

TERMS OF REFERENCE

"Consulting for Development of a Codified Digital Government Reference Model and Algorithm-Based Application"

Component 1

Country: Regional

Technical Cooperation Number: RG-T4439

Technical Cooperation Name: "Accelerating AI Adoption in Latin America and the Caribbean:

Aligning Regulations, Deploying Pilots, And Conducting Training"

1. Background and justification

- 1.1. In recent years, the focus of governments in Latin America and the Caribbean (LAC) has increasingly turned towards the adoption of digital governance systems and the digital transformation of the public sector. This shift has gained momentum due to the COVID-19 pandemic and the rising prominence of disruptive technologies, with Artificial Intelligence (AI) being particularly notable.
- 1.2. Al represents a major technological leap, akin to the transformative impact of the internet's arrival in homes and businesses at the turn of the last century. However, the integration of the internet into public administrations worldwide was plagued by sluggish initial adoption. This slow start has left a legacy of ongoing challenges with digital engagement¹. The current demand for Al integration in public services suggests a more rapid and responsive embrace of this technology. This public demand underscores the importance for public administrations to not just adopt AI, but to do so with urgency, maximizing its potential to enhance services for citizens.
- 1.3. Al is currently at the forefront of technological innovation, attracting more attention than any other modern development. The arrival of generative AI, along with the emerging development of comprehensive regulatory frameworks to regulate it, underscores the profound ethical considerations and surge in AI-centric discussion. This technology is now in the spotlight across multiple sectors from technology and government to the broader societal arena for its ability to perform tasks once considered the exclusive domain of human expertise. The public observes the development of AI with a rich spectrum of emotions, ranging from keen interest and curiosity to underlying concerns, reflecting both the technology's transformative promise and its potential pitfalls. The potential of AI is vast and undeniable. Governments worldwide can no longer ignore its impact.
- 1.4. The transformative power of AI offers opportunities for advancement and efficiency, but also raises concerns about job displacement, privacy, and security. Therefore, a balanced and inclusive approach to AI development and deployment is necessary. This will require meaningful dialogue between the

¹ In 2018, two years prior to the COVID-19 pandemic, the IADB publication "Wait No More: Citizens, Red Tape, and Digital Government" http://dx.doi.org/10.18235/0001150 was already highlighting the sluggish digitalization of interactions between citizens and public administrations in LAC. This foresight underscored the pressing need for a digital transformation within the public sector to streamline processes, enhance service delivery, and ultimately, improve the citizen-government relationship. The pandemic further emphasized this urgency, demonstrating the critical role that efficient, digitalized public services play in addressing rapid societal changes and challenges.



various actors involved, including technology, ethics, politics, and the general public.

- 1.5. Drawing on the lessons from previous industrial and technological revolutions, it is evident that countries which rapidly embrace new technologies often seize greater opportunities for growth. In this context, directing policy actions in Latin America and the Caribbean to bolster technological capacity and encourage AI adoption across all sectors is crucial. This strategy involves laying the groundwork for the socioeconomic shifts that AI will precipitate and ensuring the establishment of secure and ethical governance. To facilitate and amplify investment in AI, as well as to maximize its impact, actions must be taken from multiple angles. This includes striving to understand and emulate the most advanced global trends in the field. By adopting such a multifaceted approach, nations in Latin America and the Caribbean can not only navigate the challenges posed by AI but also harness its vast potential to drive innovation, economic growth, and social improvement².
- 1.6. The Latin American Artificial Intelligence Index³ (LAAII) developed by Chile's National Center for Artificial Intelligence (CENIA) highlights substantial gaps between Latin America⁴ and global leaders in AI development. From 2010 to 2021, Latin America contributed only 2.7% of the total scientific publications in AI-related journals. Additionally, the private investment in AI within the region amounted to just 1.7% of the total private investment made in the United States and 5% of that in China during the same period. This underlines a significant disparity in both academic contributions and financial backing for AI initiatives compared to global standards, emphasizing the need for enhanced focus and resources to boost AI growth in Latin America.
- 1.7. The LAAII portrays a complex AI development landscape across Latin America. It reveals significant disparities in AI capabilities among countries: while some display robust scientific output, they falter in transferring technology effectively. Others boast abundant data resources yet lack the necessary technological infrastructure to exploit them fully. This uneven advancement across various dimensions suggests immense potential for inter-country learning and collaboration. Additionally, the penetration of AI and related disruptive technologies in Latin America remains substantially lower than in more developed regions, affecting nearly all industrial sectors. Despite these challenges, the growth of AI competencies within the region has been observed, albeit at a slower pace compared to global trends, indicating gradual but ongoing progress in building AI expertise.
- 1.8. The LAAII outlines several main findings crucial for shaping the future of AI in the region. First, there is an urgent need for substantial investments in

² See Iglesias Rodriguez, E., García Zaballos, A., Puig Gabarró, P., & Benzaquén, I. (2020). *Inteligencia artificial: Gran oportunidad del siglo XXI: Documento de reflexión y propuesta de actuación*. Inter-American Development Bank. http://dx.doi.org/10.18235/0003037

³ The Latin American Artificial Intelligence Index, developed by CENIA, collects information about the current situation in this area along three key dimensions: enabling factors, R&D and governance. The index offers a regional perspective on critical issues for the creation of development and innovation ecosystems based on AI, the governance of this technology, gaps existing between countries, and best practices adopted by various states and organizations.https://indicelatam.cl/home-en/

⁴ The countries included in the LAAII are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru, and Uruquay

connectivity and specialized computing to mitigate structural inequalities and ensure effective AI deployment. Enhancing educational systems is critical, as it prepares the workforce to handle automation challenges, curbs talent drain, and supports innovation across diverse economic sectors. The LAAII also highlights the importance of fostering regional cooperation and cross-border collaboration, which are essential for building comprehensive data repositories and developing AI systems tailored to the region's unique needs. Moreover, the establishment of robust AI regulations is emphasized to manage risks effectively and utilize AI for social betterment, ensuring transparency and accountability. Additionally, leveraging Latin America's unique characteristics, such as linguistic diversity, rich biodiversity, and renewable energy sources, is seen as a way to gain competitive advantages globally. Finally, the need to create collaborative frameworks that involve public, private, and academic sectors is crucial, despite challenges like corruption and institutional weaknesses that currently undermine trust and ethical AI development.

- 1.9. The 2023 Government AI Readiness Index places LAC in a position that, while indicative of progress, underscores significant room for improvement. Ranked sixth out of nine regions, LAC is only ahead of the Pacific, South and Central Asia, and Sub-Saharan Africa, highlighting its position at the lower end of the global spectrum. With an average regional score of 41.50, LAC's readiness for AI integration in the public sector is in stark contrast to the leading region, North America, which has a score of 80.93. This significant gap not only demonstrates LAC's distance from the forefront of AI readiness, but also places it behind other regions such as the Middle East and North Africa (48.77) and Eastern Europe (54.67).
- 1.10. The 2023 report⁵ highlights the notable performance of five Latin American countries: Brazil, Chile, Uruguay, Colombia, and Argentina⁶. These nations distinguished themselves with scores ranging from 63.70 to 57.72 points, particularly excelling in the Government pillar of the index. The report also identifies a critical area of improvement for Latin America and the Caribbean, specifically in the Innovation Capacity dimension within the Technology Sector pillar. Here, the region exhibits a noticeable lag, with a nearly 10-point gap between its average and the global average. This disparity underscores the need for enhanced focus and investment in fostering an environment conducive to technological innovation and research & development in Al.
- 1.11. The Republic of Korea stands in contrast within the 2023 Government Al Readiness Index, emerging as one of the most advanced countries, securing the 7th position globally with a score of 75.65. It is particularly noteworthy in the Government Pillar, achieving a score of 87.55. In this specific pillar, Korea is ranked third, trailing only behind Singapore and Finland. This high-ranking underscores Korea's exemplary commitment to integrating Al within its public sector, showcasing robust governmental support, effective policy frameworks,

