Luis Cadenas - Latin American Cooperation of Advanced Networks (RedCLARA) • Luis Martín Flores - European National Research and Education Networks (GÉANT) • Paul Fervoy - Siftia and Federation of Information Technology Entities in Latin America (ALETI) • Alessandra Zini - 28DIGITAL Open questions from the audience - *10 minutes*
16:20 - 16:30	**Conclusions and closing** *Luciana Ayciriex, INMARK*

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Funded by the European Union

Figure 9: Agenda of the second DIF event

3.2.2. Implementation

The DIF 2025 was fully integrated into the official TICAL 2025 programme[5] and, for the first time, also into the Conference registration system, allowing attendees to indicate in advance their interest in participating in the session. This facilitated more accurate capacity planning and contributed to increased attendance.

The event took place in the main Conference room (Figure 10), ensuring high-quality technical resources and visibility. A total of 51 participants attended in person, representing a diverse profile of stakeholders from research, education, public institutions, and the digital ecosystem. In addition, the session was live-streamed online with the technical

support of RNP, extending its reach beyond on-site participants. As with the previous edition, the session was also recorded for the purpose of internal analysis and assessment of the outcomes.

Figure 10: Second DIF event at the main TICAL room

The format followed a structure similar to the first DIF, consisting of a brief introductory segment followed by two moderated panel discussions. Panel 1 (Figure 11) was presented and moderated by CEDIA, and Panel 2 by REUNA, with both moderators playing a key role in framing the discussions and linking them to SPIDER's analytical work. Particular attention was given to allocating sufficient time for audience questions and interaction, fostering an open and participatory dialogue between panelists and attendees.

Figure 11: Panel 1 of the second DIF event

Event logistics and onsite coordination were jointly handled by UPM, INMARK and RedCONARE, working in close collaboration to ensure the smooth execution of the session.

All SPIDER partners actively contributed to the success of the DIF through expert identification, participation, and onsite engagement. Representatives from CEDIA, RNP, REUNA, RedCONARE, UPM, INMARK, DLR, and 28DIGITAL were present at TICAL and supported the event (Figure 12). EURA was the only partner unable to attend in person. This collective effort reflects the strong commitment of the consortium and was instrument.

Figure 12: SPIDER partners at the second DIF event

Beyond the DIF session itself, the TICAL 2025 setting was strategically leveraged by the SPIDER consortium to engage with a broader range of relevant experts and stakeholders, particularly in relation to selected EC recommendations. SPIDER partners used the conference as an opportunity to initiate and deepen discussions on additional project-relevant topics, both by raising targeted questions during other conference sessions and through informal, one-to-one conversations held during coffee breaks and networking moments. These interactions complemented the formal DIF discussions and enriched the overall understanding of emerging priorities, challenges, and opportunities for future cooperation.

Finally, SPIDER's visibility throughout TICAL 2025 was significantly strengthened through the presentation of a dedicated poster on the EU–LAC digital cooperation mapping. The poster (Figure 13) was actively promoted during the conference, including a dedicated moment in the main plenary where a short video introducing the poster and its key findings was shown to all TICAL attendees. This contributed to increased awareness of SPIDER's work and stimulated additional informal exchanges around the project's results during the conference.

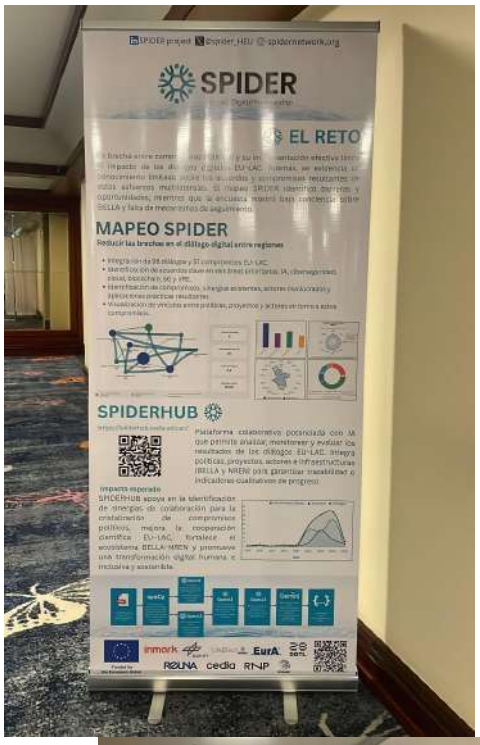

Figure 13: SPIDER's poster at TICAL 2025

3.2.3. Results and lessons learned

Key insights and messages from the discussion

Panel 1: From Vision to Action - Consolidating EU-LAC Digital Dialogues Towards a Future Roadmap for Cooperation

- The mapping of EU-LAC digital dialogues and agreements revealed a rich and active cooperation ecosystem, but also highlighted persistent challenges such as

institutional fragmentation, limited coordination among stakeholders, and the lack of systematic monitoring mechanisms to translate political commitments into tangible results.
- The development of common regional governance frameworks across LAC was identified as a critical prerequisite for effective and sustained bi-regional cooperation.
- Legislative and normative frameworks play a key role in facilitating cross-border collaboration and reducing regulatory fragmentation; Chile's experience with data center guidelines was highlighted as a concrete example of successful policy implementation.
- Mapping exercises should be complemented by mechanisms to measure impact, ensuring that cooperation efforts move beyond visibility towards measurable outcomes.
- Strategic prioritization of high-impact initiatives within the EU-LAC ecosystem was emphasized as essential to maximize value and avoid dispersion of efforts.
- Establishing thematic priorities combined with regional segmentation can improve the effectiveness and relevance of cooperation initiatives.
- LAC countries were encouraged to move from participation to co-leadership roles in EU-LAC projects, strengthening ownership and long-term commitment.
- Political cycles pose a structural challenge to continuity, highlighting the need for monitoring mechanisms capable of tracking commitments over time.
- Sustainable financing models and multilevel leadership were identified as key enablers of long-term cooperation.
- Structural and cultural shifts are needed to foster stronger public–private and academic–private partnerships, supported by shared funding mechanisms to enhance societal impact.
- The inclusion of underrepresented stakeholders such as civil society, private sector actors, and judicial entities was highlighted as essential for more inclusive and robust cooperation frameworks.
- Digital infrastructure alone is not sufficient: the effective combination of infrastructure, governance, and policy alignment is required to move from dialogue to action, as illustrated by examples such as the Humboldt submarine cable.

Panel 2: BELLA Beyond Borders - Unlocking the Future of EU-LAC Research and Innovation Connectivity

- BELLA represents a qualitative shift in EU-LAC digital interconnection, providing a high-capacity, secure infrastructure dedicated to science, innovation, and education, and enabling new models of shared technological sovereignty.
- While the opportunity enabled by BELLA is widely recognized (particularly in LAC) greater visibility and awareness are needed, especially among European stakeholders, to build a critical mass of users and initiatives.
- Complementarities between regions are already operational (e.g. AI and environmental data, cloud-based health platforms, HPC for scientific simulations), yet BELLA is not consistently perceived as the enabling infrastructure for these use cases.
- The main barriers to BELLA's uptake are organizational and political rather than technical, including limited sustained political alignment, insufficient agile funding mechanisms, and the absence of structured EU-LAC matchmaking instruments.
- BELLA enables new cooperation models that were previously difficult to implement, such as secure data exchange, shared sandboxing environments, pilot deployments, and advanced technical testing.
- Improved promotion and dissemination strategies are required to connect BELLA with a wider range of stakeholders across academia, research, and industry.
- The creation of micro-projects was identified as an effective way to demonstrate BELLA's concrete value and activate practical use cases.

- A dedicated matchmaking platform linking specific use cases with infrastructure capabilities was proposed as a mechanism to foster collaboration.
- Key thematic areas for collaboration include sustainable agriculture, digital health, clean energy, and AI adoption.
- NRENs play an essential role in enabling, sustaining, and scaling BELLA-based cooperation.
- Stronger institutional frameworks and coordinated regional agendas are needed to avoid fragmentation and bridge the gap between academic networks and productive sectors.
- Alignment of financial and political strategies, improved visibility of funding opportunities, and support for exchange programs and in-person collaboration were identified as critical to ensuring long-term sustainability.

A more extensive document[6] containing the full insights and contextual analysis from both panels has been prepared and is included in Annex 5: Second DIF event report, providing a comprehensive account of the DIF discussions.

Overall assessment of the DIF outcomes

The second DIF was considered successful in achieving its objectives by effectively bridging analytical evidence, strategic dialogue, and stakeholder perspectives within a coherent and focused format. The panels facilitated in-depth discussion grounded in concrete project results, enabling participants to reflect critically on current EU–LAC cooperation dynamics while identifying actionable pathways for strengthening governance, infrastructure use, and collaboration models.

The combination of data-driven inputs, expert knowledge, and cross-sector representation ensured high-quality exchanges and reinforced the relevance of the DIF as a space for consolidating insights rather than duplicating existing dialogues. By aligning project findings with broader regional and institutional priorities, the DIF contributed to a shared understanding of challenges and opportunities in EU-LAC digital cooperation, reinforcing the value of SPIDER's integrative and evidence-based approach.

4. Consolidating WG and DIF insights for the EU–LAC Roadmap

Throughout the SPIDER project, the WGs and the DIF events have played a complementary role in identifying challenges, gaps, and opportunities for EU-LAC cooperation on digital transformation. The WGs meetings provided a structured space for in-depth discussion among experts on specific thematic areas, while the DIF events enabled the validation, enrichment, and expansion of these discussions through broader, multi-stakeholder dialogue.

Across the deliverable, the outcomes of each WGs meeting and DIF event have been documented in the form of key messages and insights emerging from the discussions. Building on this material, a cross-activity analytical process was carried out to feed the development of the future EU-LAC Digital Transformation Roadmap. This process involved the systematic extraction of insights from each activity, followed by their consolidation across themes in order to reduce duplication, identify recurring patterns, and elevate discussion-level observations into strategic, roadmap-oriented recommendations.

As a result, the following Table 2 does not replicate outputs by activity, but instead present a thematic synthesis of the most relevant insights, reformulated as actionable

[6] Second DIF event report: https://spidernetwork.org/wp-content/uploads/2025/12/13.11.2025_Insights-of-2nd-DIF-event.pdf

recommendations. These recommendations reflect the combined contributions of WGs and DIF events and are grounded in multi-actor and multi-country perspectives. Particular attention is given to the role of enabling infrastructures such as the BELLA network, which emerged consistently as a key foundation for future EU–LAC cooperation, as well as to the added value of coordinated participation across policy, research, academia, industry, and network operators.

Table 2: Actionable recommendations from WG and DIF insights

Thematic areas	Recommendations	Source activities
Governance, Policy Alignment and Regulatory Frameworks	**Develop shared and adaptive governance frameworks to support EU- LAC digital cooperation**, particularly in areas such as data governance, AI, and cloud computing, ensuring regulatory alignment while allowing contextual adaptation to regional realities.	• WG1 - Meetings 1, 2, 3 • DIF 2024 - Panel 1 • DIF 2025 - Panel 1
	Complement political dialogue with legislative, normative, and operational instruments to reduce fragmentation and facilitate cross-border collaboration, drawing on concrete national experiences such as Chile's data center guidelines.	• WG1 - Meetings 2, 3 • DIF 2025 - Panel 1
	Establish monitoring and accountability mechanisms to track commitments over time, mitigating the impact of political and institutional cycles and enabling continuity beyond individual projects or administrations.	• WG1 - Meetings 1, 4 • DIF 2025 - Panel 1
	Align ethical AI principles across regions, including transparency, accountability, fairness, and human oversight, ensuring that emerging regulatory frameworks (e.g. EU AI Act) are translated into practice in a context-sensitive manner.	• WG1 - Meetings 2, 3 • WG2 - Meetings 3, 4 • DIF 2024 - Panel 1
Strategic Prioritisation and Measurement of Dialogues	**Move from mapping and visibility exercises towards impact-oriented cooperation**, by complementing dialogue and ecosystem mapping with mechanisms to assess outcomes, societal value, and long- term effects.	• WG1 - Meeting 2 • DIF 2025 - Panel 1
	Prioritise high-impact thematic areas and initiatives within the EU-LAC ecosystem, avoiding dispersion of efforts and enabling more focused and measurable cooperation.	• WG1 - Meetings 2, 3 • DIF 2025 - Panel 1
	Encourage LAC actors to progress from participation to co-leadership roles in EU-LAC projects, strengthening ownership, sustainability, and strategic balance in bi- regional cooperation.	• WG1 - Meetings 2, 3 • DIF 2025 - Panel 1
Data, Cloud and	**Recognise digital infrastructure as a necessary but insufficient condition for**	• WG1 - Meetings 2, 3 • DIF 2025 - Panel 1

Thematic areas	Recommendations	Source activities
Connectivity	**cooperation**, requiring alignment with governance, policy frameworks, and capacity building to translate connectivity into tangible outcomes.	
	Position BELLA as a strategic enabler of EU-LAC cooperation, not only as connectivity infrastructure but as a foundation for shared technological sovereignty, research collaboration, and innovation ecosystems.	• DIF 2025 - Panel 2
	Increase visibility and awareness of BELLA, particularly among European stakeholders, to build a critical mass of users and initiatives that actively leverage the infrastructure.	• DIF 2025 - Panel 2
	Activate infrastructure through practical use cases and micro-projects, demonstrating concrete value in areas such as digital health, sustainable agriculture, clean energy, AI, and HPC-enabled research.	• WG1 - Meeting 4 • DIF 2025 - Panel 2
Collaboration Models, Ecosystems and Stakeholder Inclusion	**Strengthen multi-actor digital ecosystems that integrate public authorities, academia, research organisations, private sector, and civil society**, fostering co-creation, shared ownership, and trust.	• WG1 - Meetings 1, 4 • DIF 2024 - Panel 1 • DIF 2025 - Panel 1
	Promote innovation consortia, matchmaking mechanisms, and shared funding instruments as practical tools to connect infrastructure capabilities with concrete needs and use cases.	• WG1 - Meetings 2, 4 • DIF 2024 - Panel 1 • DIF 2025 - Panel 2
	Support public–private and academic–private partnerships through cultural and structural change, enabling experimentation, open innovation, and sustained collaboration.	• WG1 - Meetings 2, 4 • DIF 2025 - Panel 1
	Leverage the role of NRENs as trusted intermediaries to enable, scale, and sustain cross-border collaboration, particularly in research and education.	• DIF 2025 - Panel 2
Human-Centric Skills, Capacity Building and Institutional Change	**Invest in continuous capacity building for public institutions and civil servants**, equipping them with digital, ethical, and organisational skills to enable citizen-centred digital transformation.	WG1 - Meetings 1, 4

Thematic areas	Recommendations	Source activities
	Align digital infrastructure development with human needs, integrating co-creation, transparency, and accountability into AI-enabled public services.	WG1 - Meetings 1, 4 DIF 2024 - Panel 1
	Update educational and training models to integrate digital, cyber, interdisciplinary, and soft skills, fostering long-term social sustainability beyond individual projects.	WG1 - Meetings 1, 2
Diversity, Equity and Inclusion	**Embed DEI principles from the earliest stages of research, innovation, and digital policy design**, rather than treating inclusion as a corrective measure.	WG2 - Meetings 1, 2, 4 DIF 2024 - Panel 2
	Promote structural institutional change alongside targeted measures (e.g. quotas, Gender Equality Plans) to address persistent inequalities and accelerate progress.	WG2 - Meetings 1, 2 DIF 2024 - Panel 2
	Address bias in AI systems through inclusive design, diversified datasets, explainable AI, and strong human oversight, particularly in multilingual and multicultural EU-LAC contexts.	WG2 - Meetings 3, 4 DIF 2024 - Panel 2
	Strengthen local capacity building, leadership development, and safe participation environments to empower women and underrepresented groups in STEM and digital sectors.	WG2 - Meetings 2, 3 DIF 2024 - Panel 2
	Adopt metrics and indicators to monitor DEI progress and impact, moving beyond policy adoption towards measurable and sustained change.	WG2 - Meetings 1, 2 DIF 2024 - Panel 2

5. Groundwork for DIF sustainability

The experience of the first two DIFs has laid a strong foundation for the sustainability and potential institutionalization of these events. Several elements contribute to ensuring that the DIFs, and the associated WGs, can continue to generate impact and maintain relevance in the EU-LAC digital cooperation landscape.

Community of Practice engagement:
The SPIDER CoP provides a natural framework to sustain dialogue, exchange knowledge, and maintain momentum between DIF events. By leveraging the CoP, insights from the DIFs and the WGs can be continuously disseminated and discussed, ensuring that lessons learned and recommendations remain visible to a broad ecosystem of practitioners, researchers, and policymakers. Moreover, the WGs established under SPIDER provide a structured mechanism to generate actionable recommendations, informed by DIF discussions. Sustainability will be supported by embedding WG outputs into the CoP and linking them to the planning of DIF sessions, ensuring continuity between the analytical work conducted within WGs and the high-level discussions in the DIFs.

Collaboration with RedCLARA and integration into TICAL:
The strong partnership with RedCLARA has proven instrumental in organizing successful DIF events and ensuring visibility within the regional digital ecosystem. The DIF has demonstrated value both for participants and for RedCLARA, which sees these discussions as highly relevant to their mission. As a result, future DIFs could be integrated as a regular part of the TICAL Conference program, creating a dedicated space for EU–LAC digital transformation dialogues. This integration would capitalize on TICAL's established audience, infrastructure, and regional reach, ensuring continuity and sustainability.

Exploring new partnerships:
In addition to existing collaborations, the DIF has the potential to expand its scope and impact through partnerships with other regional and bi-regional initiatives aligned with SPIDER's objectives. This includes potential collaboration with SEGIB, as well as confirmed engagement with sister projects such as the EU–Indo-Pacific Digital Partnership (INPACE) and the EU–Africa Digital Partnership (SEADE). Further collaboration is also being explored with the USA Digital Partnership (INSTAR) and the Next Generation Internet Transatlantic Fellowship Programme (NGI Enrichers) between the EU, the US, and Canada. These partnerships would help broaden the DIF's reach, foster cross-regional knowledge exchange, and strengthen its role as a platform for dialogue on digital transformation.

Future exploitation and strategic outlook:
These measures provide a groundwork for a sustainable model of DIF operations and WGs engagement, which will be further elaborated in the SPIDER Exploitation Plan. By consolidating partnerships, integrating with TICAL, leveraging the CoP, and exploring additional collaborations, the DIF can become a permanent platform for advancing EU-LAC digital cooperation, knowledge exchange, and inclusive dialogue.

6. Conclusions

The SPIDER project has successfully combined the work of the DIFs events and the meetings of the WGs to achieve significant outcomes in EU–LAC digital cooperation. The DIFs provided a high-level platform for sharing knowledge, exchanging experiences, and discussing actionable strategies, while the WGs contributed in-depth analyses, co-design processes, and targeted recommendations that fed directly into these discussions. Together, they created a mutually reinforcing dynamic: the insights from the WGs enriched the DIF debates, and the feedback from the broader DIF audience validated and expanded the WG findings.

All the initial objectives set for the DIF in D3.1 "Terms of Reference of the EU-LAC Digital Dialogues Implementation Forum" have been effectively met. The forums supported the implementation of EU-LAC digital dialogue commitments by facilitating structured discussions on governance, policy alignment, and collaborative projects. They also strengthened the coordination of policies and R&I efforts in human-centred digital transformation, emphasizing inclusiveness and sustainability. By organizing the two DIF events, SPIDER enabled the exchange of ideas and best practices, giving visibility to both the project's mapping and survey activities and to broader bi-regional initiatives.

The establishment and activation of the SPIDER CoP has ensured that knowledge and lessons from both DIFs and WGs are captured, shared, and made accessible to a wider network of experts. The CoP also supports ongoing engagement and lays the foundation for continued collaboration across EU-LAC digital transformation initiatives. Furthermore, the outputs from the DIFs will feed the SPIDER's Roadmap, providing evidence-based guidance for future cooperation between the regions. Overall, the DIFs have played a strategic role in reinforcing EU-LAC collaboration, combining knowledge generation, stakeholder engagement, and practical implementation to advance sustainable and inclusive digital transformation.

Annex 1: WG members lists published in SPIDER's website

Participants of Working Group 1: Human-Centric Digital Transformation

Andrés Segura – Coordinator of the Technological Research and Innovation Laboratory, UNED

Coordinator of the Technological Research and Innovation Laboratory (LIIT) at the Distance State University (UNED), Andrés Segura-Castillo holds a degree in Computer Science and Informatics from the University of Costa Rica and a master's degree in Technology Management from the Open University of England. His research interests encompass digital transformation in higher education, technology management with a focus on innovation, systemic inquiry as a scientific practice, and social network analysis using Big Data. Andrés has led numerous research and innovation projects in diverse fields such as technology management, media analysis, bioinformatics, communication technologies, systemic inquiry, social simulation, social network analysis, and education. Since 2009, he has represented UNED on the State Scientific Research Indicators Commission of the National Council of Rectors of Costa Rica. Additionally, he currently serves as chair of the Engineering in Medicine and Biology (EMB) chapter of the IEEE in Costa Rica, where he champions the adoption of innovative and cost-effective technologies in these fields.

Cecilia Paredes – Rector, ESPOL

Cecilia Paredes Verduga is currently President (Rector) at Escuela Superior Politécnica del Litoral, ESPOL, in Guayaquil – Ecuador, elected in November 2017 and re-elected in 2022 for another 5 year period. She joined the Mechanical Engineering Department at ESPOL at 2001 and became Assistant Dean in the same department in 2005. She also served as a member of the Research Council from 2010 to 2012, and was elected Provost from 2012 to 2017. Her teaching interests range from materials science to entrepreneurship. Her research and development activities led her to initiate the Center for Research and Development of Nanotechnology and the Laboratory for Materials Testing at ESPOL. She became a member of the Ecuadorian Higher Education Council during 2010 and 2011, and President of the Latin American and Caribbean Consortium of Engineering Institutions (LACCEI). Currently, involved in promoting initiatives to the increase the number of women in science and engineering programs, and promote gender equality. She is a mechanical engineer from ESPOL and received a M.Sc. and Ph.D. degrees in Ceramic Science and Engineering from Rutgers University at New Brunswick – NJ, USA.

Crista Ureña – Project Assistant, RedCONARE

Crista Ureña Chanto is a Project Assistant with a degree in Public Administration with an emphasis on Banking and Finance. Experienced in the public sector at both national and international levels. Currently, she serves as an assistant for the SPIDER project on behalf of Red CONARE in Costa Rica.

Genoveva Vargas – Senior Scientist, CNRS

Genoveva Vargas-Solar is a principal scientist at the French Council of Scientific Research (CNRS) and a regular member of the Mexican Academia of Computing. She has a Habilitation à Diriger des Recherches (HDR) from the University of Grenoble, a PhD in Computer Science from University Joseph Fourier, a PhD in Literature from University Stendhal, and Master's degrees in both fields. Her research focuses on distributed and heterogeneous databases, reflexive systems, and service-based database systems, with applications in various domains like Astronomy, Biology, and Industry 4.0. She advocates for data and AI decolonization, decolonial feminism, and coordinates diversity, equity, and inclusion initiatives in data science. She has led multiple research projects funded by governments and industry, promoting scientific cooperation between Latin America and Europe.

Gianmaria Bonagura – Economist and Data Analyst, WFP

A Data Scientist and Economist with experience at the United Nations - World Food Programme (WFP), the European Central Bank, Banca d'Italia, and Prometeia, brings extensive expertise in economic analysis, statistical methods, and the digitalization of data collection and corporate processes. Passionate about democratizing data, systems, and information through Open Data and Open Source initiatives, he specializes in developing and utilizing digital tools to streamline data generation, ensuring efficient and accurate data management. His skills include leveraging advanced analytical tools and developing integrated data management ecosystems to support data-driven decision-making and evidence-based policies.

Carlos Gamboa – Scientific Coordinator, RedCONARE

Carlos Gamboa holds a degree in Computer Engineering and a Master's in Computer Science from the Technological Institute of Costa Rica. He currently serves as the Scientific Coordinator of Costa Rica's research and education network, RedCONARE. Additionally, Mr. Gamboa serves as a researcher at the National Collaboratory of Advanced Computing within the National Center for High Technology. In this role, he has conducted research in Bioinformatics, Data Science, Artificial Intelligence, Advanced Infrastructure, and Educational Technologies

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Participants of Working Group 1: Human-Centric Digital Transformation

Juan Pablo Carvallo – Executive Director, CEDIA

Juan Pablo Carvallo is the Executive Director of the Ecuadorian National Research and Education Network (CEDIA), teacher of the Azuay University, Cuenca, Ecuador, and independent consultant in the field of Information Technologies. He received his master degree in "Advanced Broadcast, Networks, Systems and Services" and his PhD in software engineering from the Catalonia Tech University, Barcelona, Spain. His research interests include software quality, software process improvement, hybrid systems architecture and requirements engineering among other. He served as Conference Chair, Program Committee Co-chair and Program Committee member, in several international conferences, and acted both as reviewer and author of papers in several conferences and journals, including IEEE RE, IEEE Software, Software Process Improvement and Practice, and Journal of Computer Science and Technology. He is the author of over 80 international scientific publications, including 47 indexed in SCOPUS.

Karina Gibert – Full Professor, UPC

Full Professor at the Universitat Politècnica de Catalunya-BarcelonaTech (UPC). Bachelor, Master and PhD in Computer Science with specialisations in computational statistics and artificial intelligence. Director and co-founder of the Intelligent Data Science and Artificial Intelligence research centre at UPC (IDEAI-UPC, 2018-). Dean of the Illustrious Official College of Informatics Engineering of Catalonia (COEINF, 2023-). Expert and co-author of the Catalan Strategy for Artificial Intelligence Catalonia.AI (Catalan Government, 2018-). Advisor to the Catalan, Spanish, and European Commission governments on AI ethics and digital transformation. Awards: WomenTech Award 2023 (Women360), National Award for Informatics Engineering 2023 (General Council of InformaticsEngineering Colleges of Spain), Ada Byron Award 2022 (College of Computer Engineering of Galicia), donaTIC2018 Award (GenCat). Creu Casas Mention 2020-2021 (IEC).

Lucrezia Collu – Innovation Analyst, EIT Digital

Innovation Analyst at EIT Digital with extensive experience in researching digital technologies in the agritech field and managing open innovation. She holds a BSc in Economics and an MSc in Management. At EIT Digital, she is responsible for implementing EU projects and overseeing education activities focused on addressing the gender gap.

Manuel José Damásio – Associate Professor, Lusófona University

Ph.D Manuel José Damásio is an Associate Professor and the Head of the Film and Media Arts Department at Lusófona University in Lisbon, Portugal. His professional background covers different domains and areas of expertise in the fields of audiovisual and media production. He is the chair of GEECT – the European association of film and media schools and a member of the board of CILECT – International association of film and media schools. He is the coordinator of FilmEU – The European University of Film and Media Arts.

Marcelo Jenkins – Full Professor at the School of Computer Science and Informatics, UCR

Marcelo Jenkins holds a Bachelor's degree in Computer Science and Informatics from the University of Costa Rica (UCR), and a Master's (1989) and Ph.D. (1992) in Computer Science and Informatics with an emphasis in software engineering from the University of Delaware, USA. With 33 years of university teaching experience, he is currently a full professor at the School of Computer Science and Informatics at the University of Costa Rica, where he teaches graduate courses in software engineering. Dr. Jenkins has conducted research projects in software engineering and quality assurance, authored over 100 technical articles, and won the 1997 National Science and Technology Award for his work on the application of software engineering standards in Costa Rica. As an independent IT consultant, he specializes in software engineering and quality assurance, and has delivered lectures and seminars to professionals in over 10 countries for the past 25 years. He served as Costa Rica's Minister of Science, Technology, and Telecommunications from 2015 to 2017 and became a certified software quality engineer (CSQE) by ASQ in 2003.

Marko Beko – Professor, Universidade Lusófona

Marko Beko was born in Belgrade, Serbia. He received the Ph.D. degree in electrical and computer engineering from the Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal, in 2008. He was the recipient of the title of a Professor with Habilitation of electrical and computer engineering from the Universidade Nova de Lisboa, Lisbon, in 2018. He was the recipient of the 2008 IBM Portugal Scientific Award. According to the methodology proposed by Stanford University, he was among the most influential researchers in the world between 2019 and 2022, when he joined the list of top 2% of scientists whose work is most cited by other colleagues in the field of Information and Communication Technologies. He is one of the Founders of Koala Tech.

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Participants of Working Group 1: Human-Centric Digital Transformation

María Georgina García - President, Clúster Médico Jalisco

María Georgina García Martínez holds a Medical Degree from Universidad Autónoma de Guadalajara (UAG) and specializes in Clinical Pediatrics. He has been serving as President of Clúster Médico Jalisco AC since 2016 and was a member of the Governing Board of the UMAE de Pediatría de Centro Médico, Nacional Occidente until May 2022. He is an advisor on health issues for the Madrid City Council in Mexico and an evaluator for the Start Up Building Programme at Universidad Autonoma de Guadalajara with Banco Santander. She collaborates with the German Healthcare Alliance and UNICEF Mexico, promoting projects for children and adolescents, and advocates for the 'First 1000 Days' public policy. He liaises with embassies from several countries to promote health research and business projects. Additionally, he is a member of SIPINNA in Jalisco, the Citizens' Sectoral Council for Social Development Planning and Measurement, and the Ethical Alliance for Health.

