

TC Document

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	Framework for Artificial Intelligence use in tax administrations
▪ TC Number:	RG-T4633
▪ Team Leader/Members:	Calijuri, Monica (IFD/FMM) Team Leader; Jimenez Mosquera, Javier I. (LEG/SGO); Astudillo, Karen (IFD/FMM); Blanco Urbina Luz Inmaculada (IFD/FMM); Angel Canarete Hugo Alberto (ITE/IPS)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	
▪ Date of TC Abstract authorization:	02 Oct 2024
▪ Beneficiary:	Dominica Republic, Directorate General of Internal Taxes (DGII); El Salvador, General Directorate of Internal Taxes (DGII); and Uruguay General Tax Directorate of Uruguay (DGI).
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	OC SDP Window 2 - Economic Growth(W2F)
▪ IDB Funding Requested:	US\$150,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 months of disbursement period that includes the execution period
▪ Required start date:	01 Dec 2024
▪ Types of consultants:	Individual Consultants
▪ Prepared by Unit:	IFD/FMM-Fiscal Management Division
▪ Unit of Disbursement Responsibility:	IFD/FMM-Fiscal Management Division
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	No
▪ Alignment to the IDB Group Institutional Strategy: Transforming for Scale and Impact (GN-3159-12):	Institutional capacity and rule of law

II. Objectives and Justification of the TC

- 2.1 **Objective.** The initiative aims to develop an advanced AI-powered framework that enhances tax administrations' capabilities to detect and prevent tax evasion and fraud, optimizing compliance and revenue collection. This framework aims to modernize and automate core tax administration functions, leading to more efficient tax enforcement and reducing the burden on human resources.
- 2.2 **Justification.** Given the complexity of modern digital economies and the growing scale of cross-border transactions, traditional tax enforcement methods have proven insufficient. Both the OECD's Tax Administration 2023¹ report and the ILIA Report² underscore how AI technologies can dramatically improve compliance rates by

¹ [Tax Administration 2023. Comparative Information on OECD and other Advanced and Emerging Economies.](#)

² [ILIA 2024: Evaluating AI Readiness and Progress in Latin America](#)

automating fraud detection, analyzing large datasets, and identifying high-risk taxpayers. Countries such as Brazil, Chile, and Uruguay have made notable progress in integrating AI into their tax systems, resulting in better resource allocation and improved dispute-resolution processes. However, despite this progress, AI usage across the LAC region remains limited, highlighting a crucial gap in the adoption of these advanced technologies.

- 2.3 In Latin America, according to the ILIA Report, only Chile, Brazil, and Uruguay have reached an advanced level of AI maturity. At the same time, eight other countries are classified as adopters, and another eight are categorized as explorers in the early stages of AI integration. This illustrates the significant barriers preventing the widespread use of AI in tax administrations, primarily the lack of skilled professionals who can design, implement, and manage AI systems effectively. Addressing this talent gap is critical, as human expertise is essential to ensuring the effective application of AI tools in enhancing tax compliance and revenue generation. This initiative, in addition to introducing AI-based solutions, will prioritize the dissemination of knowledge and training components to bridge this talent gap, ensuring long-term sustainability and ethical deployment of AI in tax compliance
- 2.4 The TC is vital for the region as it provides a transformative solution to one of the most pressing public sector challenges—improving tax compliance and revenue collection. By addressing inefficiencies in tax enforcement through AI, the initiative will not only increase revenues but also contribute to creating a more transparent and fair tax system. This, in turn, will strengthen public finances and enhance the ability of governments to fund essential services. Furthermore, by integrating AI into tax administration, the TC promotes greater fiscal discipline and paves the way for a more favorable business environment, making the region more attractive for investment and economic growth.
- 2.5 The Bank has been supporting the modernization of public finances in the region and the processes of tax management modernization through digital transformation initiatives in ongoing or completed projects in: Colombia ([5148/OC-CO](#)); Peru ([4725/OC-PE](#), and [5301/OC-PE](#)); Ecuador ([5598/OC-EC](#), and [5598/OC-EC](#)); Dominican Republic ([4114/OC-DR](#)); Panama ([5126/OC-PN](#)); El Salvador ([3852/OC-ES](#)); Honduras ([3541/BL-HO](#)); Costa Rica I ([4819/OC-CR](#)) and II ([5263/OC-CR](#)); Paraguay ([4671/OC-PR](#)); Uruguay ([3161/OC-UR](#), [4705/OC-UR](#), and [1894/OC-UR](#)); Bahamas ([2756/OC-BH](#)); Argentina ([4500/OC-AR](#)); and Jamaica ([2658/OC-JA](#)), with the implementation of digital products in tax management modernization projects (i.e., the Electronic Invoice (FE) and the PROFISCO CCLIP in Brazil), as well as in the integration and digitalization of public financial management (i.e., the implementation of Integrated Financial Management Systems (SIAF)).
- 2.6 Additionally, the Fiscal Management Division (FMM) has prepared a guide for the implementation of ultimate beneficial ownership control in collaboration with the Global Forum on Transparency and Exchange of Information for Tax Purposes. More recently, through the joint efforts of the IDB, World Bank, CIAT, and the Organization for Economic Co-operation and Development (OECD), the Digital VAT Toolkit has been published. Based on internationally accepted OECD standards, this Toolkit benefits from the experience and best practices of jurisdictions that have successfully implemented these standards. It is aimed at all types of e-commerce and considers the specific circumstances of the LAC countries. Other recent initiatives include the development of the Digital Maturity Index, aimed at providing