⁵ https://oxfordinsights.com/ai-readiness/ai-readiness-index/2023-government-ai-readiness-index-2-2/ The report also notes that one of the most noteworthy developments in the region in 2023 was the signing of the Santiago Declaration by 20 Latin American and Caribbean governments. This document was the main outcome of the Summit of Ministers and High-Level Authorities of Latin America and the Caribbean on Artificial Intelligence, The declaration acknowledges the need for proactive involvement from governments to harness the opportunities that Al brings while addressing its risks

⁶ The top-5 indicated by LAAII is the same, but in a different order: Chile, Brazil, Uruguay, Argentina and Colombia.

and a forward-thinking approach to digital governance. Korea's position highlights the critical role of government initiative and infrastructure in driving Al readiness and adoption, serving as a model for other nations aiming to harness the transformative power of Al to enhance public services and administrative efficiency.

- 1.12. "Rules as Code⁷" (RaC) is an innovative approach to government rulemaking that involves the creation of rules, such as laws and regulations, in a machine-consumable format alongside the traditional human-readable form. This method allows rules to be directly understood and applied by computer systems, ensuring consistency in their execution. RaC integrates this digital format early in the rulemaking process, aiming to enhance policy making and public service delivery by fostering a truly digital government. By making rules available as digital products, RaC supports a more agile, responsive, and innovative government. It addresses the disconnect that often exists between policy intent and implementation, reducing risks and improving outcomes. Additionally, RaC makes it easier for people and businesses to understand their obligations, promoting clearer and more accessible governance. By adapting rulemaking to our increasingly digital world, RaC challenges traditional processes and holds significant potential to modernize and improve the effectiveness of government operations.
- 1.13. The commitment of Korea with the GEALC Network has materialized in the constant participation of high-level Korean authorities in the network meetings since 20128. In November 2021, the V Annual Meeting of the GEALC Network, which took place in Panama City, Panama, had a strong support from the Korean government, Sunn Bo Ram, General Director of Digital Government, Ministry of the Interior and Safety, gave the opening speech at the Ministerial Meeting. Moreover, Sungjoo Son, Director of Digital Government Cooperation, Ministry of the Interior and Safety, Seung Hyun Kim, Senior manager of National Information Society Agency (NIA) and Taewoo Nam, from Sungkyunkwan University had the opportunity to present a panel on "Korea: a leading egovernment experience to LAC e-government policymakers and managers"9. In November 2022, the VII Ministerial Meeting took place in Lima, Perú and Korea has been represented by the Director General of Public Artificial Intelligence, MOIS, Mr. Kyu Chul Hwang¹⁰, who shared the opening remarks of the Ministerial Meeting with the President of Perú, Pedro Castillo Terrones. Furthermore, Korean experts presented in the Panel: "Lessons learned from digital transformation in Korea¹¹": i) Ryu Kyoungmin, Subdirector Senior of MOIS

⁷ Mohun, J. and A. Roberts (2020), "Cracking the code: Rulemaking for humans and machines", OECD Working Papers on Public Governance, No. 42, OECD Publishing, Paris, https://doi.org/10.1787/3afe6ba5-en

⁸ Some of the Red GEALC meetings where Korean high-level authorities have participated are: Il Meeting of Ministers and 5th of High Authorities of Electronic Government of Latin America and the Caribbean (San José de Costa Rica, Costa Rica, 2012), *III Ministerial Meeting on E-Government & 8th Meeting of the Red GEALC (Cartagena de Indias, Colombia, 2014), 9th RED GEALC Annual Meeting (Mexico City, Mexico, 2015),* Digital Government Ministers' Forum in Korea and Central America 2017, and Meeting of the Red GEALC (Dominican Republic, 2017). The Red GEALC has two types of Meetings: The Ministerial Meetings every two years, and the Annual Meetings with the participation of all e-government Directors and Managers from LAC.

⁹ These presentations are available at: https://www.redgealc.org/contenido-general/noticias/documentos-y-decisiones-xv-reunion-anual-de-red-gealc/

¹⁰ The agenda of the 7TH Digital Government Ministerial Meeting Of The Americas http://www.redgealc.org/ministerial2022/en/the-event/

¹¹ These presentations are available at: https://www.redgealc.org/contenido-general/noticias/panel-corea-durante-la-vii-ministerial-de-red-gealc/



presented the results of their Digital Government Platform, ii) Wi Ji-seong, Deputy Director, Artificial Intelligence Public Policy División presented "MyData", and iii) Kim Seonhui, Deputy Director of MOIS, presented ID Mobile. After their presentation, several countries showed interest in implementing Korean best practices into their governments, by incorporating solutions of innovation and transformation of service delivery leveraged on ICTs.

2. Objectives

- 2.1. The first objective of this project is to develop a detailed taxonomy and ontology that classifies and relates legal terms used in digital government. This conceptual framework will facilitate a better understanding and unification of terms across different entities and jurisdictions, and it will also enhance interoperability and consistency in the application of laws and digital regulations.
- 2.2. The second objective is to design and develop an algorithm that uses the previously established taxonomy and ontology to analyze a country's digital administration legislation. This algorithm will assess the level of digital maturity of countries, identify the level of compliance with international standards and best practices, and highlight specific areas where legislation or implementation needs to be improved.

3. Scope of Services

- 3.1. The scope of the project encompasses everything from the research and compilation of relevant legal terms in the context of digital administration to the development of an algorithmic system capable of performing automatic evaluations of legislation.
- 3.2. It includes collaboration with experts in digital law, information technology, and e-government, as well as consultations with stakeholders to ensure that the taxonomy and ontology accurately reflect the language and needs of the sector.

4. Key Activities

The main activities of this project will be the following:

- 4.1 **Research and Analysis:** Conduct extensive research on existing legal frameworks and digital governance models both within the target country and internationally.
- 4.2 **Stakeholder Engagement:** Engage a wide range of stakeholders, including government officials, legal experts, IT professionals, and public sector workers, through workshops and meetings to gather input and ensure the taxonomy and ontology address all relevant aspects of digital administration.
- 4.3 **Development of Taxonomy and Ontology:** Collaborate with the Bank's contracted expert to design and develop a comprehensive taxonomy and ontology that categorizes and connects legal terms relevant to Digital Administration and Governance.
- 4.4 Algorithm Development: Develop an algorithm that can analyze legislation using the established taxonomy and ontology to assess compliance and maturity levels. This includes programming, testing, and refining the algorithm based on initial outputs.
- 4.5 **Interoperability Assessment:** Evaluate the interoperability of the proposed algorithm.



- 4.6 **Documentation and Reporting:** Maintain thorough documentation of all processes, decisions, and outcomes throughout the project lifecycle.
- 4.7 **Dissemination of Findings:** Develop a plan for disseminating the findings, best practices, and lessons learned from the project to other government units and external bodies interested in similar digital governance enhancements.