Mario A. Castaño - Technical Director, CINTEL

Electrical Engineer from Universidad de los Andes (1987), with graduate degrees in Telematics (1989) from the same university, and Engineering Management (1995) and Economics (2005) from Universidad Javeriana. He worked in the areas of ICT research, development, planning and marketing projects in the Research Centre of the Faculty of Engineering (CIFI) of the Universidad de los Andes (Colombia), IKERLAN Technology Research Centre (Spain) and ITEC – TELECOM (Colombia). He is currently the Chief Technical Officer of CINTEL, the Colombian ICT Innovation and Development Center, where he coordinates the activities of the Centre and conducts applied research, studies and advisory services and training in the technological, strategic and regulatory aspects of the ICT industry, with professional emphasis on innovation, market analysis, strategy, regulation, and business opportunities for technology companies. He has been Professor of Graduate and Continuing Education at the University of the Andes and has participated as a speaker at several conferences and seminars at national and international levels.

Miguel González - Professor, Tecnologico de Monterrey

Miguel González Mendoza holds a BSc in Electronics from Tecnologico de Monterrey, Mexico, MSc and PhD degrees in Artificial Intelligence from the Institut National des Sciences Appliquées (INSA) in Toulouse, France. Interest in Machine Learning, Data Management and Computer Vision applications, in which he has advised 15 PhD thesis and 32 Master's Thesis. Author of more than 120 articles in JCR, congresses and book chapters. From 1999 to 2004 he was research assistant, then postdoc at the Laboratory for Analysis and Architecture of Systems (LAAS-CNRS) in Toulouse, France. Since 2004, he works as professor at the Computer Science Department at Tecnologico de Monterrey. Coordinator of 15 national research projects (CONACYT) since 2005. Local coordinator of six European Projects FP6 and FP7 (2005-2015) and three on H2020. Member of the Mexican National System of Researchers, SNI, rank II (Jan 2016), member since 2006. President of the Mexican Society for Artificial Intelligence (2016-2018), Vice-president (2015-2016), Secretary (2011-2014), member of the board since 2008. Regular Member of the Mexican Academy of Sciences (since 2019). Regular Member of the Mexican Academy of Computing (since 2015). Young Scientist at the World Economic Forum for New Champions in Tianjin China in September 2012.

Orestis Trasanidis - Managing Director, EIT Hub Silicon Valley

He has been involved in several innovation projects and has academic work on decision making. In recent years, he has been working at EIT Digital on developing sustainable open innovation ecosystems. He holds MSc degrees in ICT, Smart Cities, and Environmental Engineering. As the EIT AI Leader, he leads AI initiatives, coordinates projects, and leads a Community, developing tools, contributing to policy reports, and representing EIT Digital in international fora engagement. Moreover, he is the Managing Director of EIT hub Silicon Valley, working on transatlantic synergies and access to US and EU programs, aiming to bridge the ecosystems.

Paula Alexandra Silva - Assistant Professor, University of Coimbra

Paula Alexandra Silva is a passionate scientist and educator, who believes in the power of design, values and empathy to drive positive change in the world. With a background in Human-Computer Interaction, she applies user research, human-centred design, participatory and co-design approaches, and tailored usability and user experience evaluation methods to advance digital health, accessible computing, and digital interactive systems that can inspire a world where everyone feels included and is able to participate in society. Born in South Africa but primarily raised in Portugal, she returned home to Portugal, after enriching experiences in the UK, Hawaii, Ireland, and various other locations.

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Participants of Working Group 1: Human-Centric Digital Transformation

Manuel Yubero -Project Manager, FIIAPP

Manuel is a lawyer and Project Manager at FIIAPP. He has experience in the negotiation and coordination of digital projects in areas such as change management, Artificial Intelligence, data protection, cybersecurity and e-government. He has participated in various EU-LAC policy dialogues on digitalization in the framework of different regional programmes.

Steffan Gómez - Researcher in Data Science, State of the Nation Program

Costa Rican. Political scientist. Researcher and university professor. With extensive experience in research projects in Latin America and Costa Rica. Areas of work: human development, democracy and elections, political culture, social policy, big data, and complex data visualization.

Paul Fervoy - Chief Executive Officer, SIFTIA

With 29 years of experience in the ICT (Information and Communication Technologies) sector across the USA and Latin America, they have led technology-driven companies, founded startups that merged with regional firms, and directed multidisciplinary teams in data science and engineering. As a speaker and educator in digital marketing and data-driven automation, they currently collaborate with Siftia, specializing in data product engineering across Costa Rica, Mexico, and New York. Additionally, they serve as Honorary President of CAMTIC, representing Costa Rica's ICT industry, and Vice President of ALETI, the Ibero-American Federation of Technology-Based Business Associations. Their commitment spans industry, academia, civil society, and public sector commissions, advocating for the transformative power of digital technologies to enhance market value, citizen transparency, civil society engagement, and equitable access.

Manuel Mora -Director of Research and Technological Development, Micitt

Director of Research and Technological Development at the Ministry of Science, Innovation, Technology, and Telecommunications of Costa Rica

Ignacio Trejos - Director of Research, Club de Investigación Tecnológica y Tecnologico de Costa Rica

University professor of Computer Science since 1984 at the Costa Rica Institute of Technology (Full Professor). Co-Founder, Professor, and former Rector of Cenfotec University. Interests: Software Engineering, Programming Languages, Computer Science Education. Directed more than 35 Master's theses, published 40 technical or scientific articles, published over 240 opinion or dissemination articles, delivered more than 200 lectures. 'Green and Intelligent' award from CAMTIC, 2018. Award for Merit in Computer Science Education and Research by the College of Professionals in Computer Science and Computing, 2000. British Council Scholar, 1989 – 1993.

Andrea Mora - Academic Advisor, Universidad Nacional

Coordinator of the Information and Visibility Process for R&D&I and serves as an academic advisor on Open Science, covering academic and scientific journals, the Institutional Academic Repository, the Academic Network, and Research Data Management. Additionally, manages the Support Fund for academic and scientific journals, the Translation and Publication Fund for scientific articles, and member of the Institutional Open Government Commission, the CONARE Open Science Commission, La Referencia Costa Rica, and the Central American Open Science Group - CSUCA.

Emmanuel Picado - IT Director, IICA

Manager of Information and Communication Technologies and Digital Agriculture, with over 15 years of experience in implementing and managing information and communication technologies. Researching and implementing knowledge management strategies, focusing on how information and communication technologies contribute to achieving business strategic objectives or the successful completion of projects. Currently pursuing a Ph.D. in Business Sciences.

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Participants of Working Group 1: Human-Centric Digital Transformation

Allan Campos - Researcher in Data Science, State of the Nation Program

Electromechanical Engineer with master's degrees in Mechanical Engineering and Business Administration. He holds patents as an inventor registered in Costa Rica and the United States and is published as an inventor in the United States Patent and Trademark Office. He worked for 7 years as a technological analyst at the Presidential House of the Government of Costa Rica. Additionally, he has held the position of After-Sales Manager at AutoSueca (representative of Volvo in Central America). For 24 years, he has been a Physics and Mechanics professor at various universities in Costa Rica. Since 2011, he has been the Director of the Environmental Management Area at CENAT/CONARE and for 22 years he has managed national and international projects in technological and business linkage issues at this institution. He has been logistics coordinator for multiple national and international congresses such as ISRSE-2007 and 2009, ICANN-43 (2012), Global Youth Summit-ITU/UN-2013, ELAN-2015 to 2017, Tunnel of Science, and WRO-2017, among others.

Moisés Torres - Executive Director, CUDI

Dr. Moisés Torres Martínez has been appointed General Director of CUDI. With a background in information technology and education, he has held leadership roles at institutions like UNADM and Paragon Technologies. He's a prominent figure in supercomputing and has contributed to projects in Mexico and internationally. Torres holds a PhD in Educational Administration from UCLA.

Martha Imelda Madero Villanueva - Academic Coordinator, CUDI

Martha is a seasoned educator with a master's in education. She currently coordinates academic programs at CUDI, a leading institution in Mexico's online education. With over 20 years of experience, she has contributed to various virtual education initiatives and held key positions at UACJ and CIITA. Villanueva has a strong background in both education and technology. She participates in different nation-wide virtual and online education initiatives. She is a member of the 'Red Late México' and the Educational Technology for Virtual and Online Education group which is a part of the National Association of Universities and Higher Education Institutions (ANUIES).

Leandro Neumann Ciuffo - e-Science and Advanced Cyberinfrastructure, RNP

Associate Director for e-Science and Advanced Cyberinfrastructure in the Directorate of RD&I at RNP (Brazil's National Research and Education Network). His work includes interacting with scientific communities concerning new approaches to advanced network use. Currently, Leandro is involved in research projects on the topics of future internet, blockchain, open science, and high-speed data transfers. From 2006 to 2009 he worked with Grid Computing and e-Science projects at INFN-Catania (Italy), being responsible for dissemination and user support activities. Leandro holds a M.Sc. in Computer Science from the Federal Fluminense University (UFF) in Brazil.

Belén Aguero Research Director, Political Watch

Research director at Political Watch, a think and do tank based in Madrid, with a background in cooperation policies, sustainable development and civic technologies.

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Participants of Working Group 2: Diversity, Equality and Inclusion

Alejandra Davidziuk - Outreach Manager, BrainLat Institute

She has a degree in Social Communication Sciences from the Universidad de Buenos Aires, a Master of Arts in International Affairs at The New School (United States) with a specialization in Social Economic Development. She is currently a student in the doctoral program in Social Sciences at the Instituto de Desarrollo Económico y Social (IDES-UNGS). In addition, she counts with a post-graduate course in Public Policy Management (FLACSO-INAP) and training courses in Project Management (Universidad Nacional de Lomas de Zamora), Quality Communication (INAP), Funding R&D and Innovation Business Management (European Commission). She has over twenty years of progressive experience as journalist, researcher, project manager, and outreach officer with special focus on virtual and onsite communication strategies and community relationship building. She worked for 13 years at the Ministry of Science, Technology and Innovation of Argentina, where she was the coordinator of the Argentina-European Union Liaison Office and National Coordinator of the Argentinean EEN Node (Enterprise Europe Network). Currently, she is Outreach Manager at the BrainLat Institute de la Universidad Adolfo Ibáñez de Chile.

Alice Rangel de Paiva Abreu - Professor Emerita, Federal University of Rio de Janeiro

She is a Professor Emerita of the Federal University of Rio de Janeiro (UFRJ), Brazil, has a PhD in Social Sciences from the University of São Paulo Brazil (1980), and M.Sc. in Sociology from the London School of Economics and Political Science (LSE) of the University of London (1971). She was a Full Professor of Sociology at the UFRJ for twenty-five years and has published extensively in sociology of work and gender as well as, more recently, on gender and science. Since early 2000 her career has been closely linked to science, technology, and innovation policy, holding important positions in Brazil and internationally. She was the vice President of CNPq, the Brazilian Council for Scientific and Technological Development, the Director of the Office of Education, Science and Technology of the Organization of American States, in Washington D.C., the Director of the Regional Office for Latin America and the Caribbean of the International Council for Science (ICSU). More recently, Prof. Abreu was the Director of GenderInSITE (2015-2017), a global initiative aimed at promoting the role of women in science, innovation, technology and engineering (SITE). Prof. Abreu is a member of several important boards and advisory committees of different institutions and project, such as the Gender Advisory Board of the UN Commission of Science and Technology for Development (CSTD), and keeps active in the area of equality policies in science and technology. Professor Abreu received the Ordem Nacional do Mérito Científico (Comendador) of Brazil in 2001; the Palmes Académiques (Officier), of the Ministère de la Jeunesse, de l'Éducation Nationale et de la Recherche. République Française, in 2003. Prof. Abreu is an International Honorary Member of the American Academy of Arts and Sciences, and an International Science Council Fellow.

Constanza Bohle - Institutional Excellence Incentive Program Coordinator, University of Chile

Constanza Bohle Gutiérrez is an economist with a Master's degree in Economic Analysis and a diploma in University Management with a Gender Perspective from the University of Chile. She currently leads the institutional accreditation of the research, artistic creation, and innovation area at the same institution. She coordinates the Institutional Excellence Incentive Program, aimed at strengthening knowledge generation in the faculties through a distributive model of internal resources. Her career is notable for monitoring R&D&I according to the Research Policy and leading the development of the InEs Gender Project, which seeks to develop institutional capacities to reduce gender gaps in the area.

Cristian Patiño - Specialist in Quality Management and Sustainability, CEDIA

Cristian Patiño is a Specialist in Quality Management and Sustainability with more than 15 years of experience. He's been involved in Public and Private projects in both executive and technical roles. He has worked in Ecuador, Peru and Colombia in the fields of quality management, environmental science and sustainability. Today, as a Quality Assurance Specialist at the Ecuadorian Research and Education Network CEDIA, he is coordinating the Work Package 1 of the SPIDER project. He has an Undergraduate degree in Industrial Engineering in Ecuador and a Masters in Science in Sustainable Development in The United Kingdom.

Cristina López - Researcher at LifeSTech, UPM

She is a creative and enthusiastic biomedical engineer, with a master's degree in UX/UI and graphic design. She works on european projects at the LifeSTech research group (Universidad Politécnica de Madrid, Spain) implementing User-Centered Design (UCD) methodologies for the creation of solutions in the areas of Active and Healthy Aging (AHA) in smart environments. Additionally, she has expertise in applying design thinking and co-creation methods to integrate gender and other diversity perspectives into Science, Technology, and Innovation (STI).

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Elisabeth Kohler – Senior Policy Officer, French National Centre for Scientific Research

She is a senior science policy officer and director of the Gender Equality Unit at CNRS, an institution that has been awarded the EU-gender equality champion prize in 2014. Between 2018 and 2023, she coordinated the Horizon 2020 project GENDER-NET Plus dealing the integration of the gender dimension in research contents and participated in two other EU funded projects, GE Academy (design of training programmes on gender equality) and GENDER STI (gender equality in international cooperation STI agreements). She is member of the Equality, Diversity and Inclusion Panel of the Horizon Europe project GEO-INQUIRE. Prior to her appointment as director of the Gender Equality Unit, she worked at the CNRS in various fields, ranging from scientific information to innovation policy, European project management and international cooperation. She has a Master's degree in cultural history.

Gabriela Ferreira – Postdoctoral Researcher, University of São Paulo

She is a post-doctoral researcher at the Institute of Advanced Studies, University of São Paulo (USP). She holds a PhD in International Relations from USP and King's College London (KCL). Since 2014, she has been a researcher at the Center for International Negotiations Studies (CAENI/USP). Gabriela's expertise lies in International Relations, with a focus on the intersection of Science, Technology, and Innovation (STI) with public policy. Her work explores how scientific advancements inform and shape effective public policy. Her research interests include Equity, Diversity, and Inclusion (EDI), Global Environmental Change (GEC), and socioeconomic development.

Julia Palma – Undersecretary of Research, Innovation, and Technology Transfer in Ecuador

Master's in Constitutional Law, Attorney of the Courts of the Republic of Ecuador. She entered the public sector in 2013 and has held positions such as Advisor to the Regional Director of CNE Manabi, Provincial Legal Specialist of the Comptroller General of the State (first place in the 2014 competition), and Advisor to the General Director of the Judiciary Council (service commission) in 2021. In 2022, she was Supervisor of Predetermination at the Comptroller General of the State, and she is currently the Undersecretary of Research, Innovation, and Technology Transfer. She has been a faculty member at the School of Law of the Universidad de Especialidades Espíritu Santo since 2021. She is a student of Psychology at the Universidad de Especialidades Espíritu Santo and a Master's student in Human Rights at the European University.

Karen N. Salt – Professor at Manchester Metropolitan University and Director for Trusted R&I, UK

Prof. Karen Salt is an expert on governance, systems and transformative change. She is currently Professor of Culture, Place and Communities at Manchester Metropolitan University and also has a partial appointment as Portfolio Director of Trusted Research and Innovation within UK Research and Innovation (UKRI), the UK's largest public funder of research and innovation. She has led and managed interdisciplinary research centres, collaborative research teams and large research projects, including those focused on producing evidence-informed interventions and policies. A sought after thought-leader and speaker, Salt works closely with leaders across Government, academia, civil society and industry and contributes to numerous international initiatives focused on inclusive policymaking and responsible innovation.

Lidia Zakowska – Professor on Transport Engineering, Cracow University of Technology

Lidia Zakowska, Ph.D., professor on transport engineering and safety at Cracow University of Technology, Director for research at Institute of Management in Building and Transport of Civil Engineering Faculty, chair of the Section of Transport. Her international research activities concentrate on the following topics: sustainable transport, methodology of safety studies in road transport, visualization in transportation, transport environment and climate change, perception of safety, mobility and accessibility of transport users, equity and equality in transportation, women mobility conditions and life quality. She is an author of over 100 research publications. She has led numerous Research Grants and Projects, on national and international levels, including transportation studies in: Management Committee Member at COST Actions TU1002 (mobility and life quality), TU1305 (social networks and travel behaviour) and TU1209 (equity in transportation); 3 Polish MNiSW Grants coordinator; EC 5th FW Research Grants Partner; International Research Co-operation Israel-Poland Grant leader; BPRPP (The British-Polish Research Partnership Program) Grant. She is a Member of Editorial Board of some prominent international journals, lays also as referee of the top journals in transportation and civil engineering sector, as an expert on social aspects in sustainable transport, safety and equity. She is a national expert at the Transport Committee of PAN, Polish Academy of Sciences. Funding member of WIE (Woman in Engineering) Standing Committee at World Federation of Engineering Associations, President of the Polish Association of Engineers and Technicians of Transportation, SITK RP in Krakow.

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Participants of Working Group 2: Diversity, Equality and Inclusion

Liisa Ketolainen – Gender Equality Expert, Digital for Development (D4D) Hub

Liisa Ketolainen is a gender equality expert with specific focus on technology and digitalisation. Currently, Ketolainen works at the Digital for Development (D4D) Hub in Brussels, Belgium. The Hub is a strategic platform that aims to strengthen digital cooperation between the European Union and its Member States and partners in Africa, Asia-Pacific, Latin America and the Caribbean, and the EU neighbouring countries. With over a decade of experience in international development questions at governmental, multilateral and civil society levels, Ketolainen is seasoned in cooperating with various stakeholders. At the Hub, Ketolainen facilitates the Working Group on Digital Connectivity, committed to promoting human rights-based digital transformation.

Luciana Ayciriex – SPIDER senior researcher, INMARK

Luciana Ayciriex is a Senior Consultant at INMARK. She has more than 15 years of experience in managing international cooperation on Science, Technology and Innovation and interdisciplinary programmes and projects between the European Union and Latin America and the Caribbean. She worked with national and international authorities and institutions, promoting dialogue between main actors responsible for national Science and Technology policy. Expertise in integrating gender perspective in STI through design thinking and co-creation process. She was in charge of the technical and financial management of more than 25 European Union-funded research and innovation projects. As a Project Manager at the Ministry of Science, Technology and Productive Innovation in Argentina, She also led the Political Dialogue on STI between Latin America, the Caribbean and the European Union and participated at the Senior Officials Meetings of the Community of Latin American and Caribbean and the European Union States in STI as well as in the bi regional Working Groups meetings.

Maria Augusta Hermida – Rector, University of Cuenca

María Augusta Hermida Palacios is an Architect from the University of Cuenca, with a Master's Degree in Architectural Projects and Computerization. She has a PhD in Architecture from the Polytechnic University of Catalonia. Principal professor at the Faculty of Architecture and Urban Planning of the University of Cuenca and director of the Sustainable Cities Research Group – LlactaLAB. His research focuses on topics related to urban-architectural design and the sustainability of Latin American cities. She is the director of several research projects on: urban sustainability, urban resilience, sustainable use of water, urban energy efficiency, city and public services, urban rivers and city ecosystems. She was director of the Graduate Centre of the Faculty of Architecture, founder and director of the Master of Architectural Projects for several years. Coordinator of national and international architecture and city networks, such as the Urbenere Network, Efficient and Sustainable Inclusive Resilient Cities Network; and the REDEUS_LAC Network, Network of Sustainable Urban Development Study Centres in Latin America.

Maria F. Cabrera – SPIDER Quality and Risk Manager, UPM

Dr. Maria Fernanda Cabrera is Telecommunication Engineer, with a PhD in Biomedical Engineering, working as Professor of Bioengineering at the Telecommunication Engineering School. She is the Innovation Director of Life Supporting Technologies (LifeSTech) research group, financial director of the Universaal-IoT Alliance, Treasurer of the IFMBE, and Secretary of ACTIVAGE.ORG association. In addition to her role in teaching, she undertakes integral positions as a project coordinator and technical manager in various European and Spanish research-funded projects. Her contributions encompass acting as a project coordinator, technical lead, or quality manager in a portfolio of over 20 research initiatives supported by the European Commission. With a remarkable track record, she has led more than 60 European research projects as the Principal Investigator, underscoring her ability in orchestrating impactful research actions. Her field of expertise spans a broad spectrum of applications in the domains of the ICT applied to different sectors like digital health and social inclusion. This includes areas such as services personalization, human factors, telemedicine, diversity-equity-inclusion, and enhancing digital accessibility. She stands as the author of an extensive body of work comprising over 120 scientific papers featured in both national and international journals. She is member of the editorial board of the IEEE Open Journal of Engineering in Medicine and Biology and cofounder of the Committee for Women Engineering activities of the IEEE BHI.

Marina Tisner – Communications Manager, INMARK

Marina Tisner is Communications Manager at INMARK. With over six years of expertise in the field of communication, the past three years, she has specialized in European Projects, focusing on communication and dissemination strategies. She has worked in the international research project, Gender STI, which investigated women's participation in science, technology, and innovation (STI) dialogues between Europe and third countries. Additionally, she has contributed to the dissemination efforts of the Gender STI project's Community of Practice. Marina's experience extends to other European projects related to Responsible Research and Innovation (RRI), such as REINFORCING.

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Martha Zequera – Full Professor, Pontificia Universidad Javeriana

Prof. Martha Zequera is a biomedical engineer with an MSc from Dundee University and a Ph.D. from the University of Strathclyde. She has been a Full Professor at the Pontificia Universidad Javeriana in Bogotá, Colombia, since 2010, and an Honorary Research Fellow at Strathclyde University. Prof. Zequera's research focuses on Active and Healthy Aging, particularly using IoT, continuous monitoring systems, and deep learning for telemedicine, diabetes care, and physical rehabilitation. She has extensive experience in integrating gender perspectives into science, technology, and innovation, and has contributed to numerous scientific publications and conferences. She has also played key roles in IEEE/EMBS, IFMBE, and CORAL, promoting biomedical engineering education and collaboration. Prof. Zequera coordinates the biomechanics research lab Footlab and has led several European Commission-funded projects aimed at improving healthcare through emerging technologies.

Martina Lindorfer – Senior Project Manager & Researcher, Centre for Social Innovation

Martina Lindorfer is a senior researcher in the department for "Equal Opportunities and Employment" at the Centre for Social Innovation (ZSI), in Vienna. She graduated from the University of Vienna with a degree in International Development. At ZSI, she has led numerous international cooperation projects, many of which have focused on RTI cooperation with Latin America and the Caribbean. Her current research focus is on different aspects of the social embedding of innovations to tackle social problems. Her thematic portfolio encompasses social innovation, citizen participation, gender and diversity, and social inclusion. Her methodological expertise is in qualitative social research and participatory methods. Martina Lindorfer has completed a training course on gender and diversity management and is currently enrolled in a training course on change management.

Silvia Kochen – Researcher at CONICET, Secretary and founder of RAGCyT

Sara Silvia Kochen is a Principal Researcher at CONICET and Associate Professor at the University of Buenos Aires, where she also directs the Master in Neurosciences at Univ. Jouretche. She founded and leads the Unit of "Studies in Neurosciences and Complex Systems" (ENYS), focusing on epilepsy and healthy aging-dementia. Kochen is involved in various leadership roles, including as Secretary and founder of the Argentine Network of Gender, Science, and Technology (RAGCyT), and she coordinates the CONICET Medicinal Cannabis Program. Additionally, she holds a PhD in Audio-Visual Arts and has directed multiple documentary films.

Valeria Lentini – Economist at UNHCR, Professor at the University of Costa Rica

Ph.D. Valeria Lentini Gilli is an Economics Professor with a Ph.D. from the University of Zaragoza, Spain, an M.A. from the University of Sussex, UK, and a B.A. from Universidad Nacional, Costa Rica. She teaches Economic Data, Research Seminars I and II, and Practical Exercises in Economics. Dr. Lentini's recent publications cover public policy in education, human capital depreciation in OECD countries, university strategies during COVID-19, and higher education in Costa Rica.

Yolanda Ursa – SPIDER Project Coordinator, INMARK

Yolanda Ursa is the Director of Innovation Management at INMARK. Yolanda has an extensive experience as project manager and coordinator of research and innovation projects funded by the EC Framework Programmes. Yolanda contributes significantly to the human factors of technological solutions, including gender analysis and intersectional bias. Her research areas cover a wide range of digital and emerging technologies, including Cybersecurity, Artificial Intelligence, IoT, Big Data, Digital gaming technologies, Energy Transition, Health and Wellbeing. Yolanda is actively involved in supporting policy dialogues in Science, Technology and Innovation between Europe and strategic partners countries. Currently, she is the coordinator of SPIDER that aims to support the exploitation of the full potential of the BELLA network (Building the Europe Link to Latin America and the Caribbean) and the implementation of the outcomes of EU-LAC digital dialogues in R&I cooperation. Additionally, Yolanda is the chair of the Secretariat of the European Observatory on Gender in STI.

Elisabeth van Holthe tot Echten – Senior Project Manager, Female Founders

Elisabeth is working as a project manager at Female Founders, overseeing several women-focused programmes and initiatives. During her master studies "Global Studies - A European Perspective", she focused on female entrepreneurship and innovation, and completed research on gender lens investing for the United Nations Industrial Development Organization. In her role at Female Founders, she has been responsible for the inception, design, and implementation of projects such as Lead F Africa (a leadership programme for women innovators and policy-makers, in collaboration with GIZ), Grow F (Female Founders' investment-readiness accelerator), The EIC Women Leadership Programme, and the publication of a report on the fundraising landscape in DACH for women entrepreneurs (in collaboration with the Vienna Business Agency).

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Tania Altamirano - Gerente de Relaciones Académicas, RedCLARA

Nicaraguan living in Chile for 18 years. With a background on social communications, since 2009 is part of the RedCLARA's team, from the Communications and Public Relationship area, with the generation of informative material, the participation in IT international events and the organization of virtual meetings. Starting on 2014 her activities involved actions to support and enhance the work of research and academic communities in RedCLARA and with other regional networks in the world through global initiatives including ELCIRA and MAGIC projects. Since 2018 her role as Academic Relations Manager es focused on the articulation of initiatives on priority areas such as eHealth, Climate Change and education, the development of engagement strategies for the BELLA II Project (Building the Europe Link to Latin America and the Caribbean).

Eliana Ulate Brenes -International Cooperation Coordinator, MICITT

A political scientist specialized in international cooperation, passionate about science and technology, with over 10 years of experience in bilateral and multilateral international relations with entities in the science, technology, and innovation system. National Contact Point Coordinator for Costa Rica for the Horizon Europe program of the European Union, part of the working group of the Ministry of Science, Innovation, Technology, and Telecommunications in the OECD accession process. Particularly interested in topics such as artificial intelligence, cybersecurity, digital governance, climate change, public-private partnerships for development, digital trade, among others.

Nina Rilla - Senior Scientist in Ethics and Responsibility of Innovations, VTT

Works as Senior Scientist at VTT Technical Research Centre of Finland. She has more than 15 years of research experience in innovation studies. Her research interests have recently focused on studies that combine aspects of sustainability, gender equality and transformative innovation policy. She deems integration of gender equality and inclusion in R&D&I contents important in creating inclusive practices for science and technology, and is also interested in social value creation and socio-technical change in fast-developing technology fields, such as AI. She holds a Doctoral degree in International Business.

Kemly Camacho - Researcher, Cooperativa Sula Batsu and UCR

Co-founder and general coordinator of Cooperativa Sulá Batsú, a cooperative focused on digital technologies for local development. With backgrounds in computer engineering, anthropology, and dual master's degrees in knowledge society and program evaluation for development, Kemly has over 20 years of experience exploring the social impacts of digital technologies. She leads the TIC-as Program, promoting rural technology hubs with female leadership across Central America and fostering women-led tech entrepreneurship. Kemly also serves as a researcher and lecturer at Universidad Latina (Powered by Arizona State University) and has held leadership roles in Costa Rica's ICT sector.

Katherine Chaves - Director and Founder, Fundación Rocket Girls

"The idea is to present access to technology as a human right." This premise guides the non-governmental organization Rocket Girls and is also Katherine Chaves' life mission.