a methodology to evaluate the progress of tax administrations in their digital transformation processes on a common basis. Moreover, the Electronic Invoice for Foreign Trade (RG-T4185) is currently under development. The TC aligns directly with the broader goal of enhancing government service efficiency, a core objective of institutional strengthening. By addressing key issues like compliance and tax enforcement while adhering to principles of transparency, ethics, and non-discrimination, this initiative will serve as a model for broader public sector improvements. The pilot projects embedded within this framework will act as scalable examples, driving improvements in tax systems and fostering a stronger, more competitive business climate where taxpayers operate on a level playing field. This initiative is crucial in supporting long-term economic stability and equitable growth across the region.

- 2.7 **Beneficiary.** The beneficiaries of this TC are Dominican Republic, through the Directorate General of Internal Taxes (DGII); El Salvador, through the General Directorate of Internal Taxes (DGII); and Uruguay through General Tax Directorate of Uruguay (DGI). The selection of beneficiary countries was based on their interest in participating in the TC and their commitment to strengthening tax administration and digital transformation at varying stages of AI maturity³. Uruguay offers advanced digital infrastructures that serve as models, while El Salvador and Dominican Republic provide diverse contexts to test AI's impact on tax compliance. This mix ensures that the TC fosters scalable solutions adaptable across Latin America, benefiting both digitally advanced and emerging tax administrations.
- 2.8 **Strategic Alignment.** This TC is consistent with the IDB Group Institutional Strategy: Transforming for Scale and Impact (GN-3159-12) and is aligned with the "Bolstering Sustainable Growth" by enhancing fiscal governance through innovative technology, promoting economic growth and decreasing the tax evasion rates. The TC is also aligned with the following operational focus areas: (i) institutional capacity, rule of law, and citizen security, by using Gen AI to enhance tools for tax administration, human talent, and processes within tax administrations. This TC is aligned with the Ordinary Capital Strategic Development Program (OC SDP) (GN-2819-14), particularly the objectives pursued by Window 2F, Priority Area 6: Inclusive Economic Growth. It enhances AI in the tax administration process, addressing the high demand from countries' tax administrations to improve and learn how to use AI in their activities. Furthermore, the TC aligns with the priorities of the Sector Strategy on Institutions for Growth and Social Welfare (GN-2587-2) by supporting public revenue generation. It is also consistent with the Fiscal Management Sector Framework (GN-2831-13) by facilitating compliance and promoting tax control.
- 2.9 **Country strategy.** This TC contributes to the strategic objectives of the beneficiary countries: (i) **El Salvador:** IDB Group Country Strategy with El Salvador 2021-2024 (GN-3046-1), by bolstering fiscal sustainability and increasing the efficiency of public resource use where AI will facilitate effective fiscal management and reduce evasion, thereby strengthening public finances to address post-COVID challenges; (ii) **Uruguay:** IDB Group Country Strategy with Uruguay 2021-2025 (GN-3056) by strengthening public administration and fiscal efficiency, where the adoption of AI tools in tax administration will support the goals of improving