5. Expected Outcome and Deliverables

- 5.1. The expected outcomes of the project aimed at developing a taxonomy and ontology for digital administration and governance, together with an algorithm for analyzing legislation, are structured to significantly improve the digital governance landscape. This development is expected to increase clarity and consistency in the interpretation and application of digital laws and regulations by helping to standardize the terminology used in digital governance.
- 5.2. By embedding a codified rule set into an algorithm, the project will facilitate better interoperability between various digital systems used by the government. This will allow seamless data exchange and integration across platforms, improving the efficiency of digital services.
- 5.3. With clearer regulations and the ability to systematically analyze legislative environments, government officials and policymakers will be better equipped to make informed decisions that align with best practices in digital governance.
- 5.4. The firm will provide the following deliverables:
 - a) **Work Plan**: A detailed plan incorporating the technical proposal, project timelines, and an outline of deliverables.
 - b) **Research Report**: Based on research of existing legal frameworks and digital governance models to inform the tailored development of the project's framework.
 - c) **Taxonomy and Ontology Frameworks**: A comprehensive document detailing the design, structure, and content of the taxonomy and ontology frameworks. This will include definitions, classifications, and the relationships between various legal terms, ensuring clarity and coherence in the application of these frameworks across digital governance platforms.
 - d) **Algorithm**: A detailed document that outlines the architecture, functionality, and methodology behind the algorithm. This includes the logic used, data inputs, decision-making processes, and how it leverages the taxonomy and ontology frameworks.
 - e) **Final Project Report**: A comprehensive final report that encapsulates all aspects of the project, providing an evaluation of impacts, effectiveness, and recommendations for future enhancements. It will include:
 - i. <u>Summary of Preliminary Work</u>: Overview of initial research and preparatory activities conducted before developing the taxonomy.
 - ii. <u>Stakeholder Engagement Description</u>: List and description of the interactions with various stakeholders, including experts and authorities, throughout the project.
 - iii. <u>Project Documentation</u>: Detailed record of all processes, decisions, and results from the project lifecycle.



- iv. <u>Impact of Interoperability</u>: Analysis of how the algorithm could be systematically integrated into national law publication systems to enhance interoperability.
- v. <u>Dissemination Plan</u>: Strategy for sharing the project's findings and outcomes with wider audiences to extend its impact.
- vi. <u>Conclusions and Future Directions</u>: Summary of key takeaways and potential future initiatives or improvements that could build on the project's success.

6. Project Schedule and Milestones

The schedule below provides a clear roadmap for all project activities and expected deliverables.

Deliverable	Months (from kick off)
a) Work Plan	1
b) Research Report	2
c) Taxonomy framework	6
d) Algorithm	12
e) Final Project Report	12

7. Reporting Requirements

The firm will have to submit all deliverables in English or Spanish and in digital format, according to the established content, formats and deadlines.

8. Acceptance Criteria

All deliverables must follow the highest quality and detail standards and require minimum revisions. All deliverables will be carefully reviewed and approved the digital government agency of the country before being accepted by the Bank. Acceptance will be given in writing, via email, by the project leader. All service costs in the budget will be approved by IDB Team before service providers are finalized. The consulting firm shall obtain the IDB Team's approval of each deliverable before associated payments will be processed.

9. Other Requirements

- **9.1** All personal data accessed by the contractor during the project must be kept strictly confidential and destroyed at the end of the contract.
- **9.2** The use of AI ethics, confidentiality and privacy is paramount.

10. Supervision and Reporting

The consulting firm will report to José Luis Hernández Carrión, e-Government Senior Specialist at IFD/ICS, who will give comments to any reports, approve reports, documents, work, and give comments or any instructions for changes. It shall be the firm's responsibility to ensure such reports are submitted to the Bank.

11. Schedule of Payments

11.1 Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the



most competitive cost proposal for the services described herein. Note on payments for logistical expenses: The consulting firm shall present a list of all expenses incurred in the contracting of services associated with logistical arrangements for the training course, expressed in United States dollars. The IDB shall require the consulting firm for such expenses. The consulting form shall keep the invoices for these expenses and present them to the IDB if required.

- 11.2 The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments. In addition to reimbursement for such expenses, the IDB shall pay the consulting upon receipt and approval of each deliverable.
- 11.3 The following schedule indicates the portion of the contract that will be paid upon receipt and validation of each deliverable.

Description	(%) Contract
Work plan	15%
Research Report	10%
Taxonomy framework	30%
Algorithm	30%
Final Report	15%
TOTAL	100%



TERMS OF REFERENCE

"Consulting for the implementation of two pilot projects of artificial intelligence technology systems based on the Korean experience."

Component 2

Country: Regional

Technical Cooperation Number: RG-T4439

Technical Cooperation Name: "Accelerating Al Adoption in Latin America and the Caribbean: Aligning Regulations, Deploying Pilots, And Conducting Training"

1. Background and justification

- 1.1. In recent years, the focus of governments in Latin America and the Caribbean (LAC) has increasingly turned towards the adoption of digital governance systems and the digital transformation of the public sector. This shift has gained momentum due to the COVID-19 pandemic and the rising prominence of disruptive technologies, with Artificial Intelligence (AI) being particularly notable.
- 1.2. Al represents a major technological leap, akin to the transformative impact of the internet's arrival in homes and businesses at the turn of the last century. However, the integration of the internet into public administrations worldwide was plagued by sluggish initial adoption. This slow start has left a legacy of ongoing challenges with digital engagement¹². The current demand for Al integration in public services suggests a more rapid and responsive embrace of this technology. This public demand underscores the importance for public administrations to not just adopt AI, but to do so with urgency, maximizing its potential to enhance services for citizens.
- 1.3. Al marks a significant technological shift, reminiscent of the profound changes triggered by the advent of the internet in homes and businesses at the close of the last century. While the incorporation of the internet into public administrations globally was initially met with slow uptake¹³, leading to ongoing digital engagement challenges, the current demand for Al integration into public services is poised to ensure a more swift and responsive adoption. This public demand underscores the critical importance for public administrations to not only adopt Al but to do so in a manner that promptly leverages its capabilities to enhance citizen services.
- 1.4. Al is currently at the forefront of technological innovation, attracting more attention than any other modern development. The arrival of generative AI, along with the emerging development of comprehensive regulatory frameworks to regulate it, underscores the profound ethical considerations and surge in AI-centric discussion. This technology is now in the spotlight across multiple sectors

¹² In 2018, two years prior to the COVID-19 pandemic, the IADB publication "Wait No More: Citizens, Red Tape, and Digital Government" http://dx.doi.org/10.18235/0001150 was already highlighting the sluggish digitalization of interactions between citizens and public administrations in LAC. This foresight underscored the pressing need for a digital transformation within the public sector to streamline processes, enhance service delivery, and ultimately, improve the citizen-government relationship. The pandemic further emphasized this urgency, demonstrating the critical role that efficient, digitalized public services play in addressing rapid societal changes and challenges.



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- 1.5. The transformative power of AI offers opportunities for advancement and efficiency, but also raises concerns about job displacement, privacy, and security. Therefore, a balanced and inclusive approach to AI development and deployment is necessary. This will require meaningful dialogue between the various actors involved, including technology, ethics, politics, and the general public.
- 1.6. Drawing on the lessons from previous industrial and technological revolutions, it is evident that countries which rapidly embrace new technologies often seize greater opportunities for growth. In this context, directing policy actions in Latin America and the Caribbean to bolster technological capacity and encourage AI adoption across all sectors is crucial. This strategy involves laying the groundwork for the socioeconomic shifts that AI will precipitate and ensuring the establishment of secure and ethical governance. To facilitate and amplify investment in AI, as well as to maximize its impact, actions must be taken from multiple angles. This includes striving to understand and emulate the most advanced global trends in the field. By adopting such a multifaceted approach, nations in Latin America and the Caribbean can not only navigate the challenges posed by AI but also harness its vast potential to drive innovation, economic growth, and social improvement¹⁴.
- 1.7. The Latin American Artificial Intelligence Index¹⁵ (LAAII) developed by Chile's National Center for Artificial Intelligence (CENIA) highlights substantial gaps between Latin America¹⁶ and global leaders in Al development. From 2010 to 2021, Latin America contributed only 2.7% of the total scientific publications in Al-related journals. Additionally, the private investment in Al within the region amounted to just 1.7% of the total private investment made in the United States and 5% of that in China during the same period. This underlines a significant disparity in both academic contributions and financial backing for Al initiatives compared to global standards, emphasizing the need for enhanced focus and resources to boost Al growth in Latin America.
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infrastructure to exploit them fully. This uneven advancement across various dimensions suggests immense potential for inter-country learning and collaboration. Additionally, the penetration of AI and related disruptive technologies in Latin America remains substantially lower than in more developed regions, affecting nearly all industrial sectors. Despite these challenges, the growth of AI competencies within the region has been observed, albeit at a slower pace compared to global trends, indicating gradual but ongoing progress in building AI expertise.