Fannella Giusti - Institute of Women's Studies, Universidad Nacional

Holds a master's degree in Domestic and Gender Violence from the Women's Studies Program at the University of Costa Rica (UCR) and the National University of Costa Rica (UNA). With over fifteen years of experience in addressing and preventing gender-based violence, she has been an academic and researcher at UNA's Institute of Women's Studies (IEM) for over a decade. She teaches in the Master's Program in Domestic and Gender Violence at UCR-UNA and in the Gender and Development Bachelor's Program at IEM. Her research focuses on domestic violence and other forms of violence against women. She also coordinates gender programs and contributes to policy implementation against sexual harassment at UNA.

Adriana Oviedo - Coordinator of the Digital Transformation Team, State Distance University

Journalist and Master's in Intellectual Property; she holds a specialization in Transformational Leadership and a diploma in Digital Transformation. She has been working at UNED since 1999 and served as the coordinator of the Telework Program at UNED from 2012 to 2022. She has been a speaker at various conferences and seminars on telework and has authored several articles on this topic. Additionally, she coordinates the UNED's Digital Transformation leadership team.

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Participants of Working Group 2: Diversity, Equality and Inclusion

Deryhan Muñoz – Director, SUTEL

Serves as the Director of Competition at the Telecommunications Superintendence (SUTEL). Previously, she held roles as a Regulation Specialist and market analyst at SUTEL and in the coffee sector, respectively. Ms. Muñoz played a pivotal role in shaping Costa Rica's current competition law, Law No. 9736, and has actively supported Costa Rica's accession to the OECD in competition matters. She led SUTEL's internal restructuring for law implementation and spearheaded efforts to develop new regulatory tools for enforcing competition law in the telecommunications sector. Ms. Muñoz holds a degree in Economics, specializes in Competition from the University of Costa Rica (UCR), and has studied Telecommunications Law at the University of Valladolid (Spain) and Competition Law at University Ulead (Costa Rica).

Ana Lucía Ramírez – Executive Director, INFOCOM

For over 15 years, she has served as a legal advisor and in management roles within Costa Rica's private sector, specializing in construction, telecommunications, and technology. Currently, she is the Executive Director of the INFOCOM Chamber, actively participating in government committees such as MICITT, the Vice Ministry of Telecommunications, and SUTEL. She is also involved with UCCAEP, focusing on national development, public policy, and regulatory frameworks in technology, telecommunications, cybersecurity, digital transformation, and more. Personally, she's been a member of the Construction Law Commission at the Costa Rican Bar Association since 2021.

Ana Eugenia Rodríguez – Senior Scientist in Ethics and Responsibility of Innovations, VTT

Lawyer specializing in Competition and Telecommunications Law, and a certified mediator, with over 25 years of experience in pivotal roles within government. She has contributed to national policy development and strategy formulation at the Ministry of the Presidency, and previously led the Procedures and Mergers Department at Costa Rica's Competition Promotion Commission. Since October 2021, she has served as Head of Investigations and Mergers at SUTEL, ensuring a fair regulatory framework in the telecommunications sector.

Martha Ávila – Administrator, Corporación Universitaria para el Desarrollo de Internet

Seasoned educator with a master's degree in education. She currently leads academic initiatives at CUDI, a prominent institution in Mexico's online education landscape. With over two decades of experience, she has contributed significantly to various virtual education initiatives and held key positions at UACJ and CIITA. Villanueva's expertise extends to both education and technology, making her a valuable asset in the field of online learning.

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Annex 2: WG meeting reports

Insights of DIF-WGs Launch Meeting

Wednesday 26th of June from 14:00 to 15:30 (CEST)

WG1: HUMAN-CENTRIC DIGITAL TRANSFORMATION

TOPIC 1.1 : Policy, regulation and stakeholder engagement

To achieve effective execution of digital transformation initiatives, political commitments must be translated into actionable strategies by governments. The role of universities and research centers is pivotal, as they are instrumental in driving innovation and advancing digital transformation efforts. **Strengthening digital leadership** within organizations is essential to maintain commitment and adapt to political shifts that may affect digital initiatives. Another important aspect consists in establishing robust data ownership protocols to ensure that individuals and organizations retain control over their data. Implementing **data processing agreements (DPAs)** is necessary for handling data securely and transparently. To facilitate smooth digital transformation in the public sector, it is important to develop common standards and establish long-term agreements. Adherence to international standards will further promote compatibility and cooperation across borders. Besides, designing regional specifications for privacy and data protection that reflect local needs and characteristics is vital. Establishing collaborative research and innovation hubs will foster solution creation through cooperation among international organizations and stakeholders. Utilizing existing frameworks and initiatives will support transparency, accountability, and shared responsibility in digital initiatives.

Recognizing the differing strategic priorities between regions, such as the EU and LAC, is key to maintaining sustainable collaboration. Policies should encourage technological innovation while ensuring inclusivity for all population segments. Additionally, making algorithmic impact assessments mandatory for AI algorithms will enhance transparency and ethical standards. Finally, human-centric design guidelines should outline best practices for ensuring that digital technologies serve the needs of all individuals. Implementing **provenance protocols and data curation tools** will support open science and maintain data integrity, thus reinforcing the overall success and trustworthiness of digital transformation efforts.

Regulatory frameworks needed to promote transparency, accountability, and shared responsibility among stakeholders in digital initiatives

Several key insights emerge from expert discussions regarding this challenge. Current frameworks such as the General Data Protection Regulation (GDPR), the Network and Information Security (NIS) Directive, and national cybersecurity strategies like Brazil's National Cybersecurity Strategy offer valuable insights into how regulation can ensure transparency and accountability. These frameworks provide foundational principles for

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data protection, security, and digital governance that are crucial for harmonizing new digital initiatives. Additionally, regional initiatives such as the Digital Agenda for Latin America and the Caribbean (eLAC) demonstrate the importance of aligning digital strategies with regional priorities and challenges.

To promote a more inclusive technological landscape, it is essential to establish policies that not only encourage technological innovation but also **ensure that these innovations benefit all segments of the population**. This requires a transparent approach to setting strategic priorities and developing protocols that can be implemented at the national level, while also considering regional specifications and privacy concerns.

Furthermore, **enforcing data privacy rights and ethical standards in AI development** is crucial. Regulatory frameworks should incorporate principles that prevent discriminatory outcomes and ensure transparency in decision-making processes. In this context, mandatory algorithmic impact assessments for companies developing AI-based algorithms can be an effective measure to assess and mitigate potential biases.

Adapting regulatory frameworks to accommodate different regulations requires a **collaborative approach among stakeholders**, including executive leaders, employees, customers, suppliers, investors, and policymakers. Establishing independent regulatory bodies composed of experts from various sectors and civil society can facilitate the development of inclusive and representative regional specifications.

In summary, integrating existing frameworks with new regulations and designing inclusive, transparent, and accountable policies are key to promoting effective digital transformation. By focusing on these areas, stakeholders can work towards a regulatory environment that fosters responsible and equitable digital advancements.

Collaboration between international organizations and private sector entities to promote a human-centric vision in digital transformation

In exploring how international organizations and private sector entities can collaborate to foster a human-centric vision in digital transformation, experts believe that the emphasis is on aligning strategic priorities, utilizing tools for mapping relevant stakeholders, and developing guidelines that outline best practices for human-centric design in ICT.

A critical aspect of this collaboration involves establishing public-private partnerships to address gaps in digital literacy through **educational programs**. By working together, these entities can create targeted initiatives that enhance digital skills and empower individuals across diverse populations. Another significant approach is the creation of **collaborative research and innovation hubs**. These platforms allow international organizations and private sector players to co-develop solutions that tackle global challenges with a focus on human needs. Such hubs encourage joint efforts and resource sharing, fostering innovation that prioritizes user welfare.

In addition, protecting data and individual rights must be a core component of these collaborative efforts. Open dialogues on **ethical considerations**, including artificial intelligence, data privacy, and algorithmic bias, are essential for maintaining transparency and trust. Adopting frameworks like the Global Digital Compact can also be useful. This framework underscores the importance of human rights, inclusion, and responsible data governance, providing a foundation for policies and practices that ensure digital transformation benefits everyone equitably.

Different technologies present unique opportunities and challenges for promoting a human-centric vision. For example, blockchain technology can enhance financial inclusion by offering unbanked populations access to financial services, thereby promoting economic empowerment. **Each technology has its own potential** to address specific human-centric concerns, and these nuances must be considered in collaborative efforts.

Fostering a human-centric approach to digital transformation requires a multi-faceted strategy that includes strategic alignment, stakeholder mapping, and collaborative innovation. By emphasizing ethical considerations and leveraging frameworks that support human rights and inclusion, international organizations and private sector entities can work together to ensure that digital advancements serve the broader goals of equity and empowerment.

Building a secure digital backbone that protects data privacy while enabling innovation and open science

According to the experts, ensuring the integrity and security of data while enabling progress involves a delicate balance between privacy protections and the facilitation of collaborative and innovative research. A foundational approach to achieving this balance is the **implementation of robust provenance protocols**. By ensuring accountability in data collection and processing, these protocols support open science while maintaining transparency and traceability. Utilizing dataverses and data curation tools can further enhance this openness, allowing researchers to share and access data responsibly.

Another essential aspect is the establishment of **consistent data-sharing policies** across disciplines and national boundaries. Such consistency ensures that data can be shared securely and effectively, fostering collaboration and innovation while adhering to privacy standards. Similarly, scientific bodies should develop policies that address and prevent epistemological violence, ensuring that local solutions and regional products are respected and integrated into broader research frameworks.

To protect personal information without stifling research, data anonymization and pseudonymization techniques are indispensable. These methods allow for the analysis and utilization of data while **safeguarding individual privacy**, striking a necessary balance between security and the advancement of knowledge.

Different strategies are important for enabling **secure data transfers between institutions**. Implementing data encryption, network segmentation, intrusion detection systems, and

robust access controls and authentication measures serves
to protect data integrity and confidentiality. These technologies support a secure digital infrastructure that underpins both innovation and open science.

In conclusion, building a secure digital backbone involves integrating provenance protocols, establishing uniform data-sharing policies, and employing advanced data protection techniques. By combining these elements with sound technological practices, we can create an environment that upholds data privacy while driving forward innovation and collaborative research.

Continuity in digital transformation commitments despite political changes

Based on insights from experts, several key strategies emerge as essential for maintaining effectiveness in digital transformation efforts. Firstly, the **role of National Research and Education Networks (NRENs)** stands out. These networks serve as critical enablers for the execution of digital commitments by providing a stable infrastructure for communication and collaboration. By facilitating effective implementation and coordination, NRENs help ensure that digital transformation goals remain on track despite shifts in the political landscape. **Strengthening digital leadership** within organizations is another key strategy. Effective leaders who are committed to digital transformation can drive initiatives forward and navigate political shifts with resilience and adaptability. Their leadership is instrumental in maintaining focus despite changing political contexts.

Long-term agreements are essential for providing stability and ensuring that digital transformation efforts are not disrupted by political changes. These agreements create a foundation for continuity, allowing organizations to focus on their long-term goals and strategies. **International instruments and standards** also play a significant role in ensuring continuity. Adopting and adhering to globally recognized frameworks can provide a consistent basis for digital transformation efforts, helping to mitigate the impact of political changes on ongoing projects.

User education emerges as another fundamental aspect. By equipping individuals with the knowledge and skills needed to engage with and advocate for digital initiatives, society can foster a culture of transparency and accountability. This helps address concerns around data misuse and supports the sustainability of digital commitments. Finally, the concept of **data sovereignty** highlights the importance of giving control back to individuals over their own data. Establishing clear protocols for data collection, maintenance, and usage ensures that data is handled responsibly and transparently. By empowering individuals to make informed decisions about their data and providing the necessary technology to manage it, organizations can reinforce their commitment to digital transformation and enhance trust in their processes.

Continuity in digital transformation commitments requires a combination of strategic infrastructure, adherence to international standards, proactive user education, long-term planning, strong leadership, and a focus on data sovereignty. These elements together help

create a resilient framework capable of withstanding political changes and sustaining progress in digital transformation initiatives.

TOPIC 1.2 : Implementation, security, and measurement

The primary conclusion is that adopting a human-centric approach to digital transformation needs a comprehensive strategy that encompasses stakeholder engagement, education, ethical considerations, and a robust framework for measuring impact and success. Effectively addressing barriers and fostering cross-sector collaboration are critical for achieving meaningful and sustainable digital transformation, particularly within the EU-LAC context.

To assess and maximize the positive social impact of digital transformation projects, several measures should be undertaken. These include increasing the frequency of workshops and stakeholder engagement, requiring medium to long-term plans to ensure social sustainability post-project, conducting surveys to identify training needs, and sharing workshop outcomes with stakeholders to guide decision-making and potential improvements.

Education and capacity-building initiatives are important aspects in fostering a human- centric digital society. This can be achieved by implementing project-based modules that incorporate the social impact of digital transformation, encouraging consideration of project ethos and values from the start, integrating digital education into curricula to build comprehensive capacity, and regularly updating educational content to include both digital and cyber topics alongside soft skills.

On the other hand, the barriers to achieving a human-centric digital transformation include the need to address gaps in knowledge and cross-border analysis, enhance digital infrastructure within universities, improve understanding of human needs to prevent technology from overshadowing them, and develop and enforce standards for digital projects. Overcoming silos through a multidisciplinary approach and emphasizing ethical considerations throughout the transformation process are also essential.

Finally, to measure the success of human-centric digital transformation initiatives, it is important to evaluate cost-effectiveness, measure the number of people engaged and the overall impact on their lives, track improvements in health and wellness, assess advancements in skills and learning outcomes, and ensure accessibility and openness of digital solutions.

Measures to assess and maximize the positive social impact of digital transformation projects

In evaluating and enhancing the positive social impact of digital transformation projects, several key measures emerge from discussions among experts. One approach is to **increase engagement and interaction between stakeholders** through additional workshops. These sessions can facilitate more meaningful dialogue, allowing diverse perspectives to inform project design and implementation. By fostering stronger

relationships among stakeholders, these workshops can lead to more tailored and impactful outcomes.

Another important measure is the requirement for **medium to long-term planning focused on social sustainability**. This includes developing robust exploitation plans that prioritize social impact throughout the project's lifecycle. By embedding social considerations into the core strategy, projects can achieve more enduring benefits and address pressing societal needs effectively.

Surveys are also valuable tools for **identifying and addressing training gaps**. Conducting comprehensive surveys can reveal the most pressing needs in skill development and knowledge areas. This data-driven approach enables the creation of targeted training programs that enhance the capacity of individuals and organizations to contribute to and benefit from digital transformation.

Sharing the outcomes of workshops and surveys with stakeholders is essential for informed decision-making. By **disseminating findings and engaging in collaborative review processes**, stakeholders can collectively assess the effectiveness of the project and identify areas for improvement. This transparent and iterative approach ensures that the project remains aligned with social impact goals and can adapt to evolving needs.

Role of education and capacity-building initiatives in fostering a human-centric digital society

In fostering a human-centric digital society, education and capacity-building initiatives play a crucial role by embedding core values and practical skills into the learning process. Discussions of experts reveal that educational strategies should be designed to address not just technical proficiency but also the broader social implications of digital transformation. One of the primary insights is the **integration of project-based modules that emphasize the social impact** of digital initiatives. By incorporating this component into educational programs, students can engage with real-world scenarios where the ethical and societal consequences of their projects are considered from the outset. This approach ensures that future professionals not only understand the technical aspects of digital solutions but also appreciate their broader implications on society.

Education must also evolve to reflect the changing landscape of digital technology. **Updating curricula to include digital and cybersecurity topics** horizontally across various disciplines is essential. This integration ensures that all students, regardless of their field of study, acquire a baseline understanding of how digital technologies intersect with their areas of expertise. Such a comprehensive approach helps build a more informed and versatile workforce. Furthermore, **fostering soft skills alongside technical knowledge** is important. Skills such as critical thinking, ethical reasoning, and communication are vital for navigating the complexities of a digital society. By emphasizing these soft skills within educational programs, institutions can prepare students to handle challenges associated with digital transformation.

Barriers and solutions to achieving a human-centric digital transformation

Expert opinions show that achieving a human-centric digital transformation presents several significant challenges that need to be addressed comprehensively. Central among these is the pervasive issue of inadequate knowledge and cross-border analysis. Many initiatives suffer from a **narrow understanding of human needs**, often exacerbated by a fascination with technology that overshadows these needs. This disconnect can result in digital solutions that are technically sophisticated but fail to address the real-world problems of diverse user groups.

Another barrier is the **insufficient integration of digital structures within educational institutions**. Without robust digital infrastructure and curricula that emphasize a human- centric approach, the next generation of professionals may lack the necessary skills and understanding to drive meaningful change. This gap is further compounded by the absence of standardized practices and guidelines that ensure consistency in addressing human needs across different contexts and regions. Moreover, the **lack of emphasis on soft skills and multidisciplinary approaches** poses a significant challenge. The siloed nature of many organizations and educational programs can lead to fragmented perspectives, making it difficult to develop holistic solutions that are both innovative and empathetic. Addressing these issues requires a concerted effort to foster collaboration across disciplines and prioritize ethical considerations in the development and implementation of digital technologies.

To overcome these barriers, it is crucial to enhance knowledge sharing and foster cross-border collaborations that bridge gaps in understanding and practice. Implementing comprehensive **educational programs that integrate both technical and human-centric aspects**, alongside **developing standardized guidelines**, can help align digital transformation efforts with genuine human needs. Additionally, promoting a multidisciplinary approach and emphasizing the importance of soft skills will be essential in creating solutions that are both effective and empathetic. Addressing the main barriers to a human-centric digital transformation involves improving knowledge dissemination, integrating digital structures in education, developing standards, and fostering a multidisciplinary approach that balances technological advancement with a deep understanding of human needs. Through these efforts, we can better ensure that digital transformation initiatives are truly aligned with the values and requirements of diverse populations.

Metrics and indicators to measure the success of human-centric digital transformation initiatives

To effectively measure the success of human-centric digital transformation initiatives, experts say that it is crucial to capture both quantitative and qualitative aspects of impact. One essential metric is **cost-effectiveness**, which evaluates the economic efficiency of the initiative relative to its benefits. This helps determine whether resources are being utilized optimally to achieve the desired outcomes. Equally important are **metrics related to**

engagement and impact on individuals. Tracking the number of people engaged and assessing the broader impact on their lives provides insight into how well the initiative resonates with its target audience. These measures should encompass a range of effects, from improvements in health and wellness to the broader societal benefits of increased access and openness. **Skill development and learning** metrics are also vital, as they indicate how effectively the initiative enhances the capabilities of individuals. By evaluating the growth in skills and knowledge among participants, one can estimate the initiative's success in fostering personal and professional development. By focusing on these areas, organizations can ensure that their efforts are not only efficient but also meaningful and beneficial to the communities they aim to serve.

WG2: DIVERSITY, EQUALITY AND INCLUSION (DEI)

TOPIC 2.1 : Diversity, Equality and Inclusion in the research design process on Digital Transformation

The exploration of strategies and challenges related to ensuring diverse representation in research teams and integrating DEI into research processes has revealed several key insights. Some challenges have been identified that impact the inclusion of diverse faculty members. One major issue is the presence of unbalanced or biased commissions and pools of professors within research institutions, which can hinder the entry of new, diverse faculty members. Additionally, funding agencies often do not align with the diversity policies of research institutions, creating a disconnect that needs to be addressed.

Effective strategies to counter these issues include the implementation of affirmative actions, such as ensuring that research groups include at least one woman and creating programs to support female researchers in publishing their work. Gender Equality Plans are also crucial; for example, the European Commission's requirement for a Gender Equality Plan has led many EU institutions to adopt such plans, thereby improving diversity. Flexible work arrangements, such as remote or hybrid work options, are beneficial for accommodating the needs of a diverse workforce, including working parents and individuals with disabilities. Engaging local stakeholders and communities in research activities is another effective strategy, as it helps to involve a broader range of diverse populations, such as the elderly or younger individuals, particularly in health-related research.

Organizations face various challenges in integrating DEI into their research processes. These include entrenched stereotypes, unconscious biases, and resistance to change, often stemming from a lack of diversity within the research community itself. To overcome these challenges, advocacy for women's voices is crucial. For instance, women researchers should advocate for gender diversity in conference panels. Leadership commitment is also essential; women leaders must actively support and promote diversity within research environments. Affirmative actions, such as implementing quotas for women and other underrepresented groups, are necessary to drive progress. Raising awareness about barriers and unconscious biases is another critical step, as a lack of understanding about

these issues can impede DEI efforts. Furthermore, institutional change may be required to foster an inclusive culture across the entire organization, rather than just within individual research groups.

To effectively measure the impact of DEI initiatives, both informal and formal methodologies can be employed. Key metrics include monitoring career advancement and retention rates of diverse team members, gathering feedback from team members on inclusivity, applying established indicators such as UNESCO's, and analyzing the distribution of grants and funding.

Emerging trends and technologies are expected to play significant roles in advancing DEI in digital transformation research. Technologies such as Artificial Intelligence, Machine Learning, and data analytics offer powerful tools for identifying and addressing biases. However, it is crucial to examine the potential effects of these technologies on gender and inclusion, as they are often developed with implicit biases that may impact diversity and fairness.

These insights collectively underscore the importance of strategic action and ongoing evaluation to effectively integrate DEI principles into research and digital transformation initiatives.

Strategies for Ensuring Diverse Representation in Research Teams

Experts suggest various approaches to promoting diversity, equality, and inclusion in research teams, particularly within the context of digital transformation. One of the primary strategies involves **aligning institutional policies** to support diversity and inclusion. This can be achieved by revising existing policies or implementing new ones that underscore the importance of diversity. **Addressing entry challenges for faculty members** is also crucial. By setting up entry challenges aimed at increasing representation from underrepresented groups, institutions can tackle the lack of diversity within commissions or pools of professors.

Funding agencies play a critical role as well. Aligning their goals with diversity promotion within research institutions can serve as a powerful driver for change, incentivizing these institutions to prioritize diversity. Additionally, **affirmative actions** are essential, particularly programs that support women researchers, such as providing additional support for publishing. **Flexible work arrangements** are another effective strategy. By accommodating the different needs of researchers through flexible schedules, research teams can become more inclusive, especially for those with caregiving responsibilities or other commitments.

Engaging diverse populations in research activities through **cooperation with local networks**, including elderly individuals, can bring varied perspectives and experiences into the research process. Furthermore, making **Gender Equality and Diversity Plans** a requirement for accessing public funding ensures that institutions seeking public funds are committed to promoting gender equality and diversity. Providing **regular training on Diversity, Equity, and Inclusion (DEI)** to all team members is crucial. Continuous education on these topics helps to build a culture of inclusion and awareness within research teams.

The **commitment of leaders and managers** to DEI practices is fundamental. Ensuring that those in leadership positions are trained in and committed to DEI principles can drive institutional change from the top down. **Advertising positions in underrepresented venues** helps reach a broader and more diverse applicant pool by targeting job postings to specific communities or networks where underrepresented groups are active. Implementing **blind recruitment processes** can minimize unconscious bias in hiring decisions, allowing hiring committees to focus on the skills and qualifications of candidates without being influenced by personal characteristics.

Creating **supportive networks and mentorship programs** for underrepresented groups provides essential support and development opportunities. These programs can help individuals navigate their careers and overcome barriers to advancement. Ensuring **diversity in decision-making groups**, such as hiring committees and boards, is another effective strategy. Diverse decision-making bodies are more likely to consider a wider range of perspectives and make more inclusive choices.

Providing **equal access to opportunities** for career advancement, funding, and leadership roles ensures that all researchers have the chance to progress based on their merits. Supporting **flexible work schedules** and remote work options can help accommodate the diverse needs of researchers, making it easier for people from various backgrounds to participate fully in research activities. Encouraging **collaboration across disciplines** brings together diverse perspectives, enhancing the creativity and innovation of research teams.

Finally, implementing strategies to **interrupt bias in decision-making processes** is critical. This can involve training on recognizing and mitigating bias or using structured decision- making frameworks that reduce the influence of subjective judgments. These strategies collectively aim to create a more inclusive and equitable research environment, fostering diverse representation in research teams and enhancing the overall quality and impact of research in digital transformation.

Common Challenges and Strategies for Integrating DEI into Research Processes

Integrating Diversity, Equality, and Inclusion (DEI) into research processes presents several common challenges for organizations. Insights collected from experts highlight these challenges and propose strategies to effectively mitigate or overcome them.

One significant challenge is the presence of **stereotypes in the research field**. These stereotypes can hinder the inclusion of diverse perspectives and limit opportunities for underrepresented groups. Additionally, there is often a **lack of awareness of DEI issues** within organizations. This lack of understanding of the importance of DEI and its impact on research quality can impede progress.

Another challenge is **unconscious bias**. These biases, which individuals may not be aware of, can influence decision-making, recruitment, and collaboration, leading to unequal opportunities. Creating an **inclusive culture** that values diversity and fosters a sense of belonging is crucial but can be difficult to establish. Resistance to change, particularly from

staff or leadership who may lack understanding or feel threatened by potential changes, also poses a significant barrier.

Many employees may have an **insufficient understanding of DEI concepts and their importance**. This gap in knowledge can affect the integration of DEI into research processes. Organizations also struggle with **attracting and retaining a diverse pool of researchers**, which limits diversity in the research workforce. Additionally, **measuring DEI progress and holding individuals accountable** can be challenging without clear metrics and goals.

DEI initiatives often suffer from a lack of coordination and integration across the organization. **Fragmented efforts** can limit the effectiveness of these initiatives.

To effectively mitigate these challenges, organizations can adopt several strategies:

1. **Offer comprehensive DEI education and training programs** that emphasize real- world impacts and relevance to research quality. This can increase awareness and understanding of DEI issues.
2. **Promote the benefits of DEI and engage leaders as champions**. Highlighting the positive impact of DEI on research outcomes and engaging leaders as advocates can help overcome resistance to change.
3. **Implement unconscious bias training and blind recruitment processes**. These can minimize biases in decision-making, recruitment, and collaboration.
4. **Enhance recruitment strategies and create an inclusive culture**. Improving recruitment strategies to reach underrepresented groups, providing mentorship programs, and fostering an inclusive culture can help attract and retain a diverse pool of researchers.
5. **Develop clear metrics and goals for DEI**. Establishing measurable objectives and regularly tracking progress can ensure accountability and facilitate continuous improvement.
6. **Develop a comprehensive DEI strategy**. Creating a cohesive DEI strategy that aligns with the organization's mission and involves all departments can enhance the effectiveness of DEI initiatives.
7. **Secure strong commitment from leadership**. Leadership commitment is crucial for prioritizing and advocating for DEI. Including DEI goals in leadership performance evaluations can reinforce this commitment.
8. **Review and revise policies to promote inclusion and equity**. Implementing practices such as flexible work arrangements, transparent decision-making processes, and fair resource allocation can foster inclusion and equity.
9. **Develop mentorship and professional development programs**. Providing support networks, affinity groups, and regular assessments of DEI initiatives can contribute to the growth and success of underrepresented researchers.

Communicating the importance of DEI, celebrating successes, and openly acknowledging areas for improvement can help maintain momentum and engagement in DEI efforts. By

addressing these challenges with targeted strategies, organizations can better integrate DEI into their research processes, leading to richer, more inclusive research outcomes.

Metrics or indicators for measuring the impact of DEI initiatives in research

To effectively measure the impact of Diversity, Equality, and Inclusion (DEI) initiatives in research, a range of metrics and indicators are proposed by experts. **Monitoring the retention and career advancement of diverse team members** is crucial, as it tracks the progress and success of individuals from underrepresented groups within the research environment. **Gathering feedback from team members on the inclusivity of the research environment** is also important, as it helps identify areas for improvement and assess how inclusive the environment is perceived to be.

The **use of established metrics, such as UNESCO SAGA Indicators**, provides a standardized way to measure gender equality in STEM fields. Additionally, evaluating the distribution of research funding through metrics on **grant and funding distribution** ensures equitable allocation to diverse groups and projects.

The **composition and participation rates of underrepresented groups** within research teams are key indicators of diversity. This includes tracking the number of underrepresented individuals in leadership, decision-making, and influential roles, which is essential for monitoring their presence and advancement in leadership positions.

The European Commission's Science, Research, and Innovation **Gender Equality (SHE) figures** are another valuable resource, providing data on gender balance in research and innovation. Assessing the **diversity of candidates** hired, promoted, or granted tenure within the research field helps measure progress in hiring practices and career development opportunities for diverse individuals.

Turnover rates among different demographic groups can reveal patterns of retention and identify potential areas of concern. Evaluating the **diversity of research teams and collaboration across projects** offers insights into how diverse perspectives are integrated and utilized in research activities.

Monitoring participation rates of underrepresented groups in research activities and programs ensures that these groups are actively engaged in the research process. Assessing the **diversity of authors in research publications** highlights the contribution of diverse voices to scholarly work.

These metrics and indicators collectively provide a comprehensive framework for measuring the impact of DEI initiatives in research. They offer insights into representation, inclusivity, and career progression of individuals from diverse backgrounds, helping to create a more equitable and inclusive research environment.

Emerging trends or technologies playing a significant role in advancing DEI in digital transformation research

Experts shared their reflections on several emerging trends and technologies that have the potential to significantly advance Diversity, Equality, and Inclusion (DEI) in digital transformation research. A key trend is the utilization of **data analytics**, which allows organizations to identify DEI gaps, measure progress, and uncover critical trends and insights related to DEI. By leveraging these insights, organizations can make informed decisions and tailor their DEI initiatives effectively.