³ [ILIA 2024: Evaluating AI Readiness and Progress in Latin America.](#)

efficiency and promoting sustainable use of public resources; and (iii) **Dominican Republic:** IDB Group Country Strategy with Dominican Republic 2021-2024 (GN-3084) by enhancing public management and institutional structure, where AI will support more efficient tax collection and management, fostering economic stability and sustainable growth

III. Description of components and budget

- 3.1 **Component 1: Development of the AI Framework for Tax Administration (US\$50,000).** The objective of this component is to design a comprehensive AI framework for use in tax administrations. It will finance the activities: i) Diagnostic: conduct a detailed diagnostic of the current situation of the use of AI in tax administration across the Region, identifying gaps and opportunities for enhancement in each beneficiary country; and ii) AI Framework Design: develop a detailed AI framework, addressing essential area like data management, model selection, and legal and ethical consideration, including privacy and data protection; customized for each beneficiary country.
- 3.2 **Component 2: Pilot Testing of the AI Framework (US\$50,000).** This component aims to pilot the AI framework within a selected tax administration to test its real application. This pilot will serve as a foundational model for other beneficiary countries to learn and adapt the framework to their environments. It will finance the activities: i) Technical Setup and Deployment: installation and configuration of the AI framework within the selected tax administration's environment, with dedicated cybersecurity protocols to safeguard data integrity and confidentiality. The Information Technology (ITE) Department of the Bank can support the alignment with international cybersecurity standards, ensuring seamless integration with existing infrastructure.
- 3.3 **Component 3: Capacity Building and Knowledge Transfer (US\$50,000).** The objective of this component is to support the appropriation of results, lessons learned, and best practices identified through the outputs of Component 1 and 2, ensuring their effective use not only by beneficiary countries but also by other interested parties across the region. This approach will promote the dissemination of generated knowledge, facilitate the scalability of the developed products, establish feedback channels for continuous improvement, and broaden capabilities for advancing digital transformation in tax administrations. Each country will benefit from targeted capacity-building activities, equipping tax administration personnel with the necessary skills. Activities include: i) Training Programs: design and delivery workshops covering essential skills such as data science, machine learning, and ethical AI practices; ii) knowledge transfer sessions: facilitate interactive sessions where staff can exchange experiences and insights on AI application in tax enforcement, building a collaborative community of practice across the region. iii) knowledge material: develop blogs, technical notes, and other knowledge-sharing materials to document and disseminate insights and best practices gained throughout the TC.
- 3.4 **Expected Results:** The TC aims to achieve several key outcomes, including enhanced tax compliance and optimized resource allocation through AI-driven fraud detection and risk assessment, increased operational efficiency in tax administrations, and strengthened institutional capacity through targeted knowledge transfer and training. The results from this TC will lay the groundwork for broader

scalability across Latin America, positioning the beneficiary countries as leaders in the integration of AI within tax administrations.

- 3.5 **Indicative Budget.** This TC requires US\$150,000, which will be financed with resources from the OC SDP Economic Growth Priority Area (W2F). No local counterpart contribution is contemplated. The budget details are provided below.

Indicative Budget (US\$)			
Component	Description	IDB/ W2F	Total Funding
Component 1. Development of the AI Framework for Tax Administration	Design a comprehensive AI framework for use in tax administrations.	50,000.00	50,000.00
Component 2. Pilot Testing of the AI Framework	Pilot the AI framework within a selected tax administration to test its real application	50,000.00	50,000.00
Component 3. Capacity Building and Knowledge Transfer	Support the appropriation of results, lessons learned, and best practices identified through the outputs of Component 1 and 2, ensuring their effective use not only by beneficiary countries but also by other interested parties across the region.	50,000.00	50,000.00
Total		150,0000	150,000

- 3.6 **Supervision, monitoring and evaluation:** The Fiscal Management Division (IFD/FMM) project team leader will be responsible for supervising, monitoring and evaluating the TC and for the financial execution of the operation. A project completion report will be prepared summarizing the activities carried out and the achievement of the expected results. This report will be shared through the Convergence system. The project team leader will closely coordinate the activities of this TC with participating country offices during the execution.
- 3.7 **Lessons Learned.** A key element of this TC will be the systematic documentation of lessons learned throughout the project's interventions. By capturing insights and best practices, this TC will provide valuable information to guide the design and implementation of future operations in AI-based tax administration. The lessons learned will cover both technical aspects, such as data management and model integration, and operational challenges, such as scalability and resource requirements, ensuring that future projects can build on these experiences for greater efficiency and impact.