- 1.9. The LAAII outlines several main findings crucial for shaping the future of AI in the region. First, there is an urgent need for substantial investments in connectivity and specialized computing to mitigate structural inequalities and ensure effective AI deployment. Enhancing educational systems is critical, as it prepares the workforce to handle automation challenges, curbs talent drain, and supports innovation across diverse economic sectors. The LAAII also highlights the importance of fostering regional cooperation and cross-border collaboration, which are essential for building comprehensive data repositories and developing Al systems tailored to the region's unique needs. Moreover, the establishment of robust AI regulations is emphasized to manage risks effectively and utilize AI for social betterment, ensuring transparency and accountability. Additionally, leveraging Latin America's unique characteristics, such as linguistic diversity, rich biodiversity, and renewable energy sources, is seen as a way to gain competitive advantages globally. Finally, the need to create collaborative frameworks that involve public, private, and academic sectors is crucial, despite challenges like corruption and institutional weaknesses that currently undermine trust and ethical AI development.
- 1.10. The 2023 Government AI Readiness Index places Latin America and the Caribbean (LAC) in a position that, while indicative of progress, underscores significant room for improvement. Ranked sixth out of nine regions, LAC is only ahead of the Pacific, South and Central Asia, and Sub-Saharan Africa, highlighting its position at the lower end of the global spectrum. With an average regional score of 41.50, LAC's readiness for AI integration in the public sector is in stark contrast to the leading region, North America, which has a score of 80.93. This significant gap not only demonstrates LAC's distance from the forefront of AI readiness, but also places it behind other regions such as the Middle East and North Africa (48.77) and Eastern Europe (54.67).
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¹⁷ https://oxfordinsights.com/ai-readiness/ai-readiness-index/2023-government-ai-readiness-index-2-2/ The report also notes that one of the most noteworthy developments in the region in 2023 was the signing of the Santiago Declaration by 20 Latin American and Caribbean governments. This document was the main outcome of the Summit of Ministers and High-Level Authorities of Latin America and the Caribbean on Artificial Intelligence, The declaration acknowledges the need for proactive involvement from governments to harness the opportunities that Al brings while addressing its risks

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- 1.13. The commitment of Korea with the GEALC Network has materialized in the constant participation of high-level Korean authorities in the network meetings since 2012¹⁹. In November 2021, the V Annual Meeting of the GEALC Network, which took place in Panama City, Panama, had a strong support from the Korean government, Sunn Bo Ram, General Director of Digital Government, Ministry of the Interior and Safety, gave the opening speech at the Ministerial Meeting. Moreover, Sungjoo Son, Director of Digital Government Cooperation, Ministry of the Interior and Safety, Seung Hyun Kim, Senior manager of National Information Society Agency (NIA) and Taewoo Nam, from Sungkyunkwan University had the opportunity to present a panel on "Korea: a leading egovernment experience to LAC e-government policymakers and managers"20. In November 2022, the VII Ministerial Meeting took place in Lima, Perú and Korea has been represented by the Director General of Public Artificial Intelligence, MOIS, Mr. Kyu Chul Hwang²¹, who shared the opening remarks of the Ministerial Meeting with the President of Perú, Pedro Castillo Terrones. Furthermore, Korean experts presented in the Panel: "Lessons learned from digital transformation in Korea²²": i) Ryu Kyoungmin, Subdirector Senior of MOIS presented the results of their Digital Government Platform, ii) Wi Ji-seong, Deputy Director, Artificial Intelligence Public Policy División presented "MyData", and iii) Kim Seonhui, Deputy Director of MOIS, presented ID Mobile. After their presentation, several countries showed interest in implementing Korean best

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practices into their governments, by incorporating solutions of innovation and transformation of service delivery leveraged on ICTs.

2. Objectives

2.1. The main objective of this consultancy is focused on the design and implementation of at least two pilots using AI techniques to improve the delivery of public digital services. The goal is to ensure that projects not only leverage local insights and expertise, but also align with international best practices in digital governance and implementing AI.

3. Scope of Services

3.1. Project pilots are conducted in coordination with the LAC country's digital government unit. As such, they will include the design, customization, training, and implementation of a system solution that has been pre-identified by the LAC beneficiary country or by the Bank.

4. Key Activities

The main activities of this project will be the following:

- 4.1. **Objective and Scope Definition**: Collaborate with the IDB, chosen experts, and beneficiary countries to define the pilot systems' goals and reach.
- 4.2. **System Development and Launch**: Design, build, and implement the Al system pilots.
- 4.3. **Continuation Roadmap**: Create a roadmap for extending the project, outlining actions for at least two years post-launch. This plan should outline future work, anticipated challenges, and strategies for scaling and adapting the AI systems.
- 4.4. **Documentation and Dissemination**: Document the solution and spread knowledge on its development and application.
- 4.5. **Training**: Design training program for human resources in the beneficiary countries focusing on both the operational use and the underlying design principles of the AI systems.
- 4.6. **Final Reporting**: Produce a final report detailing operational and maintenance protocols for the systems.

5. Expected Outcome and Deliverables

- 5.1. By incorporating Al advancements, the project will elevate local digital governance standards to international levels, promoting a higher quality of service delivery and operational efficiency.
- 5.2. The successful implementation of Al-driven pilot systems should improve the efficiency and effectiveness of public digital services, ensuring that they are more responsive to citizen needs.
- 5.3. The continuation roadmap developed as part of this project will outline strategic actions for the future to ensure that the benefits of the pilot systems are sustained and extended.
- 5.4. The firm will provide the following deliverables:
 - a) **Work Plan**: A detailed plan incorporating the technical proposal, project timelines, and an outline of deliverables.
 - b) **System Analysis and Design**: A thorough analysis and technical blueprint of the systems to be developed.



- c) **Pilot Systems**: This key activity focuses on the delivery of the pilot systems, marking the transition from their development to their provision for use. The scope of the project remains deliberately broad, leaving open the extent to which the systems are operational. This phase could include deploying the systems for real-world application, enabling assessment of their performance and user reception, as well as their potential influence on the delivery of public services.
- d) **Continuation Roadmap**: A strategic roadmap outlining the future trajectory of the project beyond the pilot phase.
- e) **Final Report**: A conclusive document presenting an overview of the project, including executed activities, achieved outcomes, lessons learned, and guidance for sustained application and growth.

6. Project Schedule and Milestones

The schedule below provides a clear roadmap for all project activities and expected deliverables.

Deliverable	Months (from kick off)
Work Plan	1
System Analysis and Design	3
Pilot system	12
Final Report and Roadmap	12

7. Reporting Requirements

The firm will have to submit all deliverables in English or Spanish and in digital format, according to the established content, formats, and deadlines.