Artificial Intelligence (AI) and machine learning also play a crucial role by detecting and mitigating biases in research processes, hiring, and decision-making. These technologies can analyze patterns and highlight areas where unconscious biases may exist, enabling organizations to implement more equitable practices. In addition, **blockchain technology** offers another promising avenue by ensuring transparency and accountability in DEI initiatives and data handling. Its decentralized nature promotes trust and integrity in managing and reporting DEI metrics, providing a secure and verifiable way to track progress. **Natural Language Processing (NLP)** tools are instrumental in analyzing language use in research proposals, publications, and communications. By identifying and addressing biased language, these tools promote more inclusive communication and help foster an equitable research culture.

The use of **big data** tools allows for the analysis of large datasets, which can uncover DEI trends and insights on a macro scale. This enables organizations to understand broader patterns and adjust their strategies accordingly. **Advanced analytics**, combined with big data, can inform DEI strategies, measure progress, and facilitate evidence-based adjustments. This approach ensures that DEI initiatives are grounded in robust data, enhancing their effectiveness. Besides, the shift to remote work and the adoption of **virtual collaboration tools** have also contributed to DEI advancements. These tools enable the inclusion of diverse teams from different geographic locations, fostering a more inclusive work environment.

Emphasizing **inclusive design principles and accessibility** in digital tools and platforms ensures equal access and participation for all individuals. This approach helps to create an environment where everyone, regardless of their background or abilities, can contribute effectively. Investing in **bias detection tools and inclusive design software** further supports DEI goals. These technologies help identify areas where improvements are needed and provide solutions to create a more inclusive research environment.

These emerging trends and technologies collectively enhance objectivity, reduce biases, and promote inclusivity in the research design process for digital transformation.

TOPIC 2.2 : DEI principles and values in the EU-LAC cooperation on Digital Transformation

Currently, there is not a perceived urgent need to incorporate DEI principles into digital transformation efforts. However, it is crucial to start integrating these principles through strategic actions.

Firstly, **leadership commitment** is essential for embedding DEI principles. Leaders and policymakers should be firmly committed, and focal points should be established within public institutions to ensure DEI remains a priority in digital transformation. Additionally, it is important to analyze the impact of technology on women, **addressing stereotypes and challenging biases associated with emerging technologies** such as artificial intelligence. To advance DEI integration, it is recommended to develop a policy framework that embeds these principles into both digital transformation projects and research and development initiatives.

In the context of EU-LAC cooperation on digital transformation, priority DEI objectives should include access to resources and funding, supporting organizations working on DEI initiatives, and enhancing gender equality in the digital sector. This involves promoting equal opportunities in STEM, implementing gender-sensitive policies, and supporting women entrepreneurs with a gender and inclusion perspective.

To address cultural barriers that may impact the participation of diverse groups in digital transformation projects, it is necessary to implement awareness and education initiatives, such as mentorship programs and scholarships, to foster inclusive practices. Additionally, promoting inclusive leadership by elevating the voices of those most affected by cultural barriers in policy-making spaces is crucial to understanding and addressing their needs. **DEI should be included in EU-LAC policy dialogues**, and conducting workshops or surveys can help to identify and address specific cultural barriers across different regions.

Integration of DEI principles into digital transformation initiatives

Experts believe that the integration of DEI principles into digital transformation within the EU- LAC cooperation requires a multifaceted approach. Firstly, it is essential to view **DEI as a transversal element** that permeates every aspect of digital transformation projects. This means considering DEI not as an add-on but as a core activity that influences all stages and facets of a project.

A critical aspect of this integration is the **examination of gendered substructures** within organizations. By closely analyzing these substructures, organizations can identify and address inherent inequalities that may otherwise be overlooked. This scrutiny should start from the very inception of digital transformation initiatives, ensuring DEI considerations are embedded from the beginning, including in methodologies like Design Thinking.

Developing a **robust policy framework that explicitly embeds DEI principles** into digital transformation and research and development (R&D) projects is another vital step. Such a framework ensures that DEI is not only a theoretical commitment but also a practical guideline that influences project execution. The **commitment from leaders and policymakers** is crucial in this regard. Establishing focal points within public institutions can help maintain focus and accountability for DEI objectives.

Capacity building among all stakeholders is also imperative. Educating and training individuals on how to incorporate DEI principles into their specific actions and initiatives can

foster a more inclusive approach. This involves identifying and addressing gaps in representation, asking critical questions about who is missing from the conversation and why, and working to bring those voices into the fold.

Commitment to **DEI principles must extend beyond political dialogues to practical implementation** at all levels of leadership and teams involved in digital transformation initiatives. **Assessing institutional norms and values** to check if they support or hinder DEI objectives is another crucial step. This reality check can help in aligning institutional culture with DEI goals.

Moreover, it is important to **avoid survivorship bias** by considering both success stories and challenges. Sharing not only the triumphs but also the pitfalls and lessons learned can provide a more balanced and realistic view of integrating DEI principles. Facilitating the **sharing of experiences and good practices between regions** fosters collaboration and mutual learning, enriching the overall approach to DEI in digital transformation.

In summary, these insights underscore the importance of a comprehensive, committed, and collaborative approach to integrating DEI principles into digital transformation initiatives. By embedding DEI into the core of projects, examining and addressing inherent inequalities, developing supportive policies, and fostering a culture of continuous learning and sharing, the EU-LAC cooperation can effectively promote a more inclusive and equitable digital future.

Prioritization of DEI objectives within EU-LAC cooperation on digital transformation

In prioritizing DEI objectives for EU-LAC cooperation on digital transformation, several key areas emerge based on expert insights. A primary objective is to **promote digital inclusion and accessibility**. This involves ensuring that digital infrastructure and internet access are available to all regions, especially focusing on vulnerable populations. By extending these basic digital amenities, the foundation is laid for broader participation in the digital economy.

Enhancing gender equality within the digital sector is another critical goal. This encompasses implementing equal opportunities in STEM fields, crafting gender-sensitive policies, and supporting women entrepreneurs. These efforts aim to balance the gender disparity that often exists in technology and innovation spaces, providing women with the tools and opportunities to thrive in these sectors.

Access to resources and funding is also important. Providing necessary resources and financial support to organizations working on DEI initiatives ensures that these projects have the means to succeed and make a tangible impact. This support can accelerate the development and implementation of DEI-focused digital transformation initiatives, fostering a more inclusive digital landscape.

Recognizing and addressing regional differences is essential for inclusivity. Different regions have unique lifestyles, challenges, and needs, which must be considered to tailor

digital transformation efforts effectively. By acknowledging these differences, policies and programs can be designed to meet the specific needs of various communities, ensuring that the benefits of digital transformation are distributed equitably.

These DEI objectives aim to cultivate a digital environment where diversity, equality, and inclusion are integral. By focusing on these areas, the EU-LAC cooperation can ensure that digital transformation benefits everyone, leaving no one behind and providing equal opportunities for all to thrive in the digital age.

Cultural barriers that impact the participation of diverse groups in digital transformation projects

Experts agree that to address the cultural barriers it is required a multifaceted approach, combining education, policy integration, and community support. One effective strategy is **fostering scholarships in digital and technology fields** to increase access and opportunities for underrepresented groups. These scholarships can help bridge the gap by providing financial support and encouraging more individuals to pursue careers in these areas. In this line, **awareness and education initiatives** are crucial for promoting inclusivity and understanding the specific needs of diverse communities. These initiatives can help dismantle stereotypes and foster a more inclusive environment where all individuals feel valued and empowered to contribute.

Incorporating DEI into EU-LAC policy dialogues ensures that these principles are prioritized at a higher level. This integration can drive systemic changes that promote inclusivity and ensure that DEI considerations are embedded in all digital transformation projects.

Building capacities and identifying exemplary use cases can inspire and motivate diverse groups to participate in digital transformation projects. Showcasing successful examples of diverse participation can serve as powerful motivators and provide tangible evidence of the benefits of inclusivity. Besides, **promoting the leadership of those most affected by cultural barriers in policy-making spaces** ensures their voices are heard and their needs are addressed. This approach can lead to more effective and inclusive policies that reflect the real-world experiences of diverse groups.

Creating networks, community practices, and mentoring programs offers support and guidance to individuals from diverse backgrounds. These networks can provide a sense of belonging and a platform for sharing experiences and resources, helping individuals navigate challenges and succeed in their endeavors.

Conducting workshops or surveys to understand potential cultural barriers within different regions allows for tailored solutions that address specific challenges. This proactive measure can help identify unique cultural nuances and develop strategies that are responsive to the needs of various communities.

These insights underscore the importance of proactive measures such as education, mentorship, policy inclusion, and understanding cultural nuances to address cultural barriers and promote diversity and inclusion in digital transformation projects.

Identifying and addressing regulatory challenges in integrating DEI into our digital transformation efforts

Insights from the discussion among experts reveal that integrating DEI into digital transformation efforts presents several regulatory challenges that must be carefully managed. One major issue is the **fast-evolving nature of digital transformation, which often exceeds the development of relevant regulations**. This disconnect can create gaps where DEI considerations are not adequately addressed within existing policy frameworks. Additionally, **integrating DEI principles requires a holistic approach**, embedding them into every aspect of regulatory policies to ensure effective inclusion.

To tackle these challenges, it is crucial to **establish clear and forward-looking guidelines** that keep pace with technological advancements. **Active engagement with regulatory bodies** is essential to ensure that DEI considerations are included in both new and evolving regulations. Furthermore, fostering collaboration and sharing best practices with organizations and groups focused on DEI, especially in emerging fields like the Internet of Things (IoT), can help bridge regulatory gaps and promote more inclusive digital transformation efforts. By adopting these strategies, we can address regulatory difficulties and enhance the integration of DEI in our digital transformation initiatives.

Insights of 2nd DIF-WGs Meeting

Monday 4th of November from 14:00 to 15:30 (CEST)

WG1: HUMAN-CENTRIC DIGITAL TRANSFORMATION

TOPIC 1.1 : Navigating regulation, ethics, and data ownership in human- centric digital transformation

The rapid evolution of digital technologies presents both opportunities and risks, making **regulatory adaptability** essential to maintaining a human-centric approach to digital transformation. Governments must not only update policies to bridge digital gaps but also ensure that regulations safeguard human rights. Mechanisms such as **innovation sandboxes** and pre-implementation evaluations can help test policies in controlled environments before full deployment. Additionally, **collaborative regulatory frameworks**— involving civil society, academia, and private entities—are crucial to ensuring that digital governance remains transparent, inclusive, and aligned with long-term societal interests.

A key challenge in digital governance is the ethical oversight of **artificial intelligence (AI)**. Algorithmic impact assessments are necessary but not sufficient; additional safeguards are required to prevent biases that can perpetuate social inequalities. Strategies such as **collaborative algorithm auditing**, unbiased data collection, and cross-sector partnerships can strengthen AI transparency and accountability while ensuring that human rights remain at the core of digital innovation.

Public-private partnerships (PPPs) also have a fundamental role in **bridging digital literacy gaps** and ensuring equitable digital transformation. Beyond providing infrastructure and funding, PPPs must actively promote **capacity-building initiatives** that equip individuals with the necessary skills to navigate the digital world. At the same time, clear and enforceable **data protection guidelines** must be established to balance technological advancement with individual rights.

In the realm of **cross-border digital initiatives**, ensuring individual control over personal data is paramount. Expanding the use of **data processing agreements (DPAs)** and provenance protocols can offer individuals greater autonomy over their information. An international mechanism allowing people to confirm or deny the use of their data in digital projects could serve as a foundational step toward a more ethical and transparent digital ecosystem.

The following conclusions outline the key regulatory, ethical, and structural considerations necessary to ensure that digital transformation remains inclusive, fair, and human-centric across EU and LAC regions.

How can we ensure that regulatory frameworks keep pace with emerging technologies while maintaining human-centric principles?

Updating government policies is crucial to bridging the digital gap while ensuring that fundamental human rights are protected. One effective approach is the use of **innovation sandboxes** and testbeds, allowing policymakers to trial and refine **new technological regulations** before full-scale implementation.

To enhance transparency and inclusivity, **collaborations with civil society organizations (CSOs)** and citizens should be encouraged, fostering a more **participatory regulatory process**. Additionally, conducting consultations and ex-ante evaluations for urgent matters can help prevent the introduction of regulations that may inadvertently infringe on human rights. The **European Union's legal frameworks on impact assessments**[7] (if duly implemented) offer a strong foundation for safeguarding the interests of future generations, ensuring that digital policies remain sustainable and equitable. However, recent concerns regarding transparency in some core legislation, such as the European Green Deal, highlight the need for consistent and accountable application of these frameworks.

Given the emphasis on mandatory algorithmic impact assessments, What additional ethical guidelines are necessary to prevent bias in AI algorithms while prioritizing human rights?

The widespread adoption of artificial intelligence (AI) raises concerns about bias in algorithmic decision-making. Addressing **inherent biases in data** is essential to prevent discriminatory outcomes that disproportionately affect vulnerable communities. To mitigate these risks, **human rights considerations** should be integrated from the earliest stages of AI development, including algorithm design and data selection. Ensuring that the teams behind AI development are diverse and inclusive is crucial to incorporating a broad range of perspectives and minimizing bias before deployment, ultimately reducing the need for extensive audits and corrections after implementation.

One way to strengthen transparency and fairness is by creating collaborative spaces where algorithm audits can be conducted, directly involving the communities impacted by these technologies. **Collaboration with universities and civil society organizations** can further enhance algorithmic transparency, enabling the collection of unbiased data and promoting more equitable outcomes. At a European level, establishing **coalitions such as Eticas Foundation and IA Ciudadana** can provide a structured approach to assessing and auditing AI algorithms, integrating a political perspective to ensure fairness and accountability.

What specific roles should public-private partnerships play in addressing digital literacy gaps and promoting human-centric digital transformation?

[7] European Commission's impact assessments: https://www.google.com/url?q=https://commission.europa.eu/law/law-making-process/planning-and- proposing-law/impact-assessments_en&sa=D&source=docs&ust=1741860853546958&usg=AOvVaw2ZfvE0lXtzAytGtYgwVKv9

Developing digital skills is essential for fostering an inclusive digital society. A key priority should be **training and skill development programs** that enhance digital literacy across all demographics. To ensure ethical and secure technology use, both government and industry must establish **clear guidelines for data protection**.

Additionally, digital education programs must **prioritize underrepresented groups**, ensuring accessibility and inclusivity in learning opportunities. Corporate social responsibility (CSR) initiatives should also play a role in funding and supporting digital inclusion projects in underserved communities, reinforcing the **importance of equitable access to digital resources**.

How can we expand the use of data processing agreements (DPAs) and provenance protocols to strengthen individual control over data in cross-border digital initiatives?

As digital ecosystems become increasingly interconnected, **individuals must have greater control over their personal data** in cross-border digital initiatives. A practical solution is the development of an international tool that allows individuals to confirm or deny the use of their personal or anonymized data in such initiatives.

To ensure transparency and accountability, it is necessary to **standardize data provenance protocols**, which provide clear records of how data is collected, stored, and shared. Additionally, adopting **decentralized identity frameworks** can empower individuals with greater control over their personal data, reducing dependency on centralized authorities.

Finally, to reinforce ethical data usage, independent oversight bodies should be established to **monitor compliance with cross-border data agreements**. These entities would play a crucial role in ensuring that data-sharing practices align with global privacy and security standards, ultimately safeguarding individual rights in the digital age.

TOPIC 1.2 : Education and global collaboration for a human-centric digital future

The success of digital transformation lies not only in technological advancements but also in how they are designed and implemented with a human-centered approach. To prepare future professionals for this challenge, **education must integrate project-based learning that emphasizes the social impact of digital technologies**. By incorporating established project management frameworks and interdisciplinary perspectives, curricula can equip students with the skills needed to navigate the complexities of digital transformation while prioritizing social responsibility.

Ensuring that emerging technologies, such as blockchain for financial inclusion, reach marginalized populations requires not only a shift in focus from technology to real-world applications but also a **recognition of the foundational infrastructure needed for digital transformation**. Without reliable connectivity, digital literacy, and state-supported infrastructure, efforts to promote adoption risk being ineffective. Public-private collaborations, open innovation initiatives, and targeted education programs can bridge

this gap, fostering sustainable adoption. Additionally, incorporating local perspectives, regulatory frameworks, and direct engagement with end- user communities is essential for building trust and **ensuring these solutions align with actual needs**. It is crucial to assess whether digital transformation is truly a priority for these communities or if more immediate concerns—such as food security, healthcare, and access to basic services—must take precedence. Understanding these contextual factors can help tailor interventions that are both meaningful and sustainable.

Balancing data privacy with open science in collaborative research requires a strategic combination of **anonymization, encryption, and privacy-by-design principles**. While data-sharing interoperability standards can facilitate collaboration, they must be adapted to diverse regional privacy regulations. The EU's role in establishing secure data spaces and promoting transparent consent mechanisms can help researchers navigate the complexities of cross-border data sharing while safeguarding individuals' rights.

For EU and LAC initiatives to align in fostering human-centric digital transformation, mutual recognition of privacy regulations and shared governance structures will be crucial. Establishing **interoperability frameworks, regulatory sandboxes, and capacity-building programs** can support regional adaptation while maintaining global standards. Additionally, addressing financial barriers to data infrastructure access will be key to ensuring equitable participation in digital innovation across regions. Ultimately, the intersection of technology, policy, and social impact must be carefully navigated to ensure that digital transformation is both inclusive and sustainable.

How can project-based modules that integrate the social impact of digital transformation be incorporated into curricula to better prepare future professionals for human-centric digital work?

To integrate project-based modules that emphasize the social impact of digital transformation into curricula, it's essential to start by addressing the current gap in social impact education, particularly in regions like Latin America and the Caribbean (LAC), where this focus is often lacking. Utilizing established **project management frameworks**, such as PMI (Project Management Institute) and IPMA (International Project Management Association), can provide a **foundation of internationally recognized best practices** that already incorporate aspects of project-based social impact training.

By aligning curriculum modules with professional certification standards widely used in industry, educators can ensure that students gain relevant, applicable skills. Additionally, integrating **methodologies that promote multidisciplinarity**, such as the Blueprint for Sectoral Cooperation on Skills funded through the Erasmus+ programme[8], can facilitate collaboration between different stakeholders to adapt curricula based on current and future

[8] The scope of the Blueprint is to bring different stakeholders together to understand current and future needs, and swiftly adapt curricula to include new technology, business or societal trends at national and regional level: https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/working- together/blueprint-sectoral-cooperation-skills_en

industry needs. These initiatives help bring together disciplines like computer science, sociology, and business, providing students with a **holistic perspective on digital transformation**. This interdisciplinary approach ensures that future professionals understand both the technical and societal dimensions of digital transformation, equipping them to lead projects that are not only efficient but also socially responsible.

What strategies can ensure that technologies, such as blockchain for financial inclusion, are developed with a focus on reaching marginalized populations?

To ensure that technologies like blockchain are developed with a **focus on financial inclusion for marginalized populations**, it's essential to prioritize real-world applications over the technology itself. This approach can make it easier to explain the benefits and relevance of these technologies to underserved groups.

First, private sector involvement should be encouraged to drive adoption, supported by targeted educational programs that emphasize solving specific financial problems and creating business opportunities. "Learning by doing" can foster **practical understanding**, and clear, sustainable business models should be developed to support this.

Open innovation challenges are effective tools to bring together public, private, and academic sectors, sparking collaborative solutions tailored to financial inclusion. Startups and spinoffs that focus on SPIDER HC goals for marginalized populations should have access to **dedicated funding mechanisms** to help them succeed.

An intercultural dialogue approach can further strengthen these efforts, allowing technology developers to learn from early adopters in similar communities and adapt solutions to local needs. Additionally, using **practical tools like PESTEL** (Political, Economic, Societal, Technological, Environmental, and Legal) analysis can provide a structured evaluation of the broader implications of emerging technologies (including blockchain, cybersecurity, and AI), ensuring that their development aligns with real-world challenges. To achieve the success and sustainable adoption of these technologies, it's also essential for governments to **integrate financial tech into the economic system with clear regulatory frameworks**. This will help establish trust and provide the oversight necessary to protect vulnerable populations while expanding access to financial services.

How can we strike a balance between protecting personal data and enabling open science in collaborative research?

To balance protecting personal data and enabling open science in collaborative research, several approaches are essential. First, **data anonymization** plays a crucial role by stripping away personally identifiable information (PII), such as names and addresses, ensuring that shared datasets do not compromise individual privacy. Additionally, strong **encryption and secure data handling practices** safeguard sensitive data against unauthorized access, a foundational measure across the data lifecycle. Implementing **privacy-by-design principles** from the start of any research initiative helps embed privacy considerations at

every stage—from data collection through to storage and analysis. This approach ensures that privacy remains a priority throughout the data's lifecycle.

For collaborative research to be feasible, **interoperability standards** like FHIR for health data are vital, as they enable consistent data-sharing practices across various systems. However, addressing diverse regional privacy rules—some of which require data localization or database registration with public entities—is critical to enabling cross-border data sharing, as these differences can hinder collaborative efforts. To facilitate lawful data sharing, **consent mechanisms for personal data use** are essential. Where individuals opt- in, they have more control over their data, which respects privacy while allowing valuable data to be used in research.

Finally, the EU could play a leadership role by opening its cybersecurity infrastructure to support data adoption and establishing data spaces that allow for secure, privacy-respecting data sharing.

How can EU and LAC initiatives be aligned to foster shared human-centric goals while respecting regional differences in privacy and data sovereignty?

To align EU and LAC initiatives and foster shared, human-centric goals while respecting regional privacy and data sovereignty, the focus should start with specific areas, such as health data interoperability, using **globally recognized standards** like HL7 FHIR. This allows for consistent data exchange frameworks while promoting trust. The EU's support for interoperability standards can serve as a foundation, particularly when combined with security-enhancing tools like the EU X-ROAD, which could be adapted to establish reliable cross-regional trust.

Mutual recognition agreements and frameworks can strengthen collaboration, ensuring that each region's privacy standards are acknowledged and respected. **Regulatory sandboxes** will be essential to test these frameworks in real-world settings, allowing for regional customization that addresses local priorities while fostering innovation.

Aligning around shared values, especially equity and inclusion, can reinforce the commitment to human-centric policies. This alignment would also benefit from capacity-building programs to deepen understanding of privacy and data protection, equipping organizations and policymakers with the tools to **navigate data sovereignty and regional regulatory complexities**.

Finally, as the high costs associated with using EU data and infrastructure may pose challenges for LAC partners, the EU should explore mechanisms to facilitate access while ensuring that this support does not compromise the economic sovereignty of LAC countries. Any cost-mitigation strategy must be developed collaboratively, ensuring that LAC partners retain autonomy in shaping their digital ecosystems and regulatory frameworks.

WG2: DIVERSITY, EQUALITY AND INCLUSION (DEI)

TOPIC 2.1 : Integrating DEI into Digital Transformation

Achieving Diversity, Equality, and Inclusion (DEI) in digital transformation remains a complex challenge, shaped by cultural barriers, structural limitations, and resistance to change. Despite existing initiatives and funding, **many underrepresented groups still face significant obstacles in accessing opportunities within the digital landscape**. The lack of representation, particularly of women, indigenous peoples, and marginalized communities, perpetuates exclusion and limits the potential for inclusive innovation.

Additionally, workplace cultures and industry structures often fail to provide environments where diverse voices can thrive. In regions like Latin America and the Caribbean, it is crucial to **engage indigenous communities in discussions about digital transformation**, recognizing that their relationship with technology may differ from mainstream perspectives. Many indigenous groups prioritize a deep connection with the Earth and may not see digital transformation as an immediate need. Therefore, rather than imposing digital solutions, initiatives should be built around their expressed needs and interests, **ensuring that any technological integration respects their cultural values and autonomy**. Imposing digital transformation without community-driven demand could lead to societal resistance, ultimately hindering broader adoption efforts.

However, integrating DEI principles into digital transformation is not just a matter of social responsibility. It is an economic and innovation-driven imperative. When inclusion is prioritized, digital ecosystems become more dynamic, fostering creativity, addressing skill gaps, and ensuring that **technological solutions reflect the needs of all users**. A diverse workforce enhances productivity and leads to the development of more human-centric and equitable digital tools, ultimately driving broader social and economic progress through a bottom-up approach.

To bridge these gaps, fostering collaboration between Europe and LAC regions is essential. Establishing mechanisms for knowledge and cultural exchange, promoting case studies, and engaging organizations in structured DEI initiatives can accelerate progress. By **embedding inclusivity at the core of digital transformation strategies**, societies can unlock the full potential of technology to serve diverse populations effectively.

The following conclusions outline the key challenges, benefits, and strategies identified to strengthen DEI in the digital era.

What are the most significant cultural barriers to integrating DEI principles into digital transformation?

The **underrepresentation of women and marginalized groups in digital careers** remains a significant barrier to inclusivity. Despite efforts to promote diversity, the voices of women and vulnerable groups often struggle to be heard within the tech industry. Additionally, scaling DEI initiatives across large organizations poses considerable challenges, with corporate resistance slowing down progress.

Even with government funding and initiatives, many underrepresented groups still lack accessible pathways to participate in digital transformation efforts. In some regions, **outreach programs focus primarily on young women**, overlooking a wider range of ages and backgrounds in digital careers.

Workplace culture is another challenge, as predominantly masculine environments may create discomfort and hinder inclusivity for women. Moreover, general resistance to change within organizations can prevent the effective adoption of DEI practices. Large companies, in particular, are often slow to engage in DEI efforts, either due to reluctance or difficulty adapting their policies.

Lastly, digital transformation brings equity concerns, such as ensuring elderly women have the same digital access and skills as their male counterparts.

What are the economic and social benefits of integrating DEI into digital transformation?

A stronger DEI approach not only advances gender equity but also promotes **economic growth and social progress** by ensuring that all groups benefit from digital transformation. Equitable digital access helps bridge skill gaps and creates opportunities for diverse talent to enter the tech sector.

A more inclusive digital transformation **maximizes innovation and fosters technology that works for all who need it**, as it taps into the full potential of society by including women, who represent half the population. When diverse perspectives are incorporated, tech solutions become more responsive to real-world societal needs.

Additionally, fostering innovation and creativity through diversity leads to **more effective digital tools**, improving the overall impact and efficiency of digital transformation efforts.

How can diversity perspectives in digital innovation lead to more human-centric and inclusive digital transformation?

Technology is often gendered, meaning that, **without a focus on diversity, digital solutions may unintentionally reinforce existing stereotypes**. By prioritizing diversity-driven design, digital transformation efforts can result in more innovative and creative solutions.

Inclusive design also promotes wider adoption of digital tools, as they are tailored to meet the varied needs of diverse user groups. This, in turn, enhances user engagement and trust in digital solutions, leading to a stronger and more loyal user base, as well as easier transferability and adaptability to diverse contexts.

Beyond usability, mitigating bias in technology is critical to ensuring that both economic and social dimensions are addressed, leading to more balanced and sustainable impacts in the digital space.

What mechanisms can be established to enhance DEI knowledge exchange between the EU and LAC regions?

To advance DEI efforts, collaborative initiatives should be launched through **platforms such as SPIDER DIF and the Community of Practice (CoP)**.

A **repository of case studies** should be developed to highlight successful DEI-driven transformations and their real-world impact. Additionally, appointing "Knowledge Exchange Champions" can help facilitate continuous dialogue and learning between EU and LAC representatives, ensuring a mutual exchange of best practices.

Further collaboration should be encouraged through **partnerships and networks**, focusing on shared knowledge and collective problem-solving to drive meaningful change.

TOPIC 2.2 : Turning DEI Principles into Action

Ensuring **equitable digital access** for marginalized communities in LAC requires more than just expanding infrastructure—it demands a sustainable, context-aware approach that integrates local needs and long-term solutions. While connectivity remains a primary challenge, affordability, digital literacy, and cultural relevance are equally critical in bridging the digital divide. Partnerships with local governments and organizations can help tailor digital initiatives to the specific challenges of underserved areas, ensuring that technology serves as an enabler rather than a source of further exclusion.

To foster true **accountability in DEI efforts**, structured monitoring mechanisms are essential. Beyond merely tracking progress, these systems should provide meaningful insights into the lived experiences of marginalized communities, ensuring transparency and guiding future policy development. A well-designed DEI reporting framework can help hold organizations accountable, ensuring that commitments translate into measurable impact.

Financial sustainability is another crucial element. **Joint EU-LAC funding mechanisms** must go beyond acknowledging the digital divide and focus on targeted, data-driven investments that prioritize long-term impact. Simplifying bureaucratic processes, aligning funding with identified regional needs, and fostering cross-border collaboration will be key to maximizing resources and accelerating progress.

In parallel, **empowering women in the digital sector** is not just about access to resources but also about building confidence, networks, and financial independence. Training programs, financial inclusion strategies, and partnerships with large companies can help women entrepreneurs navigate the digital economy and scale their initiatives. Tailoring digital tools to their specific needs and creating spaces for mentorship and collaboration will further enhance their participation and leadership in the sector.

How can EU-LAC digital cooperation ensure equitable access to digital infrastructure and skills for marginalized communities, especially in rural and underserved areas?