IV. Executing agency and execution structure

- 4.1 At the request of the participating countries, this TC will be executed by the IDB through IFD/FMM in accordance with the Bank's Technical Cooperation Policy (GN2470-2) and Annex II of the Procedures for the Processing of Technical Cooperation Operations and Related Matters (OP-619-4). Bank execution is justified due to: (i) its technical capacity and experience in systematization, exchange of experiences, and facilitation of regional policy dialogue on issues related to fiscal management and policy; (ii) its experience in establishing and maintaining digital solutions and platforms for internal use and for our clients; (iii) its expertise in

organizing events and knowledge dissemination activities; (iv) the regional nature of the project, whose execution requires a specialized technical entity capable of coordinating tasks at the regional level, facilitating dialogue among beneficiary countries, and following up and reporting on the results and products achieved within the framework of the project; and (v) its relationship and experience with relevant regional networks for the dissemination of this TC (for example, the networks on results-based budgeting and public investment in LAC).

- 4.2 The knowledge products generated within the framework of this TC will be the property of the Bank and may be made available to the public under a Creative Commons license. However, at the beneficiary's request, the intellectual property of said products may also be licensed to the beneficiary through specific contractual commitments that will be prepared with the advice of the Bank's Legal area.
- 4.3 **Procurement and financial management.** All procurement to be executed under this Technical Cooperation have been included in the Procurement Plan (Annex IV) and will be hired in compliance with the applicable Bank policies and regulations as follows: (a) Hiring of individual consultants, as established in the regulation on Complementary Workforce (AM-650) and (b) Contracting of services provided by consulting firms in accordance with the Corporate procurement Policy (GN-2303-33) and its Guidelines.
- 4.4 This TC will be executed in a period of 36 months. The unit responsible for disbursement will be the Fiscal Management Division (IFD/FMM). The project will be monitored and evaluated according to the products and performance indicators from the results matrix, according to what is established in the document The Technical Cooperation Monitoring and Reporting System (OP-1385-4).

V. Mayor issues

- 5.1 **Risks.** The project team does not foresee any significant risks that could prevent the TC from being successfully executed. However, developing the Regional Guidelines will require collaboration between the tax authorities in each country. At the regional level, coordination between countries and alignment with international organizations with relevant guidelines and recommendations will also be essential. The Bank's involvement, along with the engagement of both national and regional coordination resources, will be vital in reducing these risks.
- 5.2 **Ownership.** There is a potential challenge regarding the degree of ownership by the participating countries. The concern is that the studies, tools, models, and solutions produced under this TC may not fully resonate with the countries involved. To minimize this risk, the project team will maintain the initiative at a high level among the participating entities. Technical collaboration will also ensure that the final products reflect the countries' specific needs, challenges, and regional context.
- 5.3 **Sustainability.** A key risk is the long-term sustainability of the AI solutions developed under this TC. To address this, the project incorporates a robust capacity-building strategy to equip beneficiary countries with the necessary technical skills for maintaining and adapting these technologies. Component 3 will emphasize best practices in data security alongside core competencies in data science, machine learning, and ethical AI. This TC will count on the ITE Department knowledge to support the operation, offering guidance on cybersecurity to ensure ongoing protection of the AI framework and ensuring participants gain skills for immediate use and long-term system upkeep. Knowledge transfer sessions will

further establish a regional community of practice for ongoing exchange of best practices. Post-implementation support will provide follow-up training and resources, empowering countries to independently manage, refine, and expand the AI framework, thereby supporting sustained digital transformation.

- 5.4 **Implementation.** Changes in government leadership or shifts in the political or social landscape of the participating countries could pose implementation risks. These will be mitigated by ensuring ongoing, open communication with key counterparts in each country. Both in-person and virtual meetings will be used to foster continuous information exchange and support.

VI. Exceptions to Bank policy

- 6.1 There are no exceptions to Bank policy.

VII. Environmental and Social Aspects

- 7.1 This Technical Cooperation is not intended to finance pre-feasibility or feasibility studies of specific investment projects or environmental and social studies associated with them; therefore, this TC does not have applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF).

Required Annexes:

[Request from the Client_19605.pdf](#)

[Results Matrix_86966.pdf](#)

[Terms of Reference_88242.pdf](#)

[Procurement Plan_9698.pdf](#)