8. Acceptance Criteria

All deliverables must follow the highest quality and detail standards and require minimum revisions. All deliverables will be carefully reviewed and approved the digital government agency of the country before being accepted by the Bank. Acceptance will be given in writing, via email, by the project leader. All service costs in the budget will be approved by IDB Team before service providers are finalized. The consulting firm shall obtain the IDB Team's approval of each deliverable before associated payments will be processed.

9. Other Requirements

- 9.1. All personal data accessed by the contractor during the project must be kept strictly confidential and destroyed at the end of the contract.
- 9.2. The use of AI ethics, confidentiality and privacy is paramount.

10. Supervision and Reporting

The consulting firm will report to José Luis Hernández Carrión, e-Government Senior Specialist at IFD/ICS, who will give comments to any reports, approve reports, documents, work, and give comments or any instructions for changes. It shall be the firm's responsibility to ensure such reports are submitted to the Bank.

11. Schedule of Payments

11.1 Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the



most competitive cost proposal for the services described herein. Note on payments for logistical expenses: The consulting firm shall present a list of all expenses incurred in the contracting of services associated with logistical arrangements for the training course, expressed in United States dollars. The IDB shall require the consulting firm for such expenses. The consulting form shall keep the invoices for these expenses and present them to the IDB if required.

- 11.2 The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments. In addition to reimbursement for such expenses, the IDB shall pay the consulting upon receipt and approval of each deliverable.
- 11.3 The following schedule indicates the portion of the contract that will be paid upon receipt and validation of each deliverable.

Description	(%) Contract
Work plan	15%
System Analysis and Design	15%
Pilot systems	50%
Continuation Roadmap	5%
Draft and Final Report	15%
TOTAL	100%



TERMS OF REFERENCE

"Consulting for Strengthening capacity on education and human capital development in LAC"

Component 3

Country: Regional

Technical Cooperation Number: RG-T4439

Technical Cooperation Name: "Accelerating AI Adoption in Latin America and the Caribbean: Aligning Regulations, Deploying Pilots, And Conducting Training"

1. Background and justification

- 1.1. In recent years, the focus of governments in Latin America and the Caribbean (LAC) has increasingly turned towards the adoption of digital governance systems and the digital transformation of the public sector. This shift has gained momentum due to the COVID-19 pandemic and the rising prominence of disruptive technologies, with Artificial Intelligence (AI) being particularly notable.
- 1.2. Al represents a major technological leap, akin to the transformative impact of the internet's arrival in homes and businesses at the turn of the last century. However, the integration of the internet into public administrations worldwide was plagued by sluggish initial adoption. This slow start has left a legacy of ongoing challenges with digital engagement²³. The current demand for Al integration in public services suggests a more rapid and responsive embrace of this technology. This public demand underscores the importance for public administrations to not just adopt AI, but to do so with urgency, maximizing its potential to enhance services for citizens.
- 1.3. Al is currently at the forefront of technological innovation, attracting more attention than any other modern development. The arrival of generative AI, along with the emerging development of comprehensive regulatory frameworks to regulate it, underscores the profound ethical considerations and surge in AI-centric discussion. This technology is now in the spotlight across multiple sectors from technology and government to the broader societal arena for its ability to perform tasks once considered the exclusive domain of human expertise. The public observes the development of AI with a rich spectrum of emotions, ranging from keen interest and curiosity to underlying concerns, reflecting both the technology's transformative promise and its potential pitfalls. The potential of AI is vast and undeniable. Governments worldwide can no longer ignore its impact.
- 1.4. The transformative power of AI offers opportunities for advancement and efficiency, but also raises concerns about job displacement, privacy, and security. Therefore, a balanced and inclusive approach to AI development and deployment is necessary. This will require meaningful dialogue between the

²³ In 2018, two years prior to the COVID-19 pandemic, the IADB publication "Wait No More: Citizens, Red Tape, and Digital Government" http://dx.doi.org/10.18235/0001150 was already highlighting the sluggish digitalization of interactions between citizens and public administrations in LAC. This foresight underscored the pressing need for a digital transformation within the public sector to streamline processes, enhance service delivery, and ultimately, improve the citizen-government relationship. The pandemic further emphasized this urgency, demonstrating the critical role that efficient, digitalized public services play in addressing rapid societal changes and challenges.



various actors involved, including technology, ethics, politics, and the general public.

- 1.5. Drawing on the lessons from previous industrial and technological revolutions, it is evident that countries which rapidly embrace new technologies often seize greater opportunities for growth. In this context, directing policy actions in Latin America and the Caribbean to bolster technological capacity and encourage AI adoption across all sectors is crucial. This strategy involves laying the groundwork for the socioeconomic shifts that AI will precipitate and ensuring the establishment of secure and ethical governance. To facilitate and amplify investment in AI, as well as to maximize its impact, actions must be taken from multiple angles. This includes striving to understand and emulate the most advanced global trends in the field. By adopting such a multifaceted approach, nations in Latin America and the Caribbean can not only navigate the challenges posed by AI but also harness its vast potential to drive innovation, economic growth, and social improvement²⁴.
- 1.6. The Latin American Artificial Intelligence Index²⁵ (LAAII) developed by Chile's National Center for Artificial Intelligence (CENIA) highlights substantial gaps between Latin America²⁶ and global leaders in Al development. From 2010 to 2021, Latin America contributed only 2.7% of the total scientific publications in Al-related journals. Additionally, the private investment in Al within the region amounted to just 1.7% of the total private investment made in the United States and 5% of that in China during the same period. This underlines a significant disparity in both academic contributions and financial backing for Al initiatives compared to global standards, emphasizing the need for enhanced focus and resources to boost Al growth in Latin America.
- 1.7. The LAAII portrays a complex AI development landscape across Latin America. It reveals significant disparities in AI capabilities among countries: while some display robust scientific output, they falter in transferring technology effectively. Others boast abundant data resources yet lack the necessary technological infrastructure to exploit them fully. This uneven advancement across various dimensions suggests immense potential for inter-country learning and collaboration. Additionally, the penetration of AI and related disruptive technologies in Latin America remains substantially lower than in more developed regions, affecting nearly all industrial sectors. Despite these challenges, the growth of AI competencies within the region has been observed, albeit at a slower pace compared to global trends, indicating gradual but ongoing progress in building AI expertise.
- 1.8. The LAAII outlines several main findings crucial for shaping the future of AI in the region. First, there is an urgent need for substantial investments in

²⁴ See Iglesias Rodriguez, E., García Zaballos, A., Puig Gabarró, P., & Benzaquén, I. (2020). *Inteligencia artificial: Gran oportunidad del siglo XXI: Documento de reflexión y propuesta de actuación*. Inter-American Development Bank. http://dx.doi.org/10.18235/0003037

²⁵ The Latin American Artificial Intelligence Index, developed by CENIA, collects information about the current situation in this area along three key dimensions: enabling factors, R&D and governance. The index offers a regional perspective on critical issues for the creation of development and innovation ecosystems based on AI, the governance of this technology, gaps existing between countries, and best practices adopted by various states and organizations.https://indicelatam.cl/home-en/

²⁶ The countries included in the LAAII are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru, and Uruguay

connectivity and specialized computing to mitigate structural inequalities and ensure effective AI deployment. Enhancing educational systems is critical, as it prepares the workforce to handle automation challenges, curbs talent drain, and supports innovation across diverse economic sectors. The LAAII also highlights the importance of fostering regional cooperation and cross-border collaboration, which are essential for building comprehensive data repositories and developing AI systems tailored to the region's unique needs. Moreover, the establishment of robust AI regulations is emphasized to manage risks effectively and utilize AI for social betterment, ensuring transparency and accountability. Additionally, leveraging Latin America's unique characteristics, such as linguistic diversity, rich biodiversity, and renewable energy sources, is seen as a way to gain competitive advantages globally. Finally, the need to create collaborative frameworks that involve public, private, and academic sectors is crucial, despite challenges like corruption and institutional weaknesses that currently undermine trust and ethical AI development.