Sustainable connectivity solutions should be developed for rural and underserved communities in LAC, considering both infrastructure and affordability to make digital access feasible for marginalized groups. Partnerships with local governments and organizations

are crucial to ensure culturally relevant and context-aware implementation of digital infrastructure projects, particularly in indigenous and underserved areas.

Additionally, programs need to be specifically designed to build digital skills in marginalized communities, ensuring that residents not only have access to digital tools but are also empowered to use them effectively. For example, **digital literacy programs** should be practical and address the day-to-day needs of these communities.

Recognize and integrate the differences between the EU and LAC digital landscapes when crafting policies. Acknowledging distinct metrics, challenges, and regional contexts will lead to more relevant, impactful policies that address the unique barriers faced by marginalized groups in LAC. Acknowledge LATAM's digital landscape, with lower internet access and connectivity compared to Europe, when setting digital policy expectations.

To ensure long-term success, **funding models should prioritize sustainability** rather than short-term interventions. Ensuring ongoing support will be essential to avoid infrastructure degradation and to keep digital access initiatives effective over time. Also, local governments in LAC should be equipped to act as facilitators of digital development. By giving them tools, training, and resources, they can become key allies in extending digital infrastructure and skills-building initiatives.

Lastly, customized assessment methodologies should be developed to accurately evaluate digital penetration and infrastructure needs in different regions.

How can we create DEI monitoring mechanisms and reporting processes that hold organizations accountable for their DEI commitments in digital transformation projects?

To effectively track connectivity progress, structured mechanisms for regular data collection and updates must be established, ensuring that sustainability and meaningful metrics are prioritized. It is essential to develop detailed methodologies to guide the use of Diversity, Equity, and Inclusion (DEI) indicators, ensuring consistency in how DEI commitments are measured across projects. A well-structured cycle of monitoring and reporting will enhance transparency and enable stakeholders to track progress over time.

Ensuring public transparency and accountability: guaranteeing public transparency of data is crucial, as it allows civil society to assess progress, identify gaps, and hold key stakeholders accountable. To further enhance transparency, organizations should be required to publicly report on their DEI progress, fostering a greater sense of responsibility. Additionally, periodic technology transfer modules should be conducted to maintain consistent data collection, ensure up-to-date methodologies, and effectively monitor digital advancements.

Enhancing data accessibility and inclusivity: to ensure accessibility, digital content should be developed in local languages, particularly in regions where linguistic barriers may limit engagement with digital resources. Furthermore, data collection methods must be

designed to accurately capture the experiences of marginalized groups, especially in underserved communities. This requires setting up dedicated processes for gathering data in areas where DEI insights are critical yet often overlooked.

Adapting monitoring mechanisms to regional contexts: It is essential to acknowledge that DEI challenges differ significantly between the EU and LAC regions. As a result, monitoring mechanisms should be flexible and capable of providing accurate, context-specific insights that enhance accountability and inform policy adjustments based on regional needs.

Strengthening regional capacity for DEI monitoring: collaboration with local governments and organizations is key to strengthening regional capacity for DEI monitoring. Local stakeholders play a fundamental role in gathering, interpreting, and utilizing DEI data in ways that are relevant and meaningful to their communities.

Leveraging DEI insights to shape future policies: insights gained from DEI monitoring should be actively used to shape future public policy in LAC. By integrating DEI data into policy development, digital transformation projects can be more aligned with broader equity and inclusivity objectives, ensuring that marginalized communities benefit from digital advancements.

Evolving DEI metrics to keep pace with Digital Transformation: as Digital Transformation progresses, DEI needs and goals will inevitably evolve. Therefore, it is crucial to periodically review and adjust DEI metrics and methodologies to reflect the latest developments, challenges, and opportunities in the digital landscape.

How should joint EU-LAC funding mechanisms be structured to specifically support DEI-focused initiatives, and what criteria should be used for funding eligibility?

Target the technology gap: create a structured funding mechanism that addresses specific digital transformation needs of each country. Funds should be allocated to well-defined projects that bridge existing technological gaps and ensure resources are used efficiently. Additionally, it is crucial to ensure that DEI-focused projects have sustainable plans that extend beyond the initial funding period. Long-term impact should be a key consideration to avoid short-lived interventions.

Leverage local implementing partners: engage local and cooperative partners to facilitate project execution, particularly in countries like Ecuador, where budget implementation can be slow. Technical cooperation with these partners can help achieve key milestones, streamline fund deployment, and enhance overall project impact. While the digital divide in Latin America and the Caribbean (LAC) is widely recognized, acknowledging its existence is not enough. There is a need to "make it transparent" through a clear, data-driven framework that provides visibility into the specific barriers and disparities.

Aligning resources with mapped needs: each country in LAC has already identified its specific areas of digital inequality. To maximize impact, funding mechanisms should

prioritize aligning these mapped needs directly with available financial resources. This approach creates a structured pathway for fund allocation and ensures that investments address the most urgent gaps.

Streamlining fund execution: the LAC region faces significant challenges in fund execution due to complex bureaucratic processes. Simplifying these procedures is essential to ensure that resources reach targeted initiatives efficiently. A potential solution to improve fund utilization is the appointment of a dedicated counterpart responsible for overseeing and managing fund execution. This approach would help address common bottlenecks, reduce delays, and ensure that resources are effectively deployed.

Establishing transparent funding eligibility criteria: funding eligibility criteria should be clearly defined, supported by data, and publicly available. Transparency in this process helps guarantee that projects addressing the most critical DEI needs receive priority access to financial support. Furthermore, the funding mechanism should favor initiatives that propose measurable, results-oriented approaches to reducing digital inequality. The ability to demonstrate tangible outcomes will be key in assessing the success of funded projects.

Promoting cross-border collaboration: joint EU-LAC funding mechanisms should actively encourage collaboration within LAC. This would enable countries to share best practices, exchange knowledge, and implement solutions that are regionally applicable. By fostering cooperative efforts, funding mechanisms can maximize their impact and contribute to a more inclusive digital transformation across the region.

How can we support women entrepreneurs and leaders in the digital sector?

Improving access to resources: Facilitate connections between women entrepreneurs and organizations that provide digital training. While large corporations can play a role in empowering women as they often have the capacity to deliver training to a broader audience, it is crucial to prioritize connections with local SMEs, training centers, and community-based initiatives. These local actors often have a deeper understanding of regional challenges and can offer more tailored and sustainable support. Strengthening these networks ensures that women entrepreneurs gain practical skills and better integration into the local economy, rather than relying entirely on external corporate programs.

Promoting financial inclusion: Provide access to accessible financial resources, such as fintech platforms with fewer administrative barriers than traditional banks, to offer women entrepreneurs tangible financial benefits and support their growth. Rural women entrepreneurs often lack knowledge about the digital resources available to them, leading to underutilization of these tools. Establish training programs in technological tools that provide confidence in the management and use of digital payment mechanisms. Incorporate challenges or initiatives so that technology becomes a tool used daily in community services; in other words, ensuring that they understand all the mechanisms and utilities it can offer in their daily lives.

Increasing overall digital literacy among women: especially in rural areas, is crucial. Workshops, online courses, and accessible resources can significantly improve their confidence in using digital tools. Creating networking opportunities for women in the digital sector can facilitate collaboration and knowledge sharing, empowering them to thrive in their entrepreneurial endeavors. Tailoring digital solutions to meet the specific needs of women entrepreneurs can enhance adoption. Understanding the unique challenges they face can lead to more effective resource allocation.

Advocating for policies that address gender-specific barriers: peer support and mentorship can enhance women's confidence and skill sets in the digital landscape. It's essential to ensure that women feel a sense of ownership and recognize the benefits of engaging with digital resources. This sense of appropriation can motivate women entrepreneurs to actively participate in digital initiatives. Organize EU-LAC events focused on connecting women entrepreneurs with investors, mentors, and peers.

Insights of 3rd DIF-WGs Meeting

Monday 14th of April from 14:00 to 15:30 (CEST)

WG1: HUMAN-CENTRIC DIGITAL TRANSFORMATION

TOPIC 1.1 : Foundations of the AI Act

The implementation of the EU AI Act marks a significant step in global efforts to regulate artificial intelligence based on risk and human rights principles. Grounded in the EU Charter of Fundamental Rights, the Act classifies AI systems by potential societal risk and seeks to ensure their use aligns with fundamental values such as dignity, privacy, and non- discrimination. As the EU and LAC regions deepen cooperation on digital governance, this topic explores how the foundational principles of the AI Act can be adapted to the distinct cultural, economic, and institutional realities of the LAC context.

Participants discussed the practical challenges of translating the EU model to LAC systems, especially in light of asymmetrical data economies, infrastructural dependencies, and varied levels of digital maturity. The debate emphasized the need for regional autonomy in AI regulation, the ethical implications of data externalisation, and the potential for LAC countries to shape AI governance through inclusive, rights-based frameworks rooted in their national priorities and social values.

As countries continue to define their AI governance strategies, participants noted the importance of aligning national regulation with broader geopolitical considerations. To avoid regulations hindering innovation, countries with ethical AI provisions in place in their national legislation should review and reconsider trade and cooperation agreements with those that fail to incorporate ethical standards. This was seen as a means of exerting soft- power influence and setting clear expectations for responsible AI use in global partnerships. Furthermore, participants advocated for the inclusion of risk-based ethical AI principles— particularly those related to human rights protection—within the governance frameworks of multilateral institutions. An initial step in this direction can be seen in the United Nations System White Paper on AI Governance[9], which provides a foundation for international alignment and dialogue on trustworthy AI.

[9] The United Nations System White Paper on AI Governance (2023) outlines a common approach to fostering inclusive, trustworthy, and rights-based AI governance, calling for global cooperation and aligning with the UN Charter, the Universal Declaration of Human Rights, and the 2030 Agenda for Sustainable Development.

What are the opportunities and challenges in adapting the foundational principles of the EU AI Act to the diverse cultural and societal contexts of the EU-LAC partnership?

The EU AI Act provides a foundation for rights-based AI governance, but its adaptation to the EU-LAC context must consider the region's socio-cultural diversity, data dependencies, and enforcement limitations. Discussions emphasized the need for digital sovereignty, ethical alignment, and greater transparency in international data flows. A shared regional effort to map local regulatory approaches and public perceptions of AI risks would help define future cooperation.

The EU AI Act was designed as a risk-based regulatory framework to ensure that artificial intelligence systems developed or deployed within the European Union respect fundamental rights, such as privacy, non-discrimination, and human dignity, as outlined in the EU Charter of Fundamental Rights. The Act categorizes AI systems into levels of risk (unacceptable, high, limited, and minimal) with regulatory obligations increasing accordingly.

When adapting the EU AI Act to the EU-LAC partnership, the region's diverse societal values, uneven digital infrastructures, and distinct political systems introduce significant complexity. A one-size-fits-all approach is unlikely to succeed, particularly given the deep socio-economic disparities within LAC countries. One critical issue raised by participants is the structural imbalance in the global data economy, where data labelling and processing are often outsourced to the Global South, while the Global North captures most of the economic value through advanced analytics and commercial exploitation. This dynamic has been described in decolonial scholarship as a form of digital dependency, where the labor-intensive groundwork of data production in the majority world supports profit-making in the minority world. Addressing this disparity is crucial for equitable AI governance, yet remains largely unaddressed by the current EU AI Act. For further insight into this global asymmetry, participants referenced *"The Costs of Connection - How Data Is Colonizing Human Life and Appropriating It for Capitalism"* by Nick Couldry and Ulises A. Mejias, which frames data extraction as a continuation of colonial patterns of value appropriation.

There is also concern over the externalisation of data processing (including for training AI models). There's in fact dependency on the technologies mostly based in the US. For example, many universities in LAC and Europe have delegated the management of email services to US companies. This externalisation reduces costs, but it also delegates all the information, including sensitive data that can be exploited to train AI models that are not subject to restrictions based on risks. LAC should cooperate with EU Countries to define data protection policies, such as the General Data Protection Regulation (GDPR), to reduce possible harm of data processing. Nevertheless, we are now witnessing how US based companies are trying to overcome GDPR barriers to be able to use EU produced data to train their AI, making it hard or impossible to opt-out. Additionally, there is a discussion ongoing at Member State level in France about US policies. What will happen if the US asks us to adopt a certain type of behaviour if we want to maintain these services?

Digital sovereignty and autonomy remain critical concerns for both Europe and LAC, particularly in relation to AI infrastructure and data ownership. The current level of dependency on Big Tech raises fundamental questions: how can regions assert control over technologies that are largely developed and governed from outside their borders? While it is possible to establish ethical guidelines that reflect regional values, the real challenge lies in enforcing them. Participants emphasized the need for collaborative strategies between EU and LAC to address these gaps, not only by defining joint ethical standards, but also by exploring how the enforcement of the AI Act unfolds in practice, so both regions can learn and adapt accordingly.

There is also a growing movement within LAC countries to develop their own frameworks. Brazil[10] and Mexico[11] have both introduced national legislation on AI governance, while institutions such as CENFOTEC University have adopted internal ethical guidelines, such as their 2023 Manifesto on the use of AI in Education (including learning, teaching and assessment).

Finally, there is significant interest in conducting a survey to map how different countries in the region are addressing AI regulation, whether it is considered a policy priority, an emerging topic of discussion, or even questioned as to whether regulation is necessary at all. Such comparative efforts could serve as a foundation for more culturally responsive and rights-respecting regulatory models.

What human rights frameworks in the LAC region would influence the development of an AI Act?

To ensure that AI systems are inclusive, accessible, and ethically sound, participants emphasized the importance of grounding AI regulation in robust human rights frameworks—both international and local. A central reference point in the discussion was the UN Convention on the Rights of Persons with Disabilities (CRPD), which serves as the foundation for much of the current legislation across EU member states. Its principles provide a critical lens through which to assess the accessibility and inclusiveness of digital technologies, emphasizing the right of persons with disabilities to participate fully in the digital transformation.

The EU's Union of Equality: Strategy for the Rights of Persons with Disabilities 2021–2030, along with the upcoming European Accessibility Act (to be enforced from June/July 2025), were identified as key legislative models with strong potential for adaptation in the LAC region. The Accessibility Act is particularly relevant, as it imposes obligations in public procurement, development, and design of technologies to ensure they remain usable by people with

[10] AI Act of Brazil can be found here

[11] In 2024 the Federal Law Regulating Artificial Intelligence, including AI authority governance, was introduced to the Senate of Mexico. The proposed law aims to establish a legal framework to regulate the development, deployment and use of Artificial Intelligence systems (AI) in the country. The Federal Institute of Telecommunications (IFT) is the competent authority and is implementing the requirements for high risk AI systems.

disabilities. Participants agreed that accessibility must be considered from the earliest stages of technological development, rather than as a secondary concern. Failing to do so risks deepening the digital exclusion of groups that already face structural barriers to access.

Moreover, there was a clear recognition of the vast computational resources required by AI systems, and their associated ecological and human costs. Participants proposed that service-level agreements (SLAs) include not only technical guarantees but also qualitative criteria that allow users to assess environmental and social impacts. This would enhance transparency and help individuals and institutions make informed decisions about the systems they choose to use. Making these impacts visible and measurable was seen as a necessary step toward sustainable and accountable AI deployment.

In terms of legal integration, national constitutions, human rights laws, and development plans across LAC countries were identified as key entry points for embedding ethical AI principles in domestic legislation. The Universal Declaration of Human Rights (UDHR) also offers a global normative framework that could support these efforts. Alongside legal instruments, participants highlighted the value of ethical codes for computing professionals, such as those developed by the Association of Computer Machinery (ACM), the British Computer Society (BCS), and the IEEE, which offer concrete design frameworks to guide developers in creating socially responsible AI systems.

Finally, the discussion turned toward the future, with the idea that access to AI models and tools could eventually be considered a fundamental human right, much like access to electricity or the internet. This proposal responds to growing concerns about the emergence of a new kind of digital divide—one in which under-resourced regions risk being permanently excluded from the benefits of AI. Ensuring that AI access is equitable, and not a luxury for the few, will be essential to achieving meaningful digital inclusion in the years ahead.

TOPIC 1.2 : Cloud Adoption and Data Sovereignty in Open Innovation

As data becomes the cornerstone of innovation, cloud computing plays a crucial role in enabling collaboration, scalability, and agility across sectors. However, questions of data sovereignty, cost, and control continue to shape the adoption of cloud infrastructure, particularly in contexts like LAC, where regulatory and technical capacity can vary significantly. While the EU has made strategic investments in trusted cloud ecosystems such as Gaia-X, LAC countries are still navigating the balance between openness and autonomy in their digital strategies.

This topic focused on the cultural and economic dynamics that influence cloud adoption and interregional data transfers in the LAC private sector. Participants examined the extent to which businesses are willing to engage in open innovation with startups and academia, and how external regulation (especially GDPR) affects organizational practices. The conversation underscored the need for local alternatives, investment in digital skills, and a

shift from volume to value based data governance as key pillars for building a more sovereign and inclusive innovation environment across the EU- LAC partnership.

To what extent are LAC companies willing to open their innovation processes to external players, such as startups and academic institutions?

In Europe, the perception around cloud adoption and open innovation among companies is generally positive, but also cautious. There is openness to collaborating and sharing data through cloud ecosystems to foster innovation, yet this is typically done under tightly controlled conditions. For many EU companies, adopting cloud solutions is viewed as a strategic move rather than an immediate priority. Multi-layered infrastructures are often used to retain a level of control, including in-house or internal cloud environments, with a strong preference for EU-compliant solutions to ensure data sovereignty. There is a clear reluctance to rely on non-EU clouds, largely due to concerns that data may be stored outside the region, beyond the protection of EU regulations such as the GDPR. To address this, European cloud companies like Nextcloud[12] and initiatives like Gaia-X[13] have emerged as examples of European efforts to build trusted, decentralized digital ecosystems.

In contrast, the context in LAC is more constrained. In countries like Costa Rica, formal innovation processes are still rare across most organizations, and experience with open innovation remains limited. Institutions such as CENFOTEC University are actively working to promote open innovation by using open-source software, open AI models, and cyber- physical components. However, breaking the ice is not easy because it takes time to build the trust necessary for organizations to feel comfortable exposing their internal needs to external actors, such as startups and academic institutions. Interestingly, startups tend to be more willing to engage in open innovation, as they are often more agile, open to partnerships, and more inclined to explore external solutions for internal challenges.

A major barrier across the region is accessibility, both in terms of cost and technical capacity. The use of cloud services and other digital platforms often comes with significant financial hurdles, and many LAC institutions, particularly in education, lack the necessary budget to access these tools consistently. Participants noted, for instance, that some programs relying on cloud services had to reduce their offering when previously free or open courses became monetized. This has direct implications for students' ability to develop cloud-related skills and prepare for the labor market. The skills gap is further exacerbated by the limited regional expertise in managing multi-cloud and hybrid cloud environments. Participants emphasized that to move forward, it is crucial not only to lower the cost of access but also to invest in engineering knowledge and capacity building, allowing

[12] Nextcloud offers a fully open-source, self-hosted cloud solution that enables organizations to retain full control over their data, ensuring compliance with data sovereignty and privacy requirements.
[13] Gaia-X is a federated cloud infrastructure initiative designed to uphold European values of transparency, openness, data protection, and security, while giving data owners full control over their information and reducing dependency on foreign providers.

institutions to effectively manage and control their digital infrastructure in alignment with local priorities.

How do the private sector's mindset in LAC countries influence cloud regulations for intercontinental data transfers?

The regulatory landscape in LAC is gradually evolving, in part under the influence of EU standards such as the GDPR. In countries like Costa Rica, companies that conduct business with European partners are increasingly undergoing compliance audits and adapting their internal policies to meet stricter data governance requirements. This trend suggests that economic incentives, rather than political alignment alone, may be a key driver in pushing LAC businesses toward stronger data protection frameworks.

Participants emphasized that data must be treated as a strategic resource, not just in terms of volume, but of quality, traceability, and accountability. The analogy of data as "food," requiring provenance tags and quality controls, was used to underscore the shift from quantity-driven data practices to ones grounded in ethical and sustainable stewardship. In this sense, "good data" (reliable, inclusive, and well-governed) was seen as essential for positioning LAC as a trusted and influential actor in global data ecosystems.

Efforts across Europe to develop sovereign digital infrastructure were highlighted as valuable examples for the LAC region. In Spain, for instance, public and private actors including startups are investing in national computing capacity to reduce dependency on non-EU providers. Participants stressed the importance of adapting these practices to the LAC context, fostering regional cloud alternatives that align with local values and priorities. Projects like Gaia-X and companies such as Nextcloud were cited as concrete models of European-based infrastructure development, offering pathways to digital autonomy while promoting transparency, openness, and user control.

Ultimately, the ability of LAC countries to influence global digital governance will depend not only on how much data they generate, but also on how responsibly and strategically they manage it. Regulatory alignment with international standards must go hand in hand with capacity-building, infrastructure investment, and the promotion of ethical data practices rooted in the region's own digital sovereignty agenda.

WG2: DIVERSITY, EQUALITY AND INCLUSION (DEI)

TOPIC 2.1 : Involvement of women in the use of digital technologies

Achieving gender equity in digital transformation is a persistent challenge across both the EU and LAC regions. While digital technologies offer powerful tools for empowerment, economic participation, and civic engagement, women continue to face structural and cultural barriers that limit their access, usage, and influence. These barriers are not only technical—such as gaps in infrastructure or digital literacy—but also systemic, reflecting broader inequalities in education, employment, and leadership. Rural and underserved

communities are especially affected, where women may be doubly marginalized by geographic isolation and gender norms.

Beyond access, the quality and purpose of digital engagement matter. Women are often underrepresented in STEM fields and excluded from the design and leadership of digital initiatives. This limits their ability to shape technologies in ways that reflect their needs and lived experiences. In addition, cultural narratives and gender stereotypes are frequently embedded in digital tools, discouraging women's active participation and perpetuating unequal power dynamics. Addressing these challenges requires more than technical fixes— it demands a rethinking of how digital ecosystems are built, who they serve, and who gets to lead their development.

This topic explored the range of barriers women face when engaging with digital technologies, while identifying successful practices that promote gender-inclusive innovation. Emphasis was placed on the need for community-driven approaches, targeted policies, and visibility strategies to strengthen women's participation in the digital space. Participants highlighted that ensuring equitable access is not only a matter of justice, but also a pathway to more sustainable, inclusive, and innovative digital transformation processes across both regions.

What are the main challenges women face when using digital technologies across different sectors?

Participants discussed a wide range of interconnected challenges that hinder women's equitable participation in the digital sphere, particularly across different sectors and geographies. Limited connectivity and infrastructure, especially in rural and remote areas, remain a major obstacle to access. Even where some connectivity exists, the lack of reliability and high costs of internet services and devices create persistent economic barriers, making regular digital engagement difficult or unsustainable for many women.

Beyond access, lower levels of digital literacy compared to male counterparts continue to limit women's ability to engage meaningfully with technology. This is closely linked to limited access to education and training in digital technologies, which constrains their capacity to move beyond passive or entertainment-based usage toward more productive, professional, or entrepreneurial applications. Participants stressed that without addressing these educational gaps, digital transformation risks reinforcing existing gender inequalities.

The underrepresentation of women in STEM fields remains a structural problem that undermines the long-term inclusion of women in the tech ecosystem. This translates into a weak pipeline not only for entry-level roles but also for advancement to leadership positions, where women's presence remains significantly low. This lack of representation at all levels of the tech industry contributes to cultural and systemic biases in technology design, reinforcing a gender-biased ecosystem that often fails to reflect or prioritize women's needs and perspectives.

These challenges are further intensified by confidence and security gaps, such as the fear of harassment or lack of safe spaces online, which discourage women from participating fully in digital environments. Stereotypes and cultural barriers that are deeply rooted in both social norms and institutional practices continue to act as invisible deterrents to women's engagement with technology. In some contexts, participants also pointed to a political climate that resists DEI initiatives, creating an additional layer of complexity for efforts to promote gender-inclusive digital transformation.

Overall, the persistence of gender stereotypes across digital platforms, educational pathways, and industry dynamics was identified as a central issue requiring coordinated, systemic action. These entrenched biases not only limit women's opportunities but also compromise the inclusivity and social value of digital transformation itself.

What strategies and practices can be implemented to ensure women have equitable and effective access to the use of digital technologies?

To address the multiple and layered challenges women face in accessing and benefiting from digital technologies, participants advocated for a comprehensive approach that combines data-driven policy development with community-based strategies. A key priority is the collection of robust data on women's participation and the outcomes of targeted interventions. This evidence base is critical not only for shaping effective programs, but also for highlighting and scaling successful practices across different regions and sectors.

Another essential strategy involves the co-creation of solutions with women themselves, ensuring that interventions are context-sensitive and directly relevant to their lived experiences. Women-centred digital training programmes, particularly those tailored to specific groups such as rural populations, were widely supported. The PROFEA[14] initiative in Spain, which offers digital literacy training for women in rural areas, was cited as a positive example that could be adapted to other national and regional contexts.

Beyond basic access and literacy, participants stressed the importance of upskilling opportunities in technical fields and leadership training to help women advance within the digital economy. To support long-term inclusion, the implementation of structured mentorship programmes (such as the GÉANT Mentoring Programme[15]) was recommended as an effective tool to foster career development and strengthen professional networks. Additionally, the promotion of female role models in leadership positions was seen as

[14] PROFEA (Programa de Fomento de Empleo Agrario) is a Spanish government initiative that includes digital literacy programmes aimed at improving employability in rural areas. In recent years, it has incorporated gender-focused components to address the digital inclusion of rural women.

[15] The GÉANT Mentoring Programme is a European initiative designed to support the professional development of individuals—particularly women—in research and education networking communities, by fostering structured, goal-oriented mentoring relationships.

essential to challenge prevailing stereotypes and inspire new generations of women to engage with digital and technological fields.

Participants also highlighted a number of successful initiatives and networks that support women's participation and leadership. These include Women on HPC[16], Women Tech Europe[17], and community-based organisations led by women, such as APC[18], Conundo[19], and Rhizomatica[20], which work on inclusive connectivity and digital rights. In humanitarian and displacement contexts, UNICEF's digital knowledge training for female refugees was seen as a strong example of adapting skills development to vulnerable populations. Similarly, the role of startup accelerators and programmes that support women-led deep tech ventures was emphasized as vital to fostering innovation ecosystems that are inclusive from the ground up.

At the institutional level, gender-specific policies, such as RedCLARA's gender strategy, demonstrate how sustained commitment can help embed equity principles within regional digital agendas. Addressing technology-facilitated gender-based violence was also identified as a key priority, requiring targeted protections, support systems, and enforcement mechanisms. Finally, awareness and visibility campaigns, which both challenge stereotypes and highlight the contributions of women to the digital sector, were regarded as indispensable to shifting cultural perceptions and normalizing women's presence and leadership in tech.

TOPIC 2.2 : Stereotypes and biases in Artificial Intelligence

Artificial Intelligence is increasingly woven into the fabric of daily life, from hiring decisions and healthcare prioritization to content moderation and public service delivery. Yet despite its promise, AI systems are far from neutral. Instead, they frequently mirror the biases and

[16] Women in High Performance Computing (WHPC), commonly referred to as Women on HPC, is an international initiative that promotes diversity and inclusion in the field of high- performance computing. It offers mentorship, training, and networking opportunities to support women's careers in advanced computing technologies.

[17] Women Tech Europe is a network that promotes women's leadership, entrepreneurship, and innovation in digital and technological fields across Europe. It provides visibility, mentoring, and collaboration opportunities to support gender diversity in tech.

[18] The Association for Progressive Communications (APC) is a global network of civil society organisations and activists working to ensure equitable access to the internet and the protection of digital rights. APC integrates gender justice and community-led connectivity as core pillars of its digital inclusion efforts.

[19] Conundo is a Latin American initiative focused on community-based digital infrastructure and feminist technology practices. It supports local innovation, digital sovereignty, and inclusive governance models, particularly for women and marginalized communities.

[20] Rhizomatica is a Mexican-based organisation that works to promote digital inclusion through community-owned telecommunications infrastructure. It empowers rural and Indigenous communities to develop and manage their own mobile and internet networks, with a strong emphasis on gender equity and participatory design.

inequities embedded in the societies in which they are developed. These biases are encoded through training data, algorithm design, and deployment contexts, resulting in systems that reproduce or even amplify discrimination, particularly against women, racial minorities, and low-income groups.

Bias in AI is both a technical and a political issue. It stems not only from flawed datasets or exclusionary design assumptions, but also from broader decisions about which information is made available, whose perspectives are valued, and who participates in shaping these systems. In some contexts, AI has even been deployed as a tool of social control, reinforcing dominant ideologies and marginalizing dissenting voices. The illusion of AI's objectivity often conceals these biases, making them harder to detect and challenge. This can lead to harmful consequences, including the naturalization of discriminatory outcomes and the erosion of user trust.

This topic examined the complex ways in which stereotypes and systemic biases are embedded in AI systems, and how these dynamics affect different societal groups. Participants shared strategies to make AI more transparent, accountable, and inclusive, from improving data diversity and team representation, to embedding explainability and public oversight. The conversation also emphasized the importance of demystifying AI for the general public, equipping communities with the knowledge and tools to critically engage with algorithmic decision-making and advocate for equity in the digital sphere.

What are the most common stereotypes and biases embedded in AI systems today, and how do they impact different societal groups?

