TC Document

I. Basic Information for TC

 Country/Region: 	REGIONAL
TC Name:	Fislac AI Insights: Where Fiscal Clarity Meets Strategic Action
TC Number:	RG-T4635
 Team Leader/Members: 	Valencia Arana, Oscar Mauricio (IFD/FMM) Team Leader; Astudillo, Karen (IFD/FMM) Alternate Team Leader; Cardenas Valero Juan Carlos (CSD/CCS); Bonilla Merino Arturo Francisco (LEG/SGO); Blanco Urbina Luz Inmaculada (IFD/FMM); Angel Canarete Hugo Alberto (ITE/IPS)
 Taxonomy: 	Research and Dissemination
Operation Supported by the TC:	
 Date of TC Abstract authorization: 	01 Oct 2024.
 Beneficiary: 	Ministries of Finance in LAC
Executing Agency and contact name:	Inter-American Development Bank
 Donors providing funding: 	OC SDP Window 2 - Economic Growth(W2F)
 IDB Funding Requested: 	US\$245,000.00
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: 	December 1st, 2024
 Types of consultants: 	Individuals
 Prepared by Unit: 	IFD/FMM-Fiscal Management Division
 Unit of Disbursement Responsibility: 	IFD/FMM-Fiscal Management Division
 TC included in Country Strategy (y/n): 	No
 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 **Objectives.** The general objective of this technical cooperation (TC) is to develop an AI-powered virtual assistant that provides timely macro-fiscal intelligence to enhance the success of fiscal consolidations, mitigate macroeconomic risk, and contribute to economic recovery in Latin America and the Caribbean (LAC). The specific objectives of this TC are to: (i) integrate generative AI technology with the FISLAC platform to enhance macro-fiscal analysis; (ii) develop rapid visualization tools and conduct context-specific fiscal analysis tailored to LAC countries; and (iii) support fiscal policymaking with AI tools and create a knowledge-operations feedback loop.
- 2.2 **Justification.** The Fiscal Sustainability for Latin American and the Caribbean Countries (FISLAC) is an innovative technological platform developed by the Fiscal Management Division of the Inter-American Development Bank (IDB) to enhance strategic fiscal policy decision-making. In an uncertain environment, FISLAC has emerged as an indispensable tool for finance ministries by facilitating effective fiscal management. By providing updated analysis of macro-fiscal risks, FISLAC promotes fiscal sustainability, drives economic growth, and ultimately improves the quality of life for citizens across the region. In alignment with these objectives, this TC proposes developing FISLAC AI Insights, a Gen AI-powered virtual assistant integrated into the

FISLAC platform. The assistant will be specifically designed to offer macro-fiscal advice and insights tailored to the unique needs of policymakers in Latin America and the Caribbean. Users can use natural language interaction to ask domain-specific queries related to macroeconomic and fiscal topics. Responses will include data analysis, visual charts, and actionable insights to enhance the decision-making process¹.

- 2.3 The TCs activities will focus on customizing the user interface, refining the AI's natural language processing capabilities, and ensuring seamless integration with FISLAC's existing tools. This approach will provide an agile, accessible resource to support critical fiscal policy decisions, such as debt management strategies, budget planning, and economic recovery initiatives.
- 2.4 Leveraging FISLAC's regional user base, which includes officials from Ministries of Finance, Planning Ministries, Central Banks, Fiscal Councils, regional think tanks, and academia, this proposal aims to expand the platform's impact with AI capabilities. Serving between 7,000 and 10,000 monthly users, FISLAC provides continuous technical assistance and training, reaching 80% of the region. By integrating additional data sources and functionalities, FISLAC AI-Insights will streamline macro-fiscal information, aiding governments with precise, structured insights for effective decision-making. This approach not only enables historical analysis and peer comparisons for identifying gaps and assessing macro-fiscal risks but is also expected to improve public expenditure efficiency and effectiveness as the platform evolves.
- 2.5 **Strategic Alignment.** This TC is consistent with the Institutional Strategy "Transforming for Scale and Impact" (GN-3159-12) and is aligned with the "Bolstering Sustainable Growth" objective by enhancing fiscal governance through innovative technology, promoting economic growth, and ensuring debt sustainability in LAC countries through data-driven policy recommendations. The proposal is also aligned with the focus area of "Institutional Capacity, Rule of Law and Citizen Security" by using Gen AI to enhance tools for fiscal analysis and policymaking used by government agencies. This TC is also aligned with Sectorial Framework for Fiscal Policy and Management (GN-2831-8) which emphasizes strengthening institutional capacity in the public sector to design and implement fiscal policies with a sustainable path and economic development through developing analytical tools and creating metrics to identify major macro fiscal risks and fragilities.
- 2.6 Likewise, this TC is aligned with the objectives of the Ordinary Capital Strategic Development Program (OC SDP) (GN-2819-14), particularly the objectives pursued by Window 2.F, Priority Area 6: Inclusive Economic Growth. It enhances AI in public sector services, addressing the high demand from countries for impact analysis of shocks and policies. FISLAC AI Insights offers a robust framework for risk analysis, both for individual countries and in comparison, with other countries. It delivers real-time, adaptable solutions through an AI-powered virtual assistant, strengthening macro-fiscal policy and decision-making.
- 2.7 Additionally, the TC aligns with the "One Caribbean initiative" (GN-3201-5) by enhancing institutional capacity and providing a framework to analyze the macroeconomic impact of natural disasters on Caribbean economies, and with the

¹ A demonstrative example of the FISLAC AI virtual assistance is available at <u>https://youtu.be/vua0CoxGXM0</u>

"América en el Centro initiative" (GN-3233) by designing pro-growth fiscal policies that enhance productivity and regional integration in Central America. FISLAC AI Insights offers tools to strengthen climate resilience by collecting public reported information on natural disasters from countries to measure impacts and provide a timely analysis of climate shocks on fiscal accounts

2.8 Contribution to the Bank's operative program. This TC will coordinate with other projects supporting activities aimed at strengthening the quality of expenditures and the impact of fiscal policies such as: (i) Independent fiscal councils for a responsible and transparent fiscal policy in the post-pandemic (ATN/OC-19742-RG); (ii) Fiscal risk analysis, ALC monitoring and policy options with inclusive growth (ATN/OC-19672-RG); and (iii) Strengthening macro-fiscal frameworks in Latin America and the Caribbean (ATN/KR-19694-RG). The TC will contribute to future operations supporting fiscal reforms, as the AI-powered virtual assistant will provide timely macro-fiscal intelligence. This will enhance the policy advice offered by IDB fiscal specialists, helping countries in the region improve the quality of public spending and create public value. During execution, the TC will also consider lessons learned from current projects in beneficiary countries to ensure consistency with the proposed results of this TC.

III. Description of activities/components and budget

- 3.1 **Component 1: Collection and Integration of Data² (US\$100,000).** The objective of this component is to ensure that the AI-powered virtual assistant has comprehensive, real-time access to reliable and harmonized fiscal data by streamlining the integration of multiple data sources. This will provide the assistant with accurate, up-to-date macro-fiscal information, allowing it to deliver more precise insights for policymakers. The expected result of this component is to integrate fiscal data from LAC countries into a single tool, referred to as the FISLAC AI Insights. This component will finance the following activities: (i) Integration of fiscal data from multiple sources, including FISLAC's database, Latin Macro Watch, and other IDB tools; (ii) Development of automated data pipelines to ensure periodical updates and access to reliable fiscal data; (iii) Validation and harmonization of