- 1.9. The 2023 Government AI Readiness Index places Latin America and the Caribbean (LAC) in a position that, while indicative of progress, underscores significant room for improvement. Ranked sixth out of nine regions, LAC is only ahead of the Pacific, South and Central Asia, and Sub-Saharan Africa, highlighting its position at the lower end of the global spectrum. With an average regional score of 41.50, LAC's readiness for AI integration in the public sector is in stark contrast to the leading region, North America, which has a score of 80.93. This significant gap not only demonstrates LAC's distance from the forefront of AI readiness, but also places it behind other regions such as the Middle East and North Africa (48.77) and Eastern Europe (54.67).
- 1.10. The 2023 report²⁷ highlights the notable performance of five Latin American countries: Brazil, Chile, Uruguay, Colombia, and Argentina²⁸. These nations distinguished themselves with scores ranging from 63.70 to 57.72 points, particularly excelling in the Government pillar of the index. The report also identifies a critical area of improvement for Latin America and the Caribbean, specifically in the Innovation Capacity dimension within the Technology Sector pillar. Here, the region exhibits a noticeable lag, with a nearly 10-point gap between its average and the global average. This disparity underscores the need for enhanced focus and investment in fostering an environment conducive to technological innovation and research & development in AI.
- 1.11. The Republic of Korea stands in contrast within the 2023 Government Al Readiness Index, emerging as one of the most advanced countries, securing the 7th position globally with a score of 75.65. It is particularly noteworthy in the Government Pillar, achieving a score of 87.55. In this specific pillar, Korea is ranked third, trailing only behind Singapore and Finland. This high-ranking underscores Korea's exemplary commitment to integrating Al within its public sector, showcasing robust governmental support, effective policy frameworks,

²⁷ https://oxfordinsights.com/ai-readiness/ai-readiness-index/2023-government-ai-readiness-index-2-2/ The report also notes that one of the most noteworthy developments in the region in 2023 was the signing of the Santiago Declaration by 20 Latin American and Caribbean governments. This document was the main outcome of the Summit of Ministers and High-Level Authorities of Latin America and the Caribbean on Artificial Intelligence, The declaration acknowledges the need for proactive involvement from governments to harness the opportunities that AI brings while addressing its risks

²⁸ The top-5 indicated by LAAII is the same, but in a different order: Chile, Brazil, Uruguay, Argentina and Colombia.

and a forward-thinking approach to digital governance. Korea's position highlights the critical role of government initiative and infrastructure in driving Al readiness and adoption, serving as a model for other nations aiming to harness the transformative power of Al to enhance public services and administrative efficiency.

1.12. The commitment of Korea with the GEALC Network has materialized in the constant participation of high-level Korean authorities in the network meetings since 2012²⁹. In November 2021, the V Annual Meeting of the GEALC Network, which took place in Panama City, Panama, had a strong support from the Korean government, Sunn Bo Ram, General Director of Digital Government, Ministry of the Interior and Safety, gave the opening speech at the Ministerial Meeting. Moreover, Sungjoo Son, Director of Digital Government Cooperation, Ministry of the Interior and Safety, Seung Hyun Kim, Senior manager of National Information Society Agency (NIA) and Taewoo Nam, from Sungkyunkwan University had the opportunity to present a panel on "Korea: a leading egovernment experience to LAC e-government policymakers and managers"30 . In November 2022, the VII Ministerial Meeting took place in Lima, Perú and Korea has been represented by the Director General of Public Artificial Intelligence, MOIS, Mr. Kyu Chul Hwang³¹, who shared the opening remarks of the Ministerial Meeting with the President of Perú, Pedro Castillo Terrones. Furthermore, Korean experts presented in the Panel: "Lessons learned from digital transformation in Korea³²": i) Ryu Kyoungmin, Subdirector Senior of MOIS presented the results of their Digital Government Platform, ii) Wi Ji-seong, Deputy Director, Artificial Intelligence Public Policy División presented "MyData", and iii) Kim Seonhui, Deputy Director of MOIS, presented ID Mobile. After their presentation, several countries showed interest in implementing Korean best practices into their governments, by incorporating solutions of innovation and transformation of service delivery leveraged on ICTs.

2. Objectives

- 2.1. The main objective of this consultancy is the execution of tasks related to component 3 of this project which focuses on reduce the knowledge gap among public sector in LAC countries in term of AI.
- 2.2. There are three objectives:
 - a) Support of the design of AI educational frameworks in the region.

²⁹ Some of the Red GEALC meetings where Korean high-level authorities have participated are: II Meeting of Ministers and 5th of High Authorities of Electronic Government of Latin America and the Caribbean (San José de Costa Rica, Costa Rica, 2012), *III Ministerial Meeting on E-Government & 8th Meeting of the Red GEALC (Cartagena de Indias, Colombia, 2014), 9th RED GEALC Annual Meeting (Mexico City, Mexico, 2015),* Digital Government Ministers' Forum in Korea and Central America 2017, and Meeting of the Red GEALC (Dominican Republic, 2017). The Red GEALC has two types of Meetings: The Ministerial Meetings every two years, and the Annual Meetings with the participation of all e-government Directors and Managers from LAC.

³⁰ These presentations are available at: https://www.redgealc.org/contenido-general/noticias/documentos-y-decisiones-xv-reunion-anual-de-red-gealc/

³¹ The agenda of the 7TH Digital Government Ministerial Meeting Of The Americas http://www.redgealc.org/ministerial2022/en/the-event/

³² These presentations are available at: https://www.redgealc.org/contenido-general/noticias/panel-corea-durante-la-vii-ministerial-de-red-gealc/



- b) Provide advance AI training from lead institution to create tailor-made training activities with the agencies in charge of the IA public policy.
- c) Develop AI knowledge material.

3. Scope of Services

- 3.1. All designated activities will be executed in close collaboration with relevant LAC public policy agencies. This collaborative approach ensures that the educational initiatives are aligned with policy objectives and grounded in practical, actionable insights.
- 3.2. The development of the educational framework, as well as the programs and training materials, will be carried out considering the regional context and international trends in the field. Each task will integrate insights from the Korean experience in AI implementation and public sector innovation. The consultancy firm, in collaboration with the consultant designated by the bank, will facilitate the active involvement of Korean experts throughout the development process ensuring that these initiatives benefit from proven best practices and advanced technological insights from Korea.

4. Key Activities

The main activities of this project will be the following:

- 4.1 <u>Stakeholder Engagement and Needs Assessment</u>: Conduct consultations with regional educational institutions, AI experts, and public sector agencies to identify specific AI training needs and opportunities within the LAC region.
- 4.2 <u>Framework Design and Development</u>: This activity focuses on creating Al educational frameworks that span foundational to advanced skills, incorporating (i) technical Al concepts, (ii) ethical Al development considerations, and (iii) Al's role in public policy and governance, ensuring a holistic approach to Al education.
- 4.3 <u>Training Program Creation</u>: Design and implement tailored AI training programs for public policy agencies, emphasizing a balance between theoretical insights and practical, hands-on applications of AI technologies. Special emphasis will be placed on fostering idea exchanges between LAC participants and Korean AI experts through various platforms or events, enhancing regional knowledge through international expertise.
- 4.4 <u>Development of Educational Resources</u>: A collection of AI educational materials will be produced, including manuals, guides, case studies, and digital resources, with a focus on real-world public sector applications and ethical AI use. These resources will be made available in both Spanish and English, accompanied by a dissemination strategy aimed at broadening their accessibility and effectiveness across the LAC public sector.
- 4.5 Final Reporting: Document the process, results, and future recommendations of the project. The report will include feedback from training participants and collaborating agencies.