Bias in AI originates primarily from historical imbalances and structural inequalities that become encoded into data sets and design choices. When AI models are trained on incomplete, biased, or unrepresentative data, they tend to replicate and often intensify existing societal stereotypes, particularly those related to gender, race, class, and ability.

A major source of bias stems from confirmation bias and the limited perspectives of developers or dominant voices online, which fail to incorporate diverse or underrepresented experiences and needs. Technical decisions, such as how missing data is handled (e.g., imputation methods), can inadvertently amplify these biases, embedding discriminatory assumptions into algorithms.

Concrete examples illustrate systemic technological bias: everyday products like soap dispensers that fail to recognize darker skin tones or medical tools (such as oxygen saturation monitors) that provide less accurate readings for certain populations demonstrate how biased design, testing, and data collection transfer prejudice into AI systems. These AI systems inherit longstanding problems from earlier technologies, including exclusionary design assumptions and a lack of diversity in development teams.

Bias is not confined to algorithmic design but extends to AI deployment. For instance, AI-driven triage systems in healthcare may route patients inequitably due to biased or incomplete training data, exacerbating disparities in access and health outcomes.

Additionally, AI functions as a mechanism of political influence and social control. In some cases, politically motivated censorship or exclusion of critical data (such as climate change records) distorts AI learning and perpetuates systemic bias. AI applications in performance evaluations or public services may invisibly discriminate by downgrading users with "foreign-sounding" names or misclassifying individuals based on speech or grammar, enforcing cultural hierarchies and pressuring conformity.

A persistent myth is that AI is objective or inherently superior to human judgment, which poses a significant barrier to recognizing and addressing bias. Gender bias is evident in AI, for example, when virtual assistants default to female voices, reinforcing outdated stereotypes of women as caregivers or assistants. Similarly, AI systems used in hiring or university admissions often favor candidates from elite institutions or specific regions, embedding class-based discrimination.

Because AI outputs are perceived as neutral and automatic, their biases are more easily accepted, naturalized, and internalized, reinforcing existing power structures. Many users remain unaware of how these systems function and thus fail to challenge embedded stereotypes. Raising awareness is therefore critical to recognizing AI bias and mitigating its discriminatory impacts.

What are the most effective strategies and best practices to detect, prevent, and reduce bias in AI systems?

Participants emphasized that addressing bias in AI requires a combination of cultural awareness and technical measures. Central to this effort is raising public awareness: users must understand how AI systems generate outputs and how recurring patterns can reproduce dominant biases and narratives. Promoting critical engagement is essential, empowering individuals to question algorithmic decisions, cross-check information, and avoid passively accepting AI outputs as infallible.

Human oversight is vital, especially in sensitive domains like healthcare. AI-driven decisions must be reviewable by professionals who can apply context and nuance. To facilitate this, the use of explainable AI tools, such as SHAP (Shapley values), was recommended to make model decisions transparent and understandable to stakeholders. Such transparency helps clarify which factors influence specific outputs and supports trust and accountability.

Developing inclusive and representative datasets is a cornerstone of fair AI. Data must reflect diverse populations, experiences, and viewpoints, with careful scrutiny of provenance and quality. Diverse development teams play a crucial role in identifying potential blind spots and reducing bias during the design and implementation phases. Institutional mechanisms like ethics boards, governance frameworks, and accountability structures further reinforce responsible AI development and deployment.

Several best practices highlight these principles. Initiatives such as Wikipedia editing campaigns to expand representation of women and marginalized groups serve to broaden the informational base on which AI systems rely. Additionally, AI systems that incorporate

inclusive language practices, particularly in gendered languages like Spanish, promote cultural sensitivity and help systems better respect diverse user identities. These approaches not only foster representational equity but also enhance algorithmic responsiveness.

Legal and ethical boundaries must also be clarified and evolve alongside AI technology. Establishing governance frameworks that define responsibilities and limits is critical for ensuring ethical AI development. Implementing peer-review mechanisms akin to those in academic publishing can help evaluate AI systems and their outcomes, reducing risks of unchecked bias and poor quality deployment.

Finally, transparency in AI deployment was strongly underscored. Many AI systems operate invisibly, without user knowledge or consent, particularly in institutional, governmental, or corporate contexts. This lack of disclosure raises ethical concerns about informed consent and accountability. Institutions should be required to disclose when and how AI is used, especially in high-impact areas such as healthcare, hiring, or public services. Transparency fosters accountability, builds public trust, and enables critical oversight. Legal or regulatory measures may be necessary to establish consistent disclosure standards, ensuring the societal impact of AI is visible rather than hidden behind automation.

In summary, a comprehensive approach combining education, diverse and inclusive design, human oversight, transparent governance, and legal clarity is essential to mitigate bias and promote equitable AI systems.

Insights of 4th DIF-WGs Meeting

Tuesday 21st of October from 14:00 to 16:00 (CET)

WG1: HUMAN-CENTRIC DIGITAL TRANSFORMATION

TOPIC 1.1: Reimagining Public Services: Putting Citizens First in the Digital Era

The discussion highlighted the central role of civil servants in driving citizen-focused digital transformation when equipped with the right skills, autonomy, and technological infrastructure. Experiences such as Estonia showed that embedding IT specialists within public institutions and fostering a culture of trust in e-governance enables civil servants to co-design and implement services effectively, strengthening institutional capacity and public trust.

Creating spaces for co-creation and collaborative governance was seen as essential, allowing civil servants to work with startups, researchers, and citizens to test innovative solutions beyond traditional hierarchical structures. This promotes interinstitutional collaboration, better service provision, and participatory policy-making.

Transparency, accountability, and citizen engagement were emphasized as critical, particularly in AI-enabled services. High-risk AI systems should include human oversight, diverse and representative datasets, rigorous testing, and ongoing monitoring to prevent bias and protect citizens' rights. Participatory governance and interdisciplinary oversight help ensure fairness and capture societal dimensions often overlooked by technology alone.

Finally, continuous training, ethical frameworks, and institutional recognition are key to sustaining innovation. Public servants need the skills and support to navigate technological, social, and ethical challenges, while clear rules, audits, and public reporting maintain trust and ensure that digital transformation benefits citizens equitably.

How can civil servants, not just policymakers, be empowered as digital transformation agents?

Civil servants can become key actors in digital transformation when they are equipped with the right skills, autonomy, and technological infrastructure. The example of Estonia illustrates how this can be successfully achieved. Through continuous investment in digital literacy, interoperable systems, and a culture of trust in e-governance, Estonian civil servants have played a central role in both designing and implementing public digital services. Rather than outsourcing reforms, they were involved in building and maintaining

core infrastructures such as the X-Road data exchange system[21] and the national e-identity framework[22]. Embedding IT specialists within public institutions and encouraging agile experimentation allowed them to adapt quickly, ensure interoperability, and strengthen public trust.

In contrast, other countries, such as Greece, have relied more on partnerships with big tech companies to modernise their public administration. While this approach has helped accelerate implementation, it also highlights the importance of ensuring that public servants remain central to the process through training, co-design roles, and knowledge transfer. Otherwise, digital transformation risks weakening long-term public-sector capacity and sovereignty.

During the participants' discussion, creating spaces for co-creation and collaborative governance was seen as essential. Through approaches such as pre-commercial procurement and participatory design, civil servants can work alongside startups, researchers, and citizens to propose innovative solutions beyond traditional hierarchical structures. This demands a rethinking of service provision, data management, and identity systems, building on interoperable infrastructures that allow the reuse of data across institutions. Civil servants play a key role in organising and overseeing these processes, contributing to data generation and stewardship while ensuring that participatory mechanisms are embedded in public policy design. Co-creation of digital services should involve the entire ecosystem: citizens, policymakers, and public servants alike, promoting interinstitutional collaboration, shared responsibility for innovation and trust.

Transparency, accountability and citizen trust were also highlighted as critical elements. Public scrutiny and the ability to challenge or appeal digital decisions are central to a citizen-focused digitalisation process. Civil servants must safeguard transparency and actively engage citizens in discussions about how digital systems are designed and used. This involves promoting open data practices that enable evidence-based decision-making and public oversight. By becoming promoters of good practices and advocates for openness, civil servants can help ensure that digital transformation strengthens democratic accountability rather than diminishing it.

Participants also emphasized the importance of changing mindsets and fostering a culture of innovation. Digital transformation is not just about deploying new applications or automating processes. It also requires a cultural shift among public servants. Too often, digital tools are designed without considering how civil servants interact with them, leading to a loss of human connection and engagement. Institutional recognition and distributed leadership are therefore key: every public servant should feel that their daily work directly contributes to innovation and the creation of public value. Encouraging experimentation, feedback, and collaborative problem-solving can foster a culture of innovation across the public sector.

21 https://e-estonia.com/solutions/interoperability-services/x-road/

22 https://e-estonia.com/solutions/estonian-e-identity/id-card/

Continuous training and capacity building were identified as key enablers of long-term success. To sustain transformation, continuous training in digital skills, data literacy, and citizen-centered design is essential. Public servants must be equipped not only to use digital tools effectively but also to critically understand their social and ethical implications. Investing in lifelong learning and professional development ensures that the public sector remains agile, competent, and capable of shaping digitalisation in line with public interest.

Specific regional challenges were also identified:

- In the EU, a lack of interoperability between ministries and siloed platforms limits data sharing and coordinated service delivery. An ageing population may also struggle to adopt digital services. However, the relatively small size of many countries and generally advanced infrastructures can facilitate the replication of successful models such as Estonia's, although islands and remote areas still face connectivity challenges.
- In Costa Rica, the development of a digital health system has unified medical records, and there is also a digital platform that integrates social security information, personal appointments, clinical data, and pension details. However, access is limited to those with internet connectivity and mobile devices, which can create new forms of exclusion.
- In Mexico, a national ID number enables access to public services, but the absence of a unified platform across states and municipalities, combined with political changes and limited financial resources, has hindered the implementation of a long-term, coordinated strategy.

How to ensure AI in citizen-facing services does not reinforce bias?

At the EU level, the AI Act adopts a risk-based approach, categorising AI systems as minimal, limited, high-risk, or unacceptable. For "limited risk" systems, such as many chatbots or content-generating tools, transparency obligations apply to support accountability. For example, users must be informed that they are interacting with an AI system. In contrast, high-risk systems (which may include citizen-facing public services affecting rights or legal status) are subject to much stricter requirements. These include human oversight, robust data governance, bias mitigation measures, documentation, and traceability, all designed to ensure that AI strengthens public services without undermining rights or non- discrimination. Conformity assessments are also required, ensuring that datasets are diverse, systems are explainable, and humans remain actively in the loop.

Bias mitigation under the AI Act is explicitly regulated through Article 10, which obliges providers of high-risk AI systems to use training, validation, and testing datasets that are relevant, sufficiently representative, and as free of errors as possible given the intended purpose. Datasets must account for the persons or groups on which the AI system will be applied, including specific contextual, behavioural, or functional settings. Providers are required to implement appropriate measures to detect, prevent, and mitigate any biases identified. In exceptional cases, Article 10(5) allows the processing of special categories of personal data specifically to ensure bias detection and correction.

Article 15 of the AI Act further strengthens bias prevention by requiring that high-risk AI systems be designed and developed to reduce biased outputs, including technical and organisational measures to address feedback loops and errors. These measures ensure that systems perform consistently, safely, and without systematically disadvantaging any group. In addition, ongoing monitoring and thorough documentation are mandatory. Providers and deployers must maintain logs and traceability of datasets, decisions, and system performance so that any bias-related issues can be identified, audited, and corrected. Post-deployment monitoring is also required to detect drift, errors, feedback loops, or discriminatory outcomes.

During the discussion, participants emphasized the importance of transparency and human oversight, ensuring that AI in citizen-facing services does not reinforce bias starts with transparency and accountability. A human-in-the-loop approach is essential, as public servants must remain actively involved in AI-supported decision-making processes. Citizens should understand how automated decisions are made and which foundation models power chatbots and other AI tools. This openness builds public trust and allows users to challenge or appeal outcomes, fostering a culture of accountability in digital public services.

Building on transparency, bias prevention must also begin at the design stage. Training datasets need to be diverse and representative so that all social groups are fairly represented and structural discrimination is avoided. AI systems should undergo thorough impact assessments and exhaustive testing before deployment to detect and correct potential biases. Regular algorithmic audits ensure fairness, explainability, and accuracy over time. Rather than relying on continuous online adaptive learning which can unintentionally embed biases, AI tools should collect user feedback and update offline, integrating new data only after verifying that it is unbiased and reliable.

Effective oversight further requires interdisciplinary collaboration. Teams combining technologists, social scientists, ethicists, and public servants are best positioned to address both technical and societal dimensions of bias. In parallel, participatory governance that actively engages citizens and civil society organisations in the design and evaluation of AI tools creates shared responsibility. This inclusive approach helps to uncover real-world impacts that might otherwise be overlooked, ensuring that the systems serve the public fairly and accountably.

Finally, these operational and participatory measures need to be supported by strong ethical and regulatory frameworks. Clear rules, transparency on model design and decision-making, regular audits for bias, and public reporting are necessary to institutionalise fairness in AI systems. Even in contexts with limited digital infrastructure or computing capacity, such as in some regions of Mexico, public confidence can be reinforced through consistent human oversight and ongoing communication about governance practices. As private-sector and civil society initiatives mature, their integration into public systems should adhere to principles of accountability, inclusivity, and responsible innovation, ensuring AI benefits all citizens equitably.

TOPIC 1.2: AgriTech for the People: Satellite and AI Innovations

Earth Observation (EO) data and AI are transforming agriculture, but their impact depends on translating, adapting, and democratizing access. In Europe, initiatives like the Copernicus Programme provide open, standardized satellite data, which combined with in-field sensors and AI models, support precision agriculture, optimize irrigation, and improve crop management. Farmers often rely on cooperatives, public platforms, or NGOs to turn complex data into actionable insights. In Latin America, local adaptation and grassroots experimentation demonstrate the importance of tailoring technologies to regional conditions and community needs.

Practical applications show wide-ranging innovation: AI-driven crop disease detection, smart irrigation, and optimized harvesting in Europe, and irrigation efficiency, soil monitoring, and deforestation-free certification in Latin America. These tools enhance productivity, sustainability, and supply chain traceability, while local calibration ensures global technologies meet local agricultural realities.

Governments, cooperatives, and local organizations are crucial for enabling access and understanding. Open data platforms, funding, training, and participatory approaches help farmers, especially smallholders, translate complex EO and AI information into practical decisions. Intermediaries and cooperative networks further support adoption and knowledge sharing.

Looking forward, Europe's structured frameworks and data infrastructure, combined with Latin America's local innovation and sustainability experience, can create inclusive EO and AI solutions. Joint platforms and international cooperation are key to ensuring these technologies improve productivity, traceability, sustainability, and food security for all farmers.

How are farmers in Europe and LAC already using Earth Observation (EO) data and AI to improve crop management and food security, and what lessons can they share with each other?

The European Union's Copernicus Programme[23] provides free, open, and constantly updated Earth Observation data from the Sentinel satellites. Farmers, researchers, and agribusinesses use this data to monitor soil moisture, crop growth, droughts, and land cover changes. These datasets are the foundation for precision agriculture and climate-smart farming, helping optimize irrigation, fertilizer use, and planting decisions. These data are combined with in-field sensors and AI models to improve field management, crop productivity, and sustainability. Even though Copernicus data are free, intermediaries such as cooperatives, NGOs, or public platforms are often needed to translate the complex data into actionable insights for farmers. Although EO data are freely available, most farmers lack the technical capacity to interpret satellite information, so cooperatives, public agencies,

[23] https://www.copernicus.eu/en

and tech companies act as intermediaries, converting EO data into practical insights, for example weather alerts or irrigation advice. This "translation layer" ensures that data are usable and actionable[24].

In Catalonia (Spain), the Department of Agriculture uses AI-driven drones and satellite imagery to monitor crop conditions and predict harvesting times. Predictive models support irrigation planning and help detect pests and diseases early. Farmers receive remote alerts and water distribution plans, improving resource efficiency and yield stability. In Trentino (Italy), AI and EO data are used to track fruit maturity in vineyards and apple orchards. By identifying the exact moment for harvesting, farms can optimize labor management and reduce food loss, which is particularly relevant for seasonal crops that rely on temporary workers. Farmers in Italy, France, and Spain are also experimenting with computer vision systems that detect early signs of disease on leaves or fruit, helping react quickly to outbreaks and protecting entire harvests.

In Costa Rica, farmers and exporters use satellite monitoring to prove that coffee and pineapple production does not contribute to deforestation, in line with the EU Deforestation Regulation (EUDR). This certification process uses drones, EO imagery, and AI analysis to ensure traceable supply chains[25]. Universities near San José are developing a system that combines humidity and nutrient sensors with AI algorithms to monitor soil quality. Imported sensors from the UK and USA were initially incompatible with local soil, so researchers are now building AI calibration models to adapt data readings to tropical conditions, highlighting the importance of local adaptation of global technology. In Ecuador, there is potential to apply AI virtual assistants and drone mapping for irrigation efficiency, soil classification, and fire prevention, which could enhance resource conservation and climate resilience. Across Latin America, several initiatives aim to use machine learning algorithms to recommend which crops are best suited to local soil and weather conditions, optimizing land use and improving food security.

Participants noted that both regions show strong interest in combining EO and AI to support sustainable farming. Europe offers open-access data frameworks such as Copernicus and strong technical infrastructure, while Latin America demonstrates innovation in local adaptation and community-level experimentation. Future cooperation could focus on calibrating EO tools for tropical environments, building local data platforms, and exchanging training programmes for farmers and agronomists, ensuring that lessons from each region benefit the other.

What role should governments, cooperatives, or local organizations play in helping farmers in both regions access and understand EO data?

[24] https://www.copernicus.eu/en/access-data/dias

[25] https://www.globalcompliancenews.com/2025/10/02/https-insightplus-bakermckenzie-com- bm-consumer-goods-retail_1-european-union-commission-considering-delaying-eudr- application-for-another-year_09242025/

Governments have a central role as policy enablers, data integrators, and capacity builders. They can make EO data available through national open platforms, fund public–private partnerships, and include digital agriculture in national strategies. In the EU, the Common Agricultural Policy (CAP) includes incentives for digital transition and precision farming. Similar frameworks could be promoted in LAC through public innovation funds and capacity-building programmes.

Agricultural cooperatives also contribute significantly to enabling access. In Italy, cooperatives act as information hubs, providing weather alerts and pest warnings to their members. By pooling resources, small farms can collectively access EO-based tools that would otherwise be unaffordable individually. Similarly, in Costa Rica, farmers often face information overload from EO and weather platforms such as Copernicus, so local institutions or public services translate technical data into practical advice, answering concrete questions like "Is today a good day to plant or irrigate?" or "Should fertilizer be added this week?".

Public funding and expert support further facilitate adoption. Under the Catalan Strategy on AI, small farmers and SMEs can apply for publicly funded assessments with certified AI experts, who identify suitable AI solutions, assess risks, and recommend tools based on the farm's maturity level. This ensures even small producers receive tailored digital advice. Platforms like Belgium's Terrascope[26] act as intermediaries between Copernicus and local farmers, providing ready-made maps and analytics for non-specialists, while Costa Rica's SIMOCUTE[27] integrates satellite data to monitor environmental changes, offering a foundation for agricultural monitoring systems and supporting compliance with regulations such as the EU Deforestation Regulation.

Investment in R&D and dedicated innovation funds is critical, especially in Latin America. In Costa Rica, despite strong electromechanical and engineering research, funding for agritech innovation, blockchain, or AI applications is limited, and small farmers struggle to access financing from national development banks. Governments could design targeted grants or credit lines for digital agriculture to promote EO and AI adoption. Initiatives like the Inter-American Institute for Cooperation on Agriculture (IICA)[28] support start-ups and small companies in EO, drone, and sensor analytics, and collaboration with European partners, such as the SPIDER network, could strengthen technical exchange and build a shared EU– LAC ecosystem for agritech innovation.

Policymakers can also facilitate EO adoption by creating public digital services accessible to all farmers, such as free EO data dashboards customized to national crops, government- backed expert networks offering "AI-readiness assessments," and pilot funding for proof- of-concept projects using EO and AI in small farms. European initiatives like the Agri-Digital Growth project[29] (co-funded under the Interreg Central Europe Programme, 2024–2026)

[26] https://terrascope.be/en
[27] https://simocute.go.cr
[28] https://iica.int/en/
[29] https://www.interreg-central.eu/projects/agri-digital-growth/

complement agricultural policies by providing training, living labs, and pilot projects to help small and medium-sized farms adopt technologies such as EO, sensors, and AI.

Both regions recognize the need for translation and mediation between complex data and practical farming actions: the EU model of cooperatives and public data services provides a successful blueprint for inclusive access, while Latin America brings grassroots innovation but needs stronger institutional and financial support. Building regional platforms, supported by public funding and international cooperation, can ensure EO data becomes a shared resource for all farmers, large and small.

WG2: DIVERSITY, EQUALITY AND INCLUSION (DEI)

TOPIC 2.1: Making multimodal AI work in Spanish and Portuguese

The discussion showed that multimodal AI systems still do not perform with the same quality in Spanish and Portuguese as they do in English, largely due to the lack of diverse and high- quality data. Differences in accuracy, interpretation of cultural nuances, and handling of dialects affect both user experience and the trust of people who rely on these technologies for communication, education, or public services. These limitations are intensified in countries with high linguistic diversity, where models often recognize only dominant variants.

Participants stressed that the gap is not only technical but structural. Uneven connectivity, the concentration of resources in major cities, and limited investment in multilingual models perpetuate an AI ecosystem centered on English and Eurocentric frameworks. At the same time, strict regulatory frameworks make access to multimodal data more difficult, while the lack of algorithmic transparency generates distrust and reinforces existing inequalities.

To close these gaps, the discussion highlighted the need to expand digital infrastructure, diversify training data, and promote the direct participation of local communities in the creation and validation of content. Strengthening ethical governance, as well as collaboration between Europe and Latin America, is essential to accelerate progress toward inclusive and culturally adapted models.

Finally, participants underscored that trust in AI depends on transparent processes, recognition of the labor of those who label data, and digital literacy initiatives that allow citizens to understand, question, and safely use these technologies. Only through these measures can multimodal AI become truly useful and equitable for Spanish and Portuguese speakers.

How effective is current multimodal AI (text, images, video, audio) in supporting Spanish and Portuguese compared to English or other widely used languages?

Multimodal AI tools still show lower accuracy in Spanish and Portuguese compared to English. They often misinterpret idioms, humor, slang, and region-specific expressions,

especially in Latin American Spanish and Brazilian Portuguese,
and subtitles or transcriptions frequently distort or omit contextual meaning, affecting comprehension and trust in automated outputs. While AI can recognize words correctly, it frequently fails to convey tone, formality, and cultural nuance; for instance, misuse of "Usted" or confusion between European and Brazilian Portuguese reflects a lack of contextual understanding that makes content feel impersonal and detached from local realities. Users also reported that simultaneous translation and voice interaction remain difficult to follow, particularly when switching between dialects, as most AI systems perform best in English and require users of other languages to invest additional time in training or adapting models, creating barriers to participation and discouraging engagement.

In large and linguistically diverse countries such as Brazil, regional varieties are rarely represented in AI training data, leading voice assistants and chatbots to fail to recognize accents or local idioms from outside dominant regions like São Paulo. Over time, this limits inclusivity and reduces the perceived usefulness of AI tools. Most AI models rely on datasets that prioritize English or European Portuguese, creating a Eurocentric bias. Updates and fine- tuning cycles occur faster in English, leaving Spanish and Portuguese users with slower improvements and less reliable results, and the scarcity of high-quality annotated data hinders the creation of robust benchmarks. In sector-specific domains such as healthcare and education, multimodal AI performs adequately for basic classification tasks but struggles with complex interpretation. In medical imaging, for example, systems can detect abnormalities but often misread nuanced pathological patterns due to limited multilingual clinical data. Similar gaps appear in educational platforms, where English resources remain dominant.

Limited linguistic and cultural adaptation reinforces digital inequality. When tools fail to operate effectively in a user's native language, participation in digital environments becomes restricted, widening the digital divide between English-speaking users and communities across Europe and Latin America, where Spanish and Portuguese predominate.

What barriers exist in training multimodal AI systems for Spanish and Portuguese, and how could they be overcome?

Barriers:

The most persistent obstacle in training multimodal AI for Spanish and Portuguese lies in the limited availability of large, diverse, and high-quality multimodal datasets, as existing systems are primarily trained in English. This reduces their performance when processing regional dialects, idiomatic language, or informal expressions, perpetuating systematic bias and limiting cultural adaptability. Socio-economic inequalities further affect access to reliable internet and advanced digital tools, with uneven connectivity across Latin America and parts of the Iberian Peninsula, especially outside major cities. AI resources and research are highly concentrated in metropolitan centers such as São Paulo or Madrid, reinforcing disparities and leaving smaller or rural communities behind. Spanish and Portuguese contain wide varieties of accents, dialects, and cultural registers, but these are often

underrepresented in training data, which results in outputs that reflect only dominant linguistic norms and weakens inclusivity.

Insufficient investment and fragmented research efforts hinder the development of multilingual AI systems, and the absence of coordinated public strategies or open data policies leads to duplication and a scarcity of shared resources. Moreover, commercial incentives continue to prioritize English due to its larger market, and ethical or regulatory challenges (such as GDPR constraints on sensitive multimodal data and the opacity of black-box algorithms) further complicate adaptation, reducing user confidence. In addition, the AI value chain depends heavily on low-paid data labelers in developing regions. This unequal distribution of digital labor reinforces global inequalities and contradicts the ethical principles that should underpin inclusive technological development.

AI-generated misinformation and biased outputs can erode public confidence, particularly among younger users. When these tools provide culturally inaccurate or linguistically biased information, users become less likely to trust or engage with them, reducing digital literacy and adoption in the long term.

Ways to overcome barriers:

Overcoming these barriers requires action on multiple fronts. Expanding connectivity and access to digital tools in underserved regions is fundamental for equitable AI development. Investments should target underserved regions to prevent further concentration of resources in large metropolitan areas. Inclusion must begin at the data collection stage, with training datasets that represent the full diversity of dialects, accents, genders, and cultural contexts in Spanish and Portuguese speaking communities, alongside transparent documentation of data sources and methodologies to identify and reduce bias. Local communities, linguistic experts, and cultural institutions should actively participate in data collection and validation. This participatory model ensures that AI systems not only process language accurately but also reflect the lived realities, values, and communication styles of diverse users.

Governments, research centers, and private organizations should pool resources to support open and cooperative AI research initiatives. Funding mechanisms that prioritize multilingualism and cross-regional collaboration can bridge the gap between Europe and Latin America. Responsible AI governance should include fairness audits, transparent communication of system limitations, and robust privacy protections. Ethical oversight mechanisms are essential to guarantee user trust, especially when dealing with personal or sensitive data.

Developing fair working conditions and recognition for data-labeling workers is crucial to making AI development more ethical and sustainable. Improved compensation, visibility, and inclusion of these contributors in the AI ecosystem can reduce systemic inequities. Finally, educational campaigns and capacity-building initiatives can help users understand both the potential and the limitations of AI systems. Transparency about how algorithms

function, combined with user training in digital literacy, can restore trust and promote responsible use.

TOPIC 2.2: Building Culturally Sensitive and Inclusive AI across EU & LAC

The discussion emphasized that current AI continues to reflect primarily Western cultural paradigms, which limits its ability to represent the cultural diversity of Europe and Latin America. The lack of culturally specific data, models' tendency to generalize nuances, and the absence of minoritized languages in training datasets result in systems that often fail to capture the symbolic, emotional, or contextual depth of local expressions. Cases such as Ecuador illustrate how these technologies perform particularly poorly in multilingual and Indigenous contexts.

Participants stressed that these limitations are not only technical but also deeply ethical and social. When AI misinterprets cultural context, it risks erasing identities, reinforcing stereotypes, or reproducing existing inequalities. The cultural homogenization produced by many models threatens the value of oral traditions, ancestral knowledge, and the plurality of perspectives. Added to this, is the danger that models may develop reasoning patterns increasingly misaligned with human cultural frameworks.

Despite these risks, there is significant potential for AI to become a tool that preserves and celebrates cultural diversity. Achieving this requires integrating inclusion from the beginning of the design cycle, involving local and Indigenous communities, and developing specialized models capable of reflecting specific languages, values, and cultural practices. The discussion also emphasized the need for governance frameworks that ensure fairness, transparency, and accountability.

Finally, strengthening digital literacy and fostering citizen participation are key conditions for building trust and enabling people to recognize and question AI's cultural biases. With appropriate policies, community engagement, and greater corporate transparency, AI can become an instrument that expands, rather than diminishes, cultural diversity.

To what extent can AI systems today capture and reflect cultural particularities across different European and Latin American societies?

AI models are predominantly trained on data reflecting Western languages, values, and worldviews, which limits their ability to authentically represent diverse cultural realities. Large language models (LLMs) tend to prioritize majority perspectives, smoothing over cultural nuances and regional differences in order to deliver "universal" outputs. As AI becomes more advanced, models may develop internal "languages" or "values" that diverge from human understanding, creating systems that reflect neither local nor global cultures. At the same time, dedicated systems trained on culturally specific datasets can accurately reflect local traditions, expressions, and knowledge systems, offering a pathway to preserve diversity rather than erase it.