5. Expected Outcome and Deliverables

- 5.1. The expected outcome is to enhance the Knowledge and Understanding of Core Al concepts and technologies among the Public sector professionals in LAC countries and foster a network between LAC agencies and Korean experts, promoting the exchange of Al knowledge and best practices.
- 5.2. The firm will provide the following deliverables.



- a) **Work Plan**: A detailed schedule outlining the sequence of activities planned throughout the project.
- b) **Al Educational Framework.** The design of the framework will include the following documentation:
 - i. Complete Framework Documentation: This core document will detail the framework, explaining the methodology, attributes, and existing maturity levels. It will outline the requirements needed to achieve each level of maturity, supplemented with real-world examples, tools, or theoretical concepts to facilitate better comprehension. Consider including diagrams, flowcharts, or infographics within the framework documentation for greater clarity and ease of understanding.
 - ii. Executive Summary: A concise executive summary, not exceeding 5 pages, will provide an overview of the framework's key elements, goals, and potential impacts, designed for quick reading and to capture the essence of the framework for decision-makers and stakeholders.
 - iii. <u>Dissemination Materials</u>: To promote awareness and understanding of the framework, a variety of materials will be produced, including flyers, presentations, and informational snippets. These materials will be tailored to engage a wide audience, making the framework's insights accessible to all interested parties.
- c) Customized Training Programs: A suite of AI training programs designed based on the specific needs of LAC countries, delivered in collaboration with the lead educational institution. It will include:
 - i. Al Training Program Curriculum: A detailed curriculum outlining the training program, including modules that cover both foundational and advanced Al concepts, ethical considerations in Al, and applications of Al in public policy and governance. The curriculum will specify learning objectives, methodologies, enriched with real-world examples.
 - ii. Executive Summary: A succinct executive summary, limited to 2 pages, will provide a high-level overview of the training program, its objectives, structure, and expected outcomes. This summary aims to quickly inform and engage potential participants, stakeholders, and decision-makers about the value and scope of the AI training.
 - iii. Al Training report: This report will encompass training content, bios of speakers, and the methodology employed during the courses. It will be disseminated to participants post-event, as well as all presentations and resources used during the training sessions.
- d) Al Knowledge Materials: A robust collection of Al learning resources, including in-depth manuals, best practices guides, case studies, and interactive online resources. Additionally, an online resource (such as a website, knowledge platform, or similar) will be provided, allowing for the simple and intuitive navigation of all the compiled material. This digital space will serve as a centralized hub for accessing the comprehensive suite of Al knowledge materials, ensuring that users can easily find and utilize the resources relevant to their needs and interests. Designed with user-friendliness in mind, the platform will feature a clear layout, searchable content, and categorization by topics, ensuring a seamless and engaging learning experience for all users.



e) **Project Reports and Documentation:** Documentation of project activities, lessons learned, and recommendations for further strengthening AI capacity in the region.

6. Project Schedule and Milestones

The schedule below provides a clear roadmap for all project activities and expected deliverables.

Deliverable	Months (from kick off)
a) Work Plan	1
b) Training program curriculum	2
c) Al Educational Framework	9
c) Training report	12
d) Al Knowledge Materials	12
e) Project Reports	12

7. Reporting Requirements

The firm will have to submit all deliverables in English or Spanish and in digital format, according to the established content, formats, and deadlines.

8. Acceptance Criteria

All deliverables must follow the highest quality and detail standards and require minimum revisions. All deliverables will be carefully reviewed and approved the digital government agency of the country before being accepted by the Bank. Acceptance will be given in writing, via email, by the project leader. All service costs in the budget will be approved by IDB Team before service providers are finalized. The consulting firm shall obtain the IDB Team's approval of each deliverable before associated payments will be processed.

9. Other Requirements

- 9.1. All personal data accessed by the contractor during the project must be kept strictly confidential and destroyed at the end of the contract.
- 9.2. The use of AI ethics, confidentiality and privacy is paramount.

10. Supervision and Reporting

The consulting firm will report to Miguel Porrua, e-Government Principal Specialist at IFD/ICS, who will give comments to any reports, approve reports, documents, work, and give comments or any instructions for changes. It shall be the firm's responsibility to ensure such reports are submitted to the Bank.

11. Schedule of Payments

11.1 Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein. Note on payments for logistical expenses: The consulting firm shall present a list of all expenses incurred in the contracting of services associated with logistical arrangements for the training course, expressed in United States dollars. The IDB shall require the consulting firm for such expenses. The consulting form shall keep the invoices for these expenses and present them to the IDB if required.



- 11.2 The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments. In addition to reimbursement for such expenses, the IDB shall pay the consulting upon receipt and approval of each deliverable.
- 11.3 The following schedule indicates the portion of the contract that will be paid upon receipt and validation of each deliverable.

Description	(%) Contract
Work plan	10%
Training program curriculum	10%
Al Framework	25%
Training program report	20%
Al Knowledge Materials	25%
Project Reports	10%
TOTAL	100%



IFD/ICS Operational and knowledge Consultant

Post of duty: Washington, DC

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position

The Innovation in Citizen Services Division of the Institutions for Development Department (IFD/ICS) is looking for a professional to assist and coordinate the strategy for Accelerating AI Adoption in Latin America and the Caribbean within the ICS team in the design and execution of AI Adoption activities (including the design of a reference framework for the regulatory of a Digital Government, preparation of training materials and coordinate pilot projects).

What you'll do:

Coordinate and Support Al Adoption Strategy

The selected candidate, in collaboration with the IFD/ICS, will be instrumental in driving the adoption of Artificial Intelligence (AI) technologies. This role is centered on leveraging AI to catalyze digital transformation and enhance the efficiency, effectiveness, and inclusivity of public sector services across Latin America and the Caribbean. Key responsibilities will include:

- Coordination of overall strategy and related projects.
- Oversee design of taxonomy and ontology classifying and relating legal terms used in digital government, and design and development of algorithm using it.
- Support the deployment of Al-based pilot projects based on the Korean experience, aimed at improving public digital service delivery.
- Support the development of AI educational frameworks in the region to bridge the knowledge gap among public sector employees regarding AI.
- Supervise advance AI training by collaborating with leading institutions to create customized training activities for agencies responsible for AI public policy.
- Coordinate the development of Al knowledge materials, including guides, case studies, and policy recommendations to support Al adoption and literacy.
- Engage with beneficiary countries to tailor strategies and projects to their specific needs and contexts.
- Collaborate with international partners, such as South Korea, to leverage global insights and practices in the implementation of digital government strategies.
- Facilitate cross-border interactions within the LAC landscape.
- **Select and manage international experts** to implement the project activities, drawing on the IDB's extensive network and experience in the region.
- Monitor and evaluate the impact of Al adoption activities, ensuring alignment with the project's goals and objectives.



 Address potential technical capacity challenges among national counterparts, ensuring they can implement digital solutions and proposed policies effectively.

Cronograma de entregas y pagos

Deliverable #	Percentage	Fecha estimada de entrega
Product 1: Working Plan	20%	Once the contract is signed
Product 2: Report of the diagnosis of taxonomy and ontology classifying and relating legal terms used in digital government in LAC Region	40%	Within two months from the signing of the contract.
Product 3: Report of the progress and advances for the development of algorithm designed based on the product 2	35%	Within six months from the signing of the contract.
Product 4: Evaluation of the pilots implemented	5 %	Within twelve months from the signing of the contract.

What you'll need

- **Education:** A master's degree in computer science, Artificial Intelligence, Public Administration, Digital Governance, or related fields
- **Experience**: 5 years of relevant experience in roles related to artificial intelligence, government administration, digital government strategies, or similar areas
- Languages: Proficiency in Spanish and English, spoken and written, is required. Additional knowledge of French and Portuguese is preferable.
- Core and competencies: The candidate must be proactive, independent, organized, detail-oriented, able to simultaneously manage multiple projects, comfortable working on diverse teams, client oriented and eager to take on new challenges, particularly in the rapidly evolving field of artificial intelligence and digital governance.

Key skills:



The position requires:

- Deep understanding of AI technologies and their application in public sector projects, including machine learning, natural language processing and data analytics, and their ethical dimensions.
- Familiarity with the principles of digital transformation and governance, including the design and implementation of digital services.
- Strong ability to analyze and understand complex digital government regulatory frameworks, policies, and procedures.
- Experience with project management, including proposal development, component design, definition of deliverables, budget management and results monitoring.
- Experience with building and maintaining client relationships, in particular with government authorities.
- Familiarity with the dynamics of public institutions in Latin America and the Caribbean.
- Knowledge of digital government technical topics
- Familiarity with international organizations

Requirements:

- Citizenship: You are citizen of one of our 48-member countries.
- Consanguinity: You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

Type of contract and duration:

- Type of contract: National Consultant Full-Time.
- Length of contract: 12 months.
- Work Location: On site.

What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A competitive compensation package.
- Leave and vacations: 2 days per month of contract + gender-neutral parental leave.
- **Health Insurance** the IDB Group provides a monthly allowance for the purchase of health insurance.
- **Savings plan**: The IDB Group cares about your future, depending on the length of the contract, you will receive a monthly savings plan allowance.
- Hybrid and flexible work schedules.
- **Health and wellbeing:** Access to our Health Services Center which provides preventive care and health education for all employees.
- Development support: We offer learning opportunities to boost your professional profile such as seminars, 1:1 professional counseling, and much more.

Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.



Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at diversity@iadb.org to request reasonable accommodation to complete this application.

Our Human Resources Team reviews carefully every application.

About the IDB Group

The IDB Group, composed of the Inter-American Development Bank (IDB), IDB Invest, and the IDB Lab offers flexible financing solutions to its member countries to finance economic and social development through lending and grants to public and private entities in Latin America and the Caribbean.

About IDB

We work to improve lives in Latin America and the Caribbean. Through financial and technical support for countries working to reduce poverty and inequality, we help improve health and education and advance infrastructure. Our aim is to achieve development in a sustainable, climate-friendly way. With a history dating back to 1959, today we are the leading source of development financing for Latin America and the Caribbean. We provide loans, grants, and technical assistance; and we conduct extensive research. We maintain a strong commitment to achieving measurable results and the highest standards of integrity, transparency, and accountability.

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IFD/ICS Consultancy for the Development and Delivery of Specialized Courses, Workshops, and Seminars on Al Technologies for Policymakers, Regulators, and Stakeholders

Post of duty: Washington, DC

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

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The Innovation in Citizen Services Division of the Institutions for Development Department (IFD/ICS) is looking for a professional to assist and coordinate the strategy for Accelerating AI Adoption in Latin America and the Caribbean within the ICS team in the design and execution of AI Adoption activities (including the design of a reference framework for the regulatory of a Digital Government, preparation of training materials and coordinate pilot projects).

What you'll do:

Coordinate and Support AI specialized workshops.

The selected candidate, in collaboration with the IFD/ICS, will be instrumental in driving the designing and execution of Artificial Intelligence (AI) workshops. Key responsibilities will include:

- Develop specialized courses, workshops, and seminars focused on AI technologies tailored for policymakers, regulators, and stakeholders.
- Research and incorporate best practices, latest advancements, ethical considerations, and implications of AI technologies into training materials.
- Design engaging and interactive learning experiences to facilitate understanding and knowledge retention.
- Customize training programs to address specific needs and challenges faced by policymakers, regulators, and stakeholders.
- Deliver training sessions either in-person or virtually, ensuring effective communication and engagement with participants.
- Evaluate the effectiveness of training programs through participant feedback and performance assessments, making adjustments as necessary to improve outcomes.
- Stay updated on emerging trends and developments in AI technologies to continuously enhance the quality and relevance of training offerings.
- Serve as a resource and advisor to clients on matters related to AI technologies and their integration into policy and regulatory frameworks.



Deliverable #	Percentage	Estimated delivery
Product 1: Working Plan	40%	Once the contract is signed
Product 2: Report of the Specialized courses, workshops, and seminars on AI technologies designed and executed	40%	Within two months from the signing of the contract.
Product 3: Evaluation of the pilots implemented	20 %	Within twelve months from the signing of the contract.

What you'll need

- **Education:** A master's degree in Computer Science, Artificial Intelligence, Public Administration, Digital Governance, or related fields
- **Experience:** 5 years of relevant experience in roles related training and education regarding artificial intelligence, government administration, digital government strategies, or similar areas
- **Languages:** Proficiency in Spanish and English, spoken and written, is required. Additional knowledge of French and Portuguese is preferable.
- Core and competencies: The candidate must be proactive, independent, organized, detail-oriented, able to simultaneously manage multiple projects, comfortable working on diverse teams, client oriented and eager to take on new challenges, particularly in the rapidly evolving field of artificial intelligence and digital governance.

Key skills:

The position requires:

- Deep understanding of AI technologies and their application in public sector projects, including machine learning, natural language processing and data analytics, and their ethical dimensions.
- Familiarity with the principles of digital transformation and governance, including the design and implementation of digital services.
- Strong ability to analyze and understand complex digital government regulatory frameworks, policies, and procedures.
- Experience with designing and delivering workshops, courses and project management.
- Experience with building and maintaining client relationships, in particular with government authorities and academic institutions.
- Familiarity with the dynamics of public institutions in Latin America and the Caribbean.
- Knowledge of digital government technical topics
- Familiarity with international organizations



Requirements:

- Citizenship: You are citizen of one of our 48-member countries.
- Consanguinity: You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

Type of contract and duration:

• Type of contract: National Consultant Full-Time.

• Length of contract: 12 months.

• Work Location: On site.

What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A competitive compensation package.
- Leave and vacations: 2 days per month of contract + gender-neutral parental leave.
- **Health Insurance** the IDB Group provides a monthly allowance for the purchase of health insurance.
- **Savings plan**: The IDB Group cares about your future, depending on the length of the contract, you will receive a monthly savings plan allowance.
- Hybrid and flexible work schedules.
- **Health and wellbeing:** Access to our Health Services Center which provides preventive care and health education for all employees.
- **Development support:** We offer learning opportunities to boost your professional profile such as seminars, 1:1 professional counseling, and much more.

Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.

Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at diversity@iadb.org to request reasonable accommodation to complete this application.

Our Human Resources Team reviews carefully every application.

About the IDB Group

The IDB Group, composed of the Inter-American Development Bank (IDB), IDB Invest, and the IDB Lab offers flexible financing solutions to its member countries to finance economic and social development through lending and grants to public and private entities in Latin America and the Caribbean.



About IDB

We work to improve lives in Latin America and the Caribbean. Through financial and technical support for countries working to reduce poverty and inequality, we help improve health and education and advance infrastructure. Our aim is to achieve development in a sustainable, climate-friendly way. With a history dating back to 1959, today we are the leading source of development financing for Latin America and the Caribbean. We provide loans, grants, and technical assistance; and we conduct extensive research. We maintain a strong commitment to achieving measurable results and the highest standards of integrity, transparency, and accountability.

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