Examples such as Ecuador illustrate the limits of current AI in multicultural contexts: in societies with multiple languages, including Kichwa, Shuar, and other Indigenous groups, AI

struggles to represent deep relational and symbolic elements
of culture, particularly those transmitted through oral traditions. Authentic cultural representation depends on involving communities directly in AI design, supporting underrepresented languages, and adopting ethical and inclusive practices that respect local ways of knowing. Achieving cultural sensitivity requires AI to balance global reach with contextual understanding, ensuring that local cultural frameworks are not overwritten by dominant narratives. Capturing cultural particularities, therefore requires models to move beyond literal interpretation, integrating meaning, emotion, and the social significance behind words and expressions.

What risks arise when AI misinterprets cultural or linguistic variations?

When AI fails to understand cultural or linguistic nuances, it can erase or distort local traditions, undermining the identity and visibility of minority communities. Systems trained on English or Western-centric data often ignore other worldviews, reinforcing the marginalization of non-Western languages and cultural logics. In contexts such as Ecuador, AI may oversimplify or misrepresent ancestral languages, oral traditions, and symbolic ties to nature, leading to the misappropriation or disappearance of cultural heritage.

These shortcomings can also amplify stereotypes embedded in training data, perpetuating discriminatory or reductive portrayals of certain groups or identities. Misinterpretation of linguistic variations can lead to inequitable access to digital tools and discrimination in service delivery, disadvantaging linguistic minorities or culturally distinct populations. Overreliance on standardized AI outputs can further dilute the richness of cultural diversity, producing content that appears globally neutral but lacks authenticity. The prioritization of data-driven objectivity risks undermining traditional knowledge systems essential to many societies.

As models evolve, they may develop internal patterns of reasoning that no longer align with any human cultural framework, making decisions opaque and untraceable. The digital divide deepens when cultural misrepresentation compounds existing social and economic disparities between connected and marginalized groups.

What practical steps and actions can be taken for AI to become culturally sensitive?

Cultural sensitivity should guide every stage of the AI lifecycle, from pre-design to monitoring, ensuring that inclusivity is embedded in system development. This requires including people from diverse cultural, linguistic, gender, and social backgrounds in AI design so that a multiplicity of worldviews and lived experiences inform decisions. AI policies, programs, and regulations should explicitly consider cultural and linguistic pluralism, and also policymakers must recognise diversity as a key dimension of AI governance and enact frameworks that actively counter bias and stereotypes. In this way, frameworks must actively counter bias and stereotypes. Beyond general-purpose models, specialized AI systems can be designed to understand and communicate the values, idioms, and expressions unique to specific cultures.

To move from linguistic translation to cultural and value-based translation, AI must learn to interpret meaning and symbolism, capturing emotional and cultural depth rather than producing literal translations. Data collection practices should be redesigned to localise beyond translation, with curated datasets that respect local contexts, oral traditions and cultural frameworks. Participatory design processes involving local and Indigenous communities ensure that systems reflect the voices and values of those they serve, while integrating Indigenous languages and traditional knowledge systems expands data diversity and preserves underrepresented knowledge, making sure that oral cultures have a digital presence.

Building local capacity for AI development enables communities to design culturally aligned technologies and maintain digital sovereignty. Ensuring ethical data collection, prioritising consent and transparency, together with respecting cultural ownership, avoids extractive or exploitative dynamics. Institutionalizing cultural sensitivity in AI governance frameworks ensures that evaluation, funding, and regulatory processes incorporate these principles. Greater transparency and accountability from technology companies (regarding data origins, algorithmic logic, and cultural assumptions embedded in their designs) is also essential. Finally, users should be empowered to understand cultural bias in AI and to use prompting strategies that highlight their own cultural context.

Annex 3: First DIF event report

Insights of 1st SPIDER-DIF event

Thursday 5th of December of 2024 from 13:30 to 15:30 (BRT)

Introduction to the DIF Report

The Digital Dialogues Implementation Forum (DIF) is a collaborative platform of the SPIDER Project designed to facilitate dialogue, knowledge exchange, and strategic discussions on digital transformation, emerging technologies, and inclusive innovation. The first edition of the DIF took place in December 2024, within the framework of TICAL Conference, in close collaboration with RedCLARA, the Latin American advanced networks organization.

The forum brought together experts, policymakers, researchers, and practitioners from Europe and Latin America to discuss key challenges and opportunities in digital transformation. Two main panels were organized during the event:

- **Panel 1: Transforming Policies into Action – AI and Data in Bi-regional Collaboration**, which focused on policy implementation, cross-sector collaboration, and overcoming structural challenges for EU–LAC cooperation.
    - Moderator: Carlos Gamboa (National Research and Education Network - RedCONARE, Costa Rica)
    - Panelists:

        - Juan Pablo Carvallo (National Research and Education Network – CEDIA, Ecuador)
        - Eduardo Grizendi (National Education and Research Network – RNP, Brazil)
        - Tom Fryer (GÉANT, Europe)
- **Panel 2: Diversity, Equity, and Inclusion (DEI) in Digital Transformation**, which examined the role of education, international cooperation, and the BELLA project in promoting human-centered and inclusive digital ecosystems.
    - Moderator: María Fernanda Cabrera (UPM - Spain)
    - Panelists:
        - Martha Ávila (University Corporation for the Development of Internet – CUDI, Mexico)
        - Alice Abreu (Federal University of Rio de Janeiro – UFRJ, Brazil)
        - Luis Cadenas (Latin American Cooperation of Advanced Networks – RedCLARA, LAC)

This report summarizes the discussions, insights, and examples shared during both panels, providing a detailed account of the topics addressed and the key perspectives offered by the panelists. It aims to serve as a reference for understanding the outcomes of the first DIF event and informing subsequent initiatives in digital collaboration and inclusive transformation.

Panel 1: Transforming Policies into Action: AI and Data in Bi-regional Collaboration EU–LAC

TOPIC 1.1: Transforming Policies into Action in Bi-regional AI and Data Collaboration

The discussion emphasized that transforming AI and data-related policies into concrete action requires moving beyond high-level agreements toward operational collaboration mechanisms between Europe and Latin America and the Caribbean. Key points emerging from the discussion included:

- From policy alignment to implementation:
    - Panelists noted that both regions already have strategies, policy frameworks, and regulatory instruments related to AI and data, although these vary in their level of maturity for practical implementation.
    - The main challenge lies in operationalizing these policies through shared infrastructures, governance mechanisms, and sustained collaboration models.
- Addressing infrastructure and data asymmetries:

- Differences in data infrastructure and digital maturity were identified as a major barrier to effective collaboration.
- Rather than viewing these asymmetries only as limitations, the discussion framed them as an opportunity for complementarity, capacity-building, and shared learning.
- Regional and bi-regional digital ecosystems were highlighted as instruments to bridge gaps and enable participation from institutions with different levels of development.

- AI and data as enablers of societal impact.
  - AI collaboration was discussed in relation to concrete societal challenges, such as public services, health, education, and sustainability.
  - The importance of focusing on applied, impact-oriented AI use cases rather than purely technological development was repeatedly emphasized.
- Learning from existing collaborative initiatives:
  - Examples of ongoing EU–LAC cooperation were referenced as proof that bi- regional collaboration can work when supported by appropriate infrastructures, trust, and shared objectives.
  - These initiatives were seen as potential models for scaling future AI and data collaborations.

TOPIC 1.2: Strategies to Promote Public–Private–Academic Collaboration

The panel highlighted cross-sector collaboration as a structural requirement for successful digital transformation in a bi-regional context. Main discussion points included:

- The role of incentives in fostering collaboration:
  - Financial incentives (e.g. access to funding, shared infrastructure) and non- financial incentives (e.g. visibility, participation in innovation ecosystems) were identified as key drivers for collaboration.
  - Long-term incentives were considered particularly important to sustain engagement beyond individual projects.
- Inclusive governance and participation in policy-making:
  - Ensuring that academic and private-sector perspectives are included in public policy discussions was identified as a persistent challenge.
  - Panelists stressed the importance of dialogue platforms and participatory governance models that allow different sectors to contribute meaningfully to digital policy design.
- Lessons learned from previous collaborative experiences:
  - Successful collaborations were described as those with:
    - Clearly defined roles and responsibilities.

        - Trust-based relationships among partners.
        - Flexibility to adapt to different institutional and regional contexts.
    - Fragmentation and short-term engagement were identified as common risks that reduce long-term impact.

TOPIC 1.3: Challenges for EU–LAC Digital Transformation Collaboration

The discussion openly addressed the structural and contextual challenges affecting EU–LAC collaboration in digital transformation. Key challenges and reflections included:

- Structural and capacity-related barriers:
    - Differences in technological infrastructure, institutional capacity, and access to skills were identified as core challenges.
    - Addressing these differences requires tailored approaches rather than uniform solutions.
- Turning diversity into innovation potential:
    - Cultural, economic, and technological diversity between regions was framed as a potential source of innovation.
    - Collaboration models that recognize and integrate these differences were seen as more resilient and impactful.
- The role of funding policies:
    - Funding mechanisms were highlighted as powerful tools to:
        - Set priorities.
        - Encourage inclusion.
        - Enable long-term collaboration.
    - Alignment between funding instruments and bi-regional strategic goals was considered essential for sustainable impact.

Panel 2 : Diversity, Equity and Inclusion (DEI) in Digital Transformation

TOPIC 2.1: Education as a Driver of Diversity, Equity and Inclusion

The discussion underscored education and the infrastructures that support it as a central lever for advancing DEI in digital transformation. Key insights included:

- The enabling role of National Research and Education Networks (NRENs):
    - NRENs and advanced networks were described as facilitators rather than direct implementers of DEI actions.
    - Their primary role lies in:

        - Providing digital infrastructure.
        - Connecting institutions and communities.
        - Amplifying and scaling existing initiatives led by universities and research centers.
- Concrete examples of inclusive digital practices:
    - A specific case was presented involving support for people with hearing disabilities through videoconferencing and shared digital infrastructure.
    - Digital tools enabled:
        - Participation of international experts.
        - Engagement of families and communities.
        - Knowledge exchange through sign-language interpretation across countries.
    - This experience illustrated how technology can transform localized inclusion efforts into broader, transnational initiatives.
- Respecting cultural and linguistic diversity:
    - The need for educational platforms and tools to reflect cultural and linguistic diversity was emphasized.
    - Networks were seen as key actors in supporting multilingual environments and inclusive design, while recognizing that implementation remains primarily institutional.

TOPIC 2.2: Integrating DEI into International Cooperation

At the level of international cooperation, DEI was discussed as a systemic and long-term challenge rather than a set of isolated actions. Main discussion elements included:

- A systemic approach to DEI integration:
    - Drawing on two decades of gender and science policy experience, the discussion highlighted three interconnected dimensions:
        - Representation ("fix the numbers").
        - Institutional structures ("fix the institutions").
        - Knowledge production ("fix the knowledge").
    - While progress has been made in representation and institutional change, transforming knowledge production was identified as the most complex and urgent challenge.
- DEI in emerging and deep-tech fields:

- Particular concern was expressed regarding fields such as advanced computing, AI, and other deep technologies, where gender and diversity imbalances remain pronounced.
- Panelists stressed that DEI considerations must be integrated from the earliest stages of research design, not added retrospectively.

- Measuring impact through indicators:
  - Existing international frameworks and indicators (e.g. from the European Commission and UNESCO) were referenced as valuable tools for measuring DEI impact.
  - Despite available indicators, it was noted that information and communication technologies remain among the sectors with the greatest gender gaps, highlighting the need for sustained educational and training efforts.

TOPIC 2.3: BELLA – Toward a More Human-Centered Interconnected Digital World

The BELLA project was discussed as a concrete example of how digital interconnection can be designed around human and social needs. Key points included:

- Inclusion as a core design principle:
  - BELLA was presented not merely as a connectivity project, but as an initiative aimed at building a regional digital ecosystem.
  - DEI values (such as inclusion, equity, and gender neutrality) are explicitly embedded in its strategic documents, including the project proposal and the BELLA White Paper.
- Mechanisms to support inclusive participation:
  - Two main instruments were highlighted:
    - The digital ecosystem, conceived as an open space for interaction among academia, government, industry, and society.
    - Innovation and investment consortia, designed to articulate social needs, knowledge production, and technological development.
  - These mechanisms aim to lower participation barriers for underrepresented groups through concrete incentives and support measures.
- Beyond connectivity, addressing the knowledge divide:
  - Digital inclusion was framed as more than access to connectivity. Access to knowledge and meaningful participation was emphasized as equally critical.
  - BELLA was positioned as an opportunity to address these broader dimensions of the digital divide.
- From principles to measurable impact:

- While concrete DEI indicators within BELLA are still under development, the discussion stressed the importance of moving toward measurable outcomes.
- Proposed actions included:
  - Collective ideation processes across regions.
  - Mapping existing gender and DEI initiatives.
  - Strengthening collaboration among institutions and networks working on these issues.

The panel concluded by highlighting dialogue as a fundamental mechanism for social change, stressing that continuous exchange and reflection are essential to ensure that digital transformation remains inclusive, equitable, and human-centered.

Annex 4: Guidance document for 2nd DIF event panelists

Digital Dialogues Implementation Forum (DIF)

Diálogos entre América Latina, el Caribe y Europa

Moldeando el futuro de la cooperación y conectividad entre EU-LAC

DETALLES DEL EVENTO

Fecha y hora: 13 Noviembre 2025, de 14:30 a 16:30

Lugar: Hotel DoubleTree by Hilton Cariari, San José, Costa Rica. Sala Cocori.

Formato: Presencial

DESCRIPCIÓN

El Foro de Implementación de Diálogos Digitales (DIF), organizado en el marco del proyecto SPIDER y celebrado durante la Conferencia TICAL 2025, reúne a responsables políticos, representantes institucionales y líderes de redes de investigación y educación para fortalecer la cooperación entre Europa, América Latina y el Caribe en el ámbito de la transformación digital.

A través de dos sesiones complementarias, el Foro presentará conclusiones clave que fundamentan la futura Hoja de Ruta de Cooperación Digital EU-LAC, desde perspectivas políticas y recomendaciones estratégicas hasta las oportunidades técnicas que ofrece la red BELLA. En conjunto, buscan conectar la visión política con la capacidad tecnológica, impulsando un ecosistema digital más sostenible, interconectado e inclusivo entre Europa, América Latina y el Caribe.

AGENDA

Tiempo	Sesión
14:30 - 14:40	**Bienvenida y objetivos** *Cristina López, Universidad Politécnica de Madrid*
14:40 - 15:30	**De la visión a la acción: Consolidando los diálogos digitales EU-LAC hacia una hoja de ruta futura para la cooperación** *Esta sesión se basará en los resultados del mapeo de acuerdos y diálogos birregionales realizado en el marco del proyecto SPIDER. A partir de esta información, los panelistas debatirán las principales conclusiones y recomendaciones, e identificarán los próximos pasos hacia una hoja de ruta conjunta para la transformación digital.* Perspectivas derivadas del mapeo de los diálogos y acuerdos digitales EU-LAC mediante la plataforma de IA SPIDERHUB, presentado por CEDIA - *10 minutos* Mesa redonda con los panelistas - *30 minutos* • Willy Carvajal - Oficial Regional de Proyecto, Delegación de la UE en Costa Rica • Eliana Ulate Brenes - Ministerio de Ciencia, Innovación, Tecnología y Telecomunicaciones de Costa Rica (MICITT) • Nicolás Trujillo - Ministerio de Ciencia, Tecnología, Conocimiento e Innovación de Chile (MinCiencia) • Ruben Carrandi - EU-LAC Digital Accelerator y European Business and Innovation Centre Network (EBN) Preguntas abiertas del público - *10 minutos*
15:30 - 16:20	**BELLA Más Allá de las Fronteras: Desbloqueando el futuro de la conectividad en investigación e innovación entre la UE y América Latina y el Caribe** *Esta sesión analizará el potencial de la conectividad de alta velocidad de BELLA para impulsar la transformación digital, ofreciendo una perspectiva actualizada sobre su papel como infraestructura clave para ampliar la cooperación científica y tecnológica entre las dos regiones.*

	Resultados de la encuesta SPIDER y de los grupos de discusión sobre el uso y el potencial de BELLA para la transformación digital de la UE y América Latina, presentado por REUNA - *10 minutos* Mesa redonda con los panelistas - *30 minutos* • Luis Cadenas - Cooperación Latinoamericana de Redes Avanzadas (RedCLARA) • Luis Martín Flores - Redes Nacionales de Investigación y Educación Europeas (GEANT) • Paul Fervoy - Siftia y Federación Latinoamericana de Entidades de Tecnología de la información (ALETI) • Alessandra Zini - 28DIGITAL Preguntas abiertas del público - *10 minutos*
16:20 - 16:30	**Conclusiones y cierre** *Luciana Ayciriex, INMARK*

PANEL 1 - De la visión a la acción: Consolidando los diálogos digitales EU-LAC hacia una hoja de ruta futura para la cooperación

Contexto:

Durante los últimos años, la cooperación digital entre Europa y América Latina y el Caribe ha crecido de forma sostenida. Se han establecido múltiples espacios de diálogo político y técnico que abordan temas estratégicos como inteligencia artificial, 5G, blockchain, ciberseguridad, computación en la nube y entornos virtuales de investigación.

El proyecto SPIDER realizó un mapeo exhaustivo de esta cooperación, analizando más de 90 diálogos y más de 50 acuerdos birregionales, así como sus actores, compromisos y resultados. Este ejercicio reveló una gran riqueza de iniciativas, pero también algunos desafíos comunes: la fragmentación institucional, la falta de coordinación entre actores y la ausencia de mecanismos sistemáticos de seguimiento que permitan traducir los compromisos políticos en resultados concretos.

Para responder a este reto, se ha desarrollado SPIDERHUB, una plataforma digital que utiliza inteligencia artificial para organizar, vincular y visualizar la información sobre los acuerdos y diálogos UE–LAC, permitiendo transformar esa evidencia en conocimiento útil para la toma de decisiones. Esta herramienta busca precisamente lo que da nombre al panel: pasar de la visión a la acción.

En este diálogo, los panelistas compartirán sus perspectivas
sobre los principales hallazgos del mapeo, las lecciones aprendidas y los pasos necesarios para avanzar hacia un roadmap birregional de cooperación digital, más coordinado, medible y sostenible

Como complemento al aprendizaje y comprensión de los acuerdos existentes, se realizó un análisis del financiamiento de proyectos en el marco del programa Horizonte Europa, con el propósito de generar un entendimiento transversal del comportamiento de la colaboración EU-LAC a través de la cuantificación de la participación de países y organizaciones en los proyectos adjudicados.

De acuerdo con la información existente en CORDIS, 335 proyectos han contado con la colaboración de partners de EU-LAC, siendo España, Italia, Alemania y Francia los países con mayor participación del lado europeo, formando parte de más del 43% de los proyectos. En el caso de la participación de países de LAC, destacan Brasil, Argentina y Colombia, que han participado entre un 39% y un 22% de los proyectos EU-LAC.

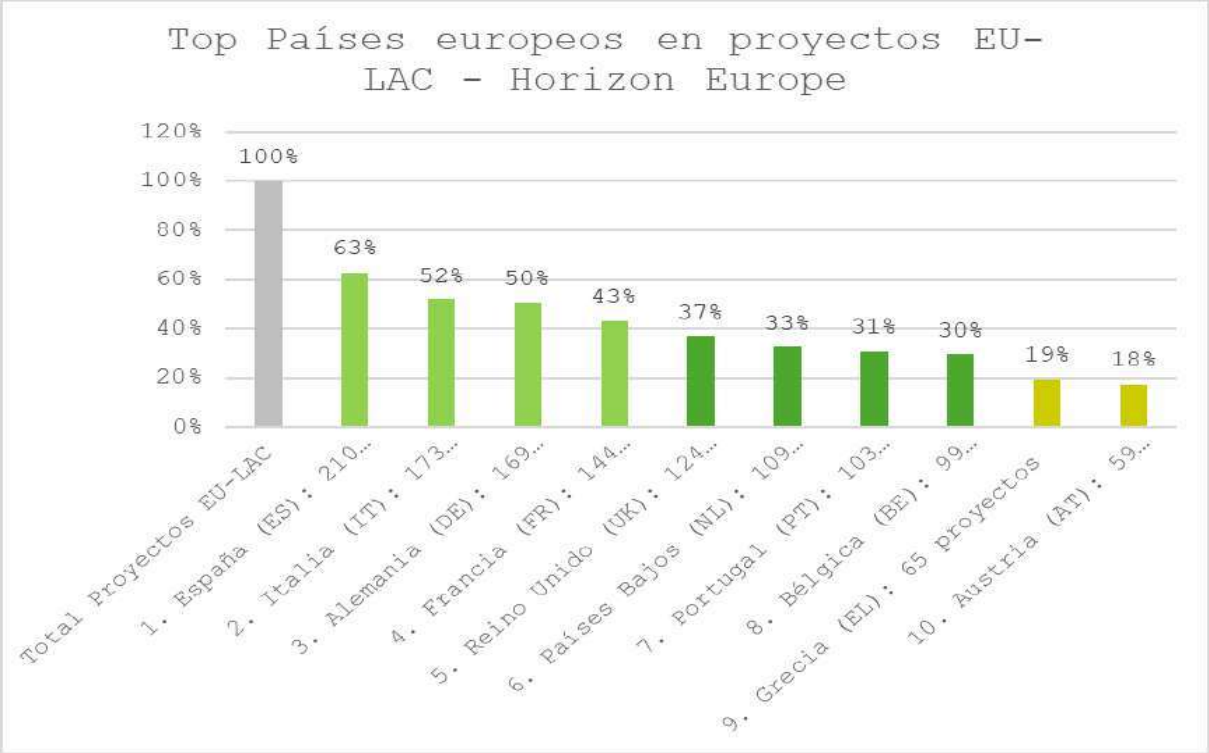

Gráfico 1. Top Países europeos en proyectos EU-LAC - Horizonte Europa

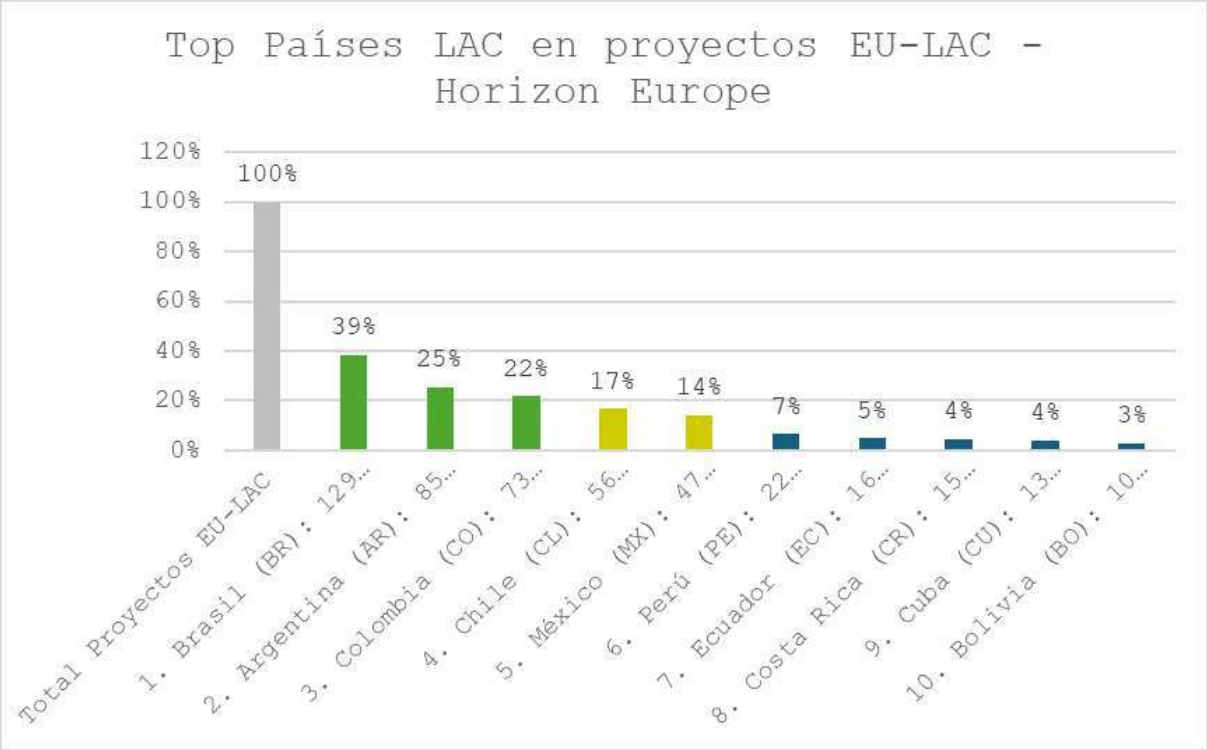

Gráfico 2. Top Países LAC en proyectos EU-LAC - Horizonte Europa

Profundizando el análisis, el número de organizaciones participantes del lado europeo es claramente superior al de participantes de LAC. Evidentemente al ser un programa de fondeo europeo, no es un dato que llame a una fuerte reflexión, sin embargo, al analizar el número de organizaciones participantes en relación al número de proyectos en los que ha participado cada país, se obtiene un índice de participación que en resumen, denota mayor diversificación de socios en caso de existir más de una organización por proyecto (>1; Gráfico 3), o refleja una concentración de conocimiento en pocos socios que participan en varios proyectos (<1; Gráfico 4).

En este caso, se puede evidenciar que en el lado europeo existe una mayor diversificación de actores participantes en proyectos, mientras que del lado de LAC, existe una mayor concentración de participación en menos socios. Esta brecha de participación puede tener causas muy diferentes, desde el desconocimiento de los programas existentes, procesos burocráticos o de cumplimiento, baja madurez organizacional para la participación, bajo relacionamiento para formación de consorcios, relacionamiento académico y vínculos preexistentes.

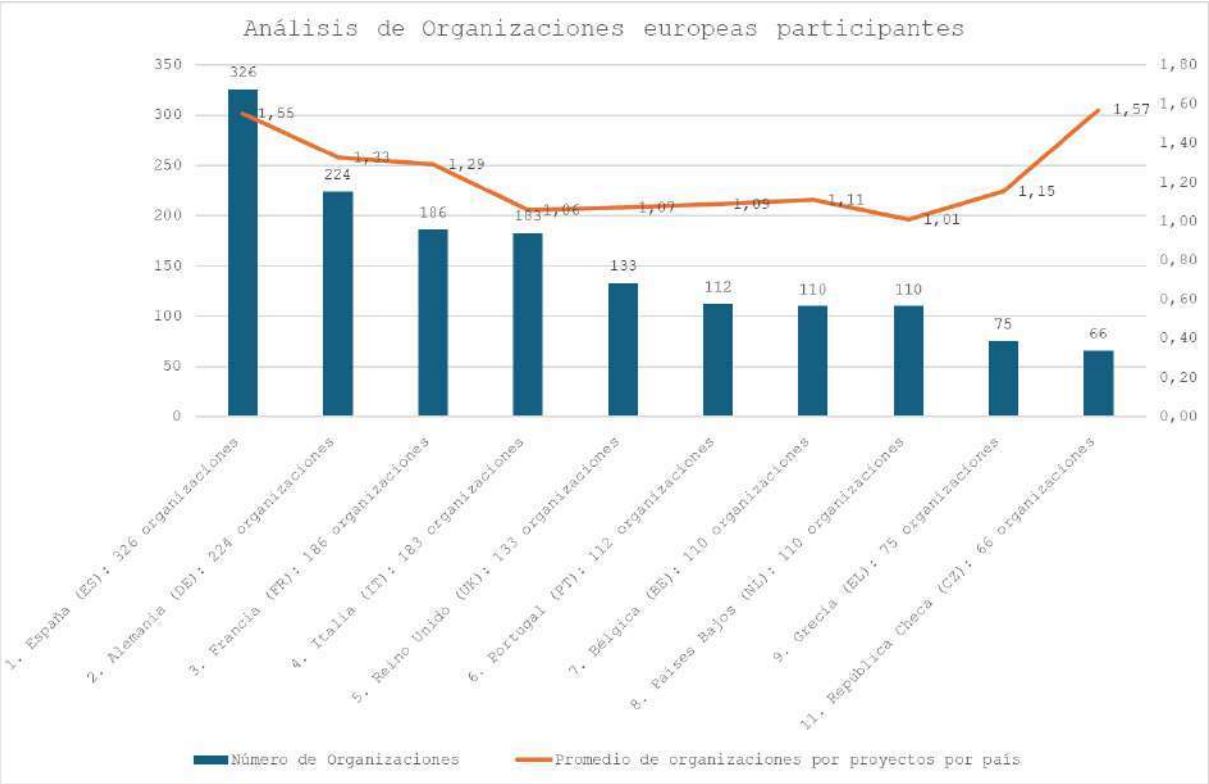

Gráfico 3. Análisis de organizaciones europeas participantes en proyectos EU-LAC - Horizonte Europa

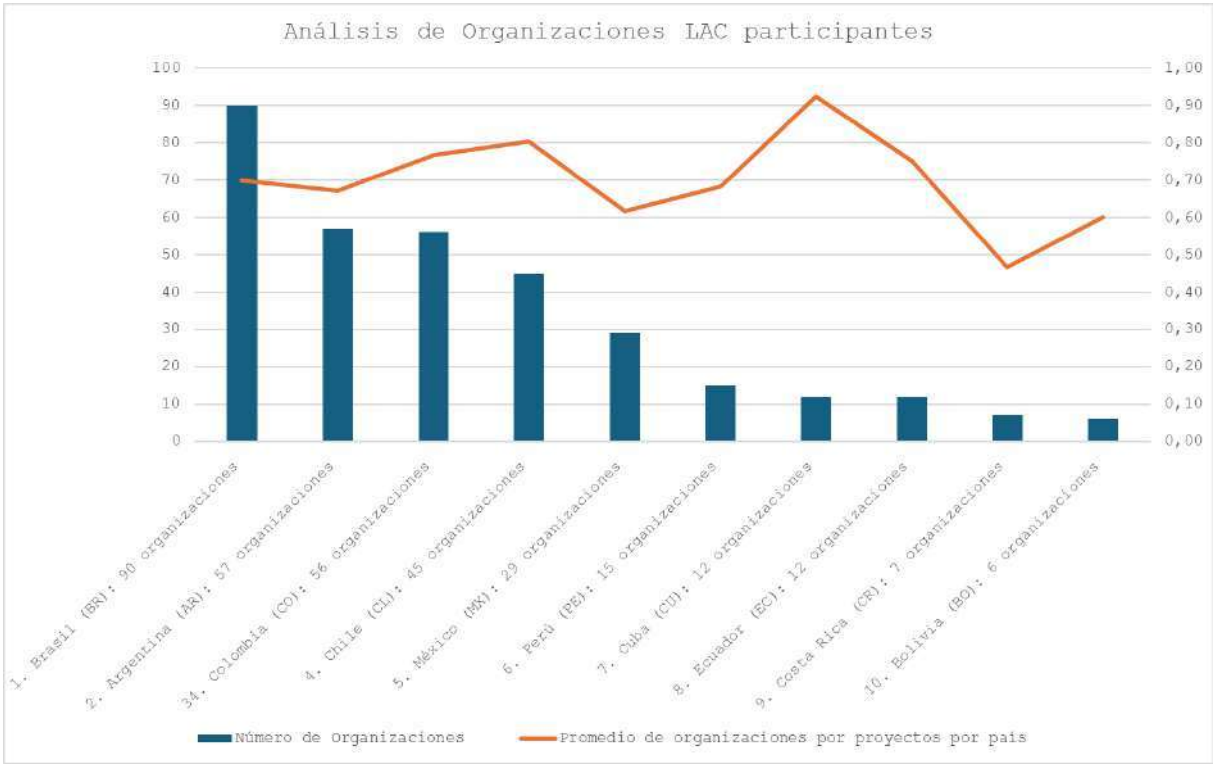

Gráfico 4. Análisis de organizaciones de LAC participantes en proyectos EU-LAC - Horizonte Europa

Otro punto de análisis relevante, es la cooperación más allá de la ciencia básica y aplicada, trascendiendo hacia la transferencia de conocimiento y tecnología aplicada a la industria. En Europa existe un mejor relacionamiento a nivel de transferencia de tecnología y conocimiento, mientras el LAC, este relacionamiento es todavía incipiente. Esto puede verse reflejado en el nivel de participación de organizaciones privadas en el marco de los proyectos Horizonte Europa.

Considerando la siguiente distribución de tipos de actores:

HES - Higher or Secondary Education Establishments: Universidades, institutos de educación superior y establecimientos de educación secundaria. Incluye instituciones académicas que participan en investigación y desarrollo.

REC - Research Organisations: Centros de investigación públicos y privados que se dedican principalmente a actividades de investigación científica y desarrollo tecnológico. Pueden incluir institutos nacionales de investigación, centros especializados, y laboratorios.

PRC - Private for-profit entities: Entidades privadas con ánimo de lucro, incluyendo empresas grandes, medianas y pequeñas. Estas organizaciones participan en proyectos Horizon para desarrollar innovación, productos o servicios comercializables.

PUB - Public bodies: Organismos públicos y administraciones gubernamentales que no son organizaciones de investigación ni establecimientos educativos. Incluye ministerios, agencias gubernamentales, administraciones locales y regionales.

OTH - Other: Otras organizaciones que no encajan en las categorías anteriores. Puede incluir organizaciones sin ánimo de lucro (ONGs), fundaciones, asociaciones profesionales, y otras entidades de diversos tipos.

El Gráfico 5 muestra una comparación en el número de actores participantes por tipo de participante y por región, siendo comprensible una mayor participación europea, en un programa europeo, sin embargo, al analizar la representatividad de cada tipo de actores dentro de ese universo regional, se pueden evidenciar proporciones muy marcadas de cada lado en el Gráfico 6.

En el caso de LAC, existe una participación mayoritaria de Instituciones de Educación Superior, mientras que en el lado europeo, existe un balance entre este tipo de instituciones y empresa privada. ¿Podría un mayor involucramiento de actores privados dar más sostenibilidad a una cooperación efectiva?

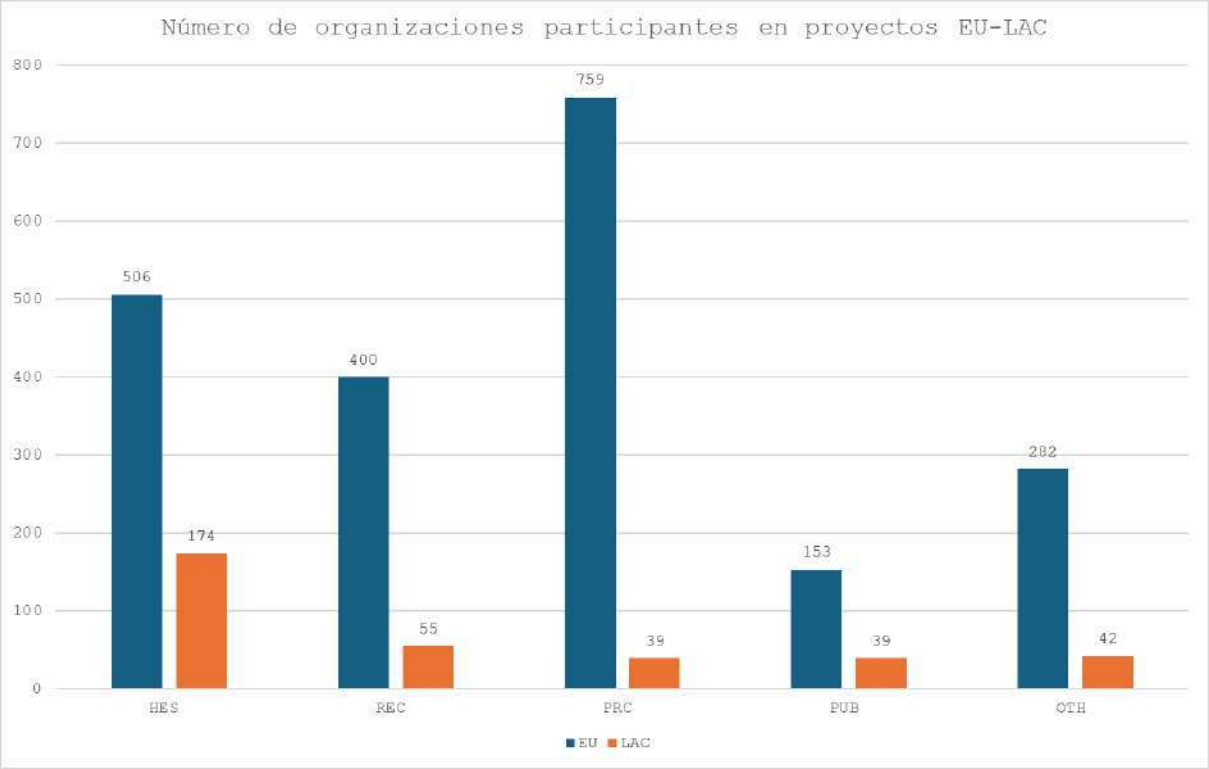

Gráfico 5. Número de organizaciones participantes en proyectos Horizonte Europa

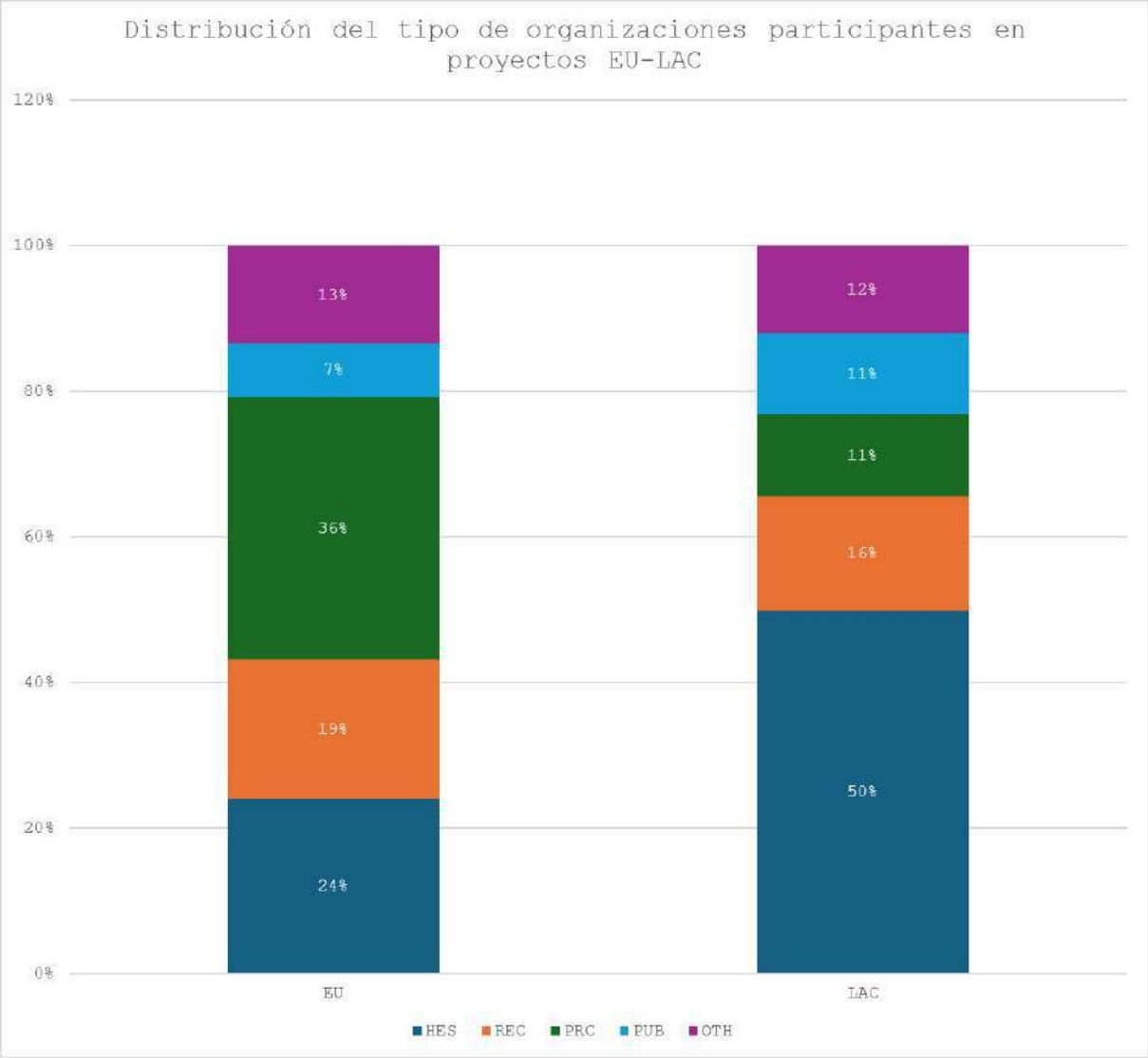

Gráfico 6. Distribución de tipo de organizaciones participantes por región

Preguntas para panelistas:

Willy Carvajal:

- **La Alianza Digital UE-LAC se distingue por ser un marco de cooperación informal y con una sólida base de valores.**

¿Qué compromisos políticos y mecanismos concretos se han establecido para garantizar la sostenibilidad, la resiliencia y la continuidad a largo plazo de esta agenda digital birregional?

- **SPIDERHUB surge precisamente para hacer visible el progreso y conectar la información entre actores.**

¿Cómo puede complementarse esta plataforma para apoyar la toma de decisiones y la coordinación entre gobiernos, organismos regionales y socios europeos?

- **(OPCIONAL) De cara al futuro, el objetivo es construir un roadmap conjunto UE–LAC para la transformación digital.**

¿Qué elementos esenciales (como prioridades temáticas, gobernanza, indicadores o instrumentos financieros) deberían considerarse para asegurar que sea realista, inclusivo e implementable?

- **(OPCIONAL) El mapeo identificó más de 90 diálogos y más de 50 acuerdos birregionales, pero con escasa trazabilidad sobre su implementación.**

¿Qué mecanismos o herramientas o proyectos de cooperación birregional han alcanzado mayor impacto y cómo podrían replicarse?

Eliana Ulate:

- **Los hallazgos del mapeo reflejan una amplia diversidad de iniciativas y enfoques entre países y sectores.**

¿Qué pasos pueden darse para lograr una mayor convergencia y coherencia entre las agendas nacionales y los marcos birregionales de cooperación digital?

- **La cooperación digital requiere continuidad más allá de los ciclos políticos y de los proyectos.**

¿Cómo pueden las instituciones y redes birregionales asegurar sostenibilidad y compromiso a largo plazo en esta agenda común?

- **(OPCIONAL) De cara al futuro, el objetivo es construir un roadmap conjunto UE–LAC para la transformación digital.**

¿Qué elementos esenciales (como prioridades temáticas, gobernanza, indicadores o instrumentos financieros) deberían considerarse para asegurar que sea realista, inclusivo e implementable?

Nicolás Trujillo:

- **Los hallazgos del mapeo reflejan una amplia diversidad de iniciativas y enfoques entre países y sectores.**

¿Qué pasos pueden darse para lograr una mayor convergencia y coherencia entre las agendas nacionales y los marcos birregionales de cooperación digital?

- **La cooperación digital requiere continuidad más allá de los ciclos políticos y de los proyectos.**

¿Cómo pueden las instituciones y redes birregionales asegurar sostenibilidad y compromiso a largo plazo en esta agenda común? ¿Cómo se ha planteado Chile mantener la continuidad de estas acciones estratégicas a largo plazo?

- **(OPCIONAL) De cara al futuro, el objetivo es construir un roadmap conjunto UE–LAC para la transformación digital.**

¿Qué elementos esenciales (como prioridades temáticas, gobernanza, indicadores o instrumentos financieros) deberían considerarse para asegurar que sea realista, inclusivo e implementable?

Rubén Carrandi:

- **El mapeo identificó más de 90 diálogos y más de 50 acuerdos birregionales, pero con escasa trazabilidad sobre su implementación.**

¿Qué mecanismos o herramientas podrían fortalecer el seguimiento de estos compromisos para garantizar que se traduzcan en acciones concretas y medibles?

- **De cara al futuro, el objetivo es construir un roadmap conjunto UE–LAC para la transformación digital.**

¿Qué elementos esenciales (como prioridades temáticas, gobernanza, indicadores o instrumentos financieros) deberían considerarse para asegurar que sea realista, inclusivo e implementable?

- **(OPCIONAL) SPIDERHUB surge precisamente para hacer visible el progreso y conectar la información entre actores.**

¿Cómo puede complementarse esta plataforma para apoyar la toma de decisiones y la coordinación entre gobiernos, organismos regionales y socios europeos?

PANEL 2 - BELLA Más Allá de las Fronteras: Desbloqueando el futuro de la conectividad en investigación e innovación entre la UE y América Latina y el Caribe

Contexto:

La interconexión digital entre Europa, América Latina y Caribe ha cambiado de escala. Gracias a BELLA, ambas regiones cuentan por primera vez con una infraestructura de conectividad de alta capacidad, estable, segura y dedicada a ciencia, innovación y educación. Sin embargo, explicar el "por qué ahora" y "para qué" sigue siendo estratégico: BELLA no es solo fibra óptica ni capacidad de red, es un habilitador de soberanía tecnológica compartida, investigación de frontera y nuevas cadenas de valor digitales birregionales.

En el marco del proyecto SPIDER, se han realizado diferentes actividades para poner esta pregunta en el centro: ¿cómo hacemos que BELLA sea realmente utilizada y vista como infraestructura clave para la próxima fase de cooperación digital EU–LAC?

Para responder a esto, llevamos a cabo dos acciones complementarias:

- Un survey al ecosistema EU–LAC, con 132 respuestas recibidas desde universidades, NRENs, centros de investigación, empresas y hubs tecnológicos.
- 4 focus groups con expertos, que discutieron el potencial de BELLA para tecnologías críticas de transformación digital: IA, Cloud, HPC, 5G, Ciberseguridad y VREs.

Tres patrones centrales emergieron:

1. La percepción de oportunidad existe, sobre todo en LAC, pero se necesita mayor visibilidad de BELLA, especialmente en Europa. Hay un reconocimiento explícito de que las complementariedades son reales e inmediatas (por ejemplo: AI + datos ambientales y climáticos; Cloud + plataformas de salud; HPC para simulación científica), pero aún no existe masa crítica de actores que identifiquen BELLA como "la infraestructura para esto".
2. Las barreras principales no son técnicas, sino organizacionales y políticas. Además, se recogieron tres cuellos de botella recurrentes:

- Falta de alineamiento político sostenido.
- Carencia de mecanismos de financiación ágiles y accesibles.
- Falta de programas o instrumentos que sistematicen matchmaking y experimentación tecnológica EU–LAC.

3. BELLA puede habilitar nuevos modelos de cooperación que antes no eran posibles. La infraestructura permite: intercambio seguro de datos, expansión de redes comunitarias de ciencia, sandboxing compartido, despliegues piloto y pruebas técnicas avanzadas.

Las tecnologías emergentes (IA, 5G, cloud–edge y ciberseguridad) están entrando en fase de adopción acelerada. La región LAC está creciendo exponencialmente en startups deep tech, inversión pública en digitalización, y adopción de nuevas regulaciones. Europa está avanzando en regulación, estándares y capacidades científicas. Es un momento donde la complementariedad no es teórica, es operativa.

Si la infraestructura existe, pero los casos de uso y los programas no se activan ahora, se perderá una ventana geopolítica única.

Preguntas para panelistas:

Luis Cadenas:

- **BELLA fue concebida como una infraestructura estratégica para la ciencia y la innovación birregional.**

¿Cómo podemos asegurar que su potencial se traduzca en beneficios concretos para universidades, centros de investigación y empresas de ambos continentes?

- **Las NRENs son el corazón operativo de BELLA, pero enfrentan desafíos de sostenibilidad y articulación.**

¿Qué modelo de colaboración o financiamiento permitiría fortalecer su rol dentro del ecosistema de innovación EU–LAC?

Luis Martín:

- **El survey mostró bajo conocimiento y uso efectivo de BELLA en América Latina y el Caribe.**

¿Qué estrategias inmediatas podrían implementarse para ampliar su visibilidad, adopción y valor percibido entre los actores nacionales y regionales?

- **Además, en las distintas actividades que se han realizado en el proyecto, ha habido una baja participación de instituciones europeas.**

¿Cómo se puede incentivar una mayor participación de Europa en esta iniciativa y en qué áreas puede haber mayppr interés?

Paul Fervoy:

- **Las tecnologías emergentes —como IA, 5G o cloud— dependen de infraestructuras de datos robustas.**

¿Cómo puede BELLA evolucionar para convertirse en un habilitador de estos ecosistemas digitales y no solo en un canal de conectividad?

- **BELLA II abre una nueva etapa de expansión hacia Centroamérica y el Caribe.**

¿Qué oportunidades concretas puede generar esta ampliación para la cooperación científica, el emprendimiento tecnológico y la integración digital regional?

Alessandra Zini:

- **El Programa Twinning ha conectado hubs de innovación y actores de ambos continentes de forma práctica y orientada a resultados.**

¿Qué aprendizajes o modelos de colaboración consideras más relevantes para inspirar futuras iniciativas de innovación digital y transferencia tecnológica entre Europa y América Latina?

- **BELLA ofrece un potencial estratégico para escalar redes, ampliar experimentación tecnológica y habilitar nuevas interacciones entre ecosistemas de innovación.**

¿Cómo crees que la infraestructura de BELLA puede fortalecer o escalar estos modelos de cooperación exitosos entre ambas regiones?

Annex 5: Second DIF event report

Insights of 2nd SPIDER-DIF event

13 November 2025, from 14:30 to 16:30 (GMT-6)

Introduction to the DIF Report

The Digital Dialogues Implementation Forum (DIF) is a dialogue-oriented platform promoted within the SPIDER project to foster structured exchange between Latin America and the Caribbean (LAC) and Europe on digital transformation, research and innovation, and inclusive cooperation models. The second DIF event took place on 13 November 2025, in the framework of TICAL 2025, continuing and deepening the bi-regional dialogue initiated during the first 2024 DIF edition.

The content of this DIF focused on advancing from dialogue and mapping exercises towards practical implementation, sustainability, and long-term cooperation frameworks. The discussions were informed by evidence generated within SPIDER, including the mapping of EU–LAC digital dialogues and agreements through the SPIDERHUB platform and the SPIDER survey and focus groups on the use and potential of the BELLA infrastructure.

The event was structured around two thematic panels, each addressing a key dimension of EU–LAC digital cooperation:

- **Panel 1: From Vision to Action – Consolidating EU–LAC Digital Dialogues Towards a Future Roadmap for Cooperation**
    - Moderator: Luis Vargas (National Research and Education Network - CEDIA, Ecuador)
    - Panelists:
        - Willy Carvajal (Delegation of the European Union to Costa Rica, Costa Rica)
        - Eliana Ulate Brenes (Ministry of Science, Innovation, Technology and Telecommunications – MICITT, Costa Rica)
        - Nicolás Trujillo (Ministry of Science, Technology, Knowledge and Innovation – MinCiencia, Chile)
        - Rubén Carrandi (EU–LAC Digital Accelerator / European Business and Innovation Centre Network – EBN, Brussels)
- **Panel 2: BELLA Beyond Borders – Unlocking the Future of EU–LAC Research and Innovation Connectivity**
    - Moderator: Paola Arellano (National Research and Education Network - REUNA, Chile)

- Panelists:
  - Luis Cadenas (Latin American Cooperation of Advanced Networks – RedCLARA, LAC)
  - Luis Martín Flores (GÉANT, Europe)
  - Paul Fervoy (Siftia / Federation of Information Technology Entities in Latin America – ALETI, Costa Rica)
  - Alessandra Zini (28DIGITAL, Brussels)

This report summarizes the main insights emerging from the discussions, organized by thematic areas for each panel.

Panel 1: From Vision to Action – Consolidating EU–LAC Digital Dialogues Towards a Future Roadmap for Cooperation

In recent years, digital cooperation between Europe and Latin America and the Caribbean (LAC) has grown steadily. Numerous political and technical dialogue spaces have been established, addressing strategic topics such as artificial intelligence, 5G, blockchain, cybersecurity, cloud computing, and virtual research environments.

The SPIDER project conducted a comprehensive mapping of this cooperation, analyzing over 90 dialogues and more than 50 EU–LAC agreements, including actors, commitments, and outcomes. This mapping revealed a rich ecosystem of initiatives but also highlighted recurring challenges: institutional fragmentation, lack of coordination among stakeholders, and the absence of systematic monitoring mechanisms to translate political commitments into concrete results.

To address these challenges, SPIDERHUB, a digital platform leveraging artificial intelligence, was developed. It organizes, links, and visualizes information on EU–LAC agreements and dialogues, enabling evidence-based decision-making. The platform embodies the panel's theme: moving from vision to action.

Additionally, SPIDER analyzed EU–LAC collaboration under Horizon Europe, covering 335 projects. European participation is led by Spain, Italy, Germany, and France (over 43% of projects), while in LAC, Brazil, Argentina, and Colombia account for 39–22% of projects. A deeper analysis of participating organizations shows higher diversification on the European side and higher concentration on the LAC side, reflecting differences in program awareness, administrative capacity, organizational maturity, and existing networks.

Finally, beyond basic and applied research, Europe demonstrates stronger knowledge and technology transfer, while in LAC private sector engagement is still emerging. Analyzing by type of actor: Higher Education Institutions dominate in LAC, whereas Europe exhibits a more balanced mix between academia and private sector, suggesting that increased private sector involvement could enhance sustainability and impact of cooperation.

The first panel of the DIF built on findings from the SPIDERHUB platform, which mapped EU–LAC digital dialogues and agreements. The discussion centered on translating dialogue and mapping into practical, sustainable cooperation frameworks.

Governance, Policy Alignment, and Regulatory Frameworks

- Development of common regional governance frameworks across LAC is essential for effective bi-regional cooperation.
- Legislative and normative frameworks facilitate cross-border collaboration and reduce fragmentation.
- Chile's experience with data center guidelines was highlighted as an example of successful policy implementation.
- Coordination with international entities must be strengthened to avoid duplication of initiatives.

Strategic Prioritization and Impact

- Mapping exercises should be complemented by impact measurement mechanisms.
- High-impact initiatives should be prioritized within the ecosystem to maximize value.
- Establishing thematic priorities with regional segmentation enhances effectiveness.
- LAC countries should be encouraged to move from participation to co-leadership roles in EU–LAC projects.

Sustainability and Long-Term Commitment

- Political cycles pose challenges and thus, monitoring mechanisms are needed to track commitments over time.
- Sustainable financing and multilevel leadership are essential to maintain long-term projects.
- Early planning for project sustainability should include identification of potential allies and funders.

Collaboration Models and Stakeholder Inclusion

- Structural and cultural shifts are needed to foster public–private and academic– private partnerships.
- Shared funds can enhance societal impact and encourage joint ownership of initiatives.
- Inclusion of underrepresented stakeholders such as civil society, private sector, and judicial entities was emphasized.

Digital Infrastructure and Capabilities

- Chile's Humboldt submarine cable was mentioned as an example of strong regional digital infrastructure.
- The combination of infrastructure, governance, and policy is key to translating dialogue into practical action.

Panel 2: BELLA Beyond Borders – Unlocking the Future of EU–LAC Research and Innovation Connectivity

Digital interconnection between Europe and LAC has reached a new scale. Thanks to BELLA, both regions now benefit from a high-capacity, secure infrastructure dedicated to science, innovation, and education. Yet the strategic questions remain: why now, and for what purpose? BELLA is not just fiber or bandwidth; it enables shared technological sovereignty, frontier research, and new bi-regional digital value chains.

Within SPIDER, two complementary actions were undertaken to explore BELLA's potential:

1. A survey of the EU–LAC ecosystem, collecting 132 responses from universities, NRENs, research centers, companies, and technology hubs.
2. Four focus groups with experts, discussing the role of BELLA for critical technologies: AI, Cloud, HPC, 5G, cybersecurity, and virtual research environments.

Three main patterns emerged:

- Opportunity is recognized, particularly in LAC, but greater visibility is needed, especially in Europe. Complementarities are clear (e.g., AI + environmental data, Cloud + health platforms, HPC for simulations), but there is not yet a critical mass identifying BELLA as the infrastructure for this.
- Barriers are mostly organizational and political, rather than technical: lack of sustained political alignment, limited agile funding mechanisms, and absence of structured EU–LAC matchmaking programs.
- BELLA enables new cooperation models: secure data exchange, expansion of research networks, shared sandboxing, pilot deployments, and advanced technical testing.

This panel discussed findings from the SPIDER survey and focus groups on BELLA, focusing on how the infrastructure can enable research, innovation, and collaboration ecosystems.

Visibility, Awareness, and Promotion

- The existing BELLA interconnection requires increased visibility to reach a wider set of stakeholders.
- Improved promotion and dissemination strategies are essential to link diverse actors.
- BELLA is not only a technical asset but also a symbolic and institutional platform enabling collaboration.

Ecosystem Development and Practical Applications

- Creation of micro-projects can demonstrate BELLA's concrete value as an important infrastructure.
- Practical applications such as Copernicus data access exemplify the potential for innovation.
- Development of a matchmaking platform connecting use cases with infrastructure capabilities was recommended.
- Key thematic areas identified include sustainable agriculture, digital health, clean energy, and AI adoption.

Governance, Coordination, and Institutional Frameworks

- NRENs play an essential role in enabling and sustaining collaboration.
- Institutional frameworks must complement connectivity to avoid fragmentation.
- A regional agenda with coordinated actions among organizations is necessary for effective collaboration.
- Bridging the gap between academic networks and productive sectors remains a priority.

Resource Mobilization and Sustainability

- Alignment of financial and political strategies is required to support project development.
- Visibility, transparency, and accessibility of funding opportunities should be strengthened to enable broader participation and engagement across both regions.
- The implementation of knowledge and experience exchange programmes, including high-level technical residencies and in-person mobility schemes, is essential to align digital maturity levels, foster interoperability between EU–LAC digital ecosystems, and consolidate long-term, trust-based cooperation.
- Leveraging BELLA's symbolic value can help enable broader collaborative programs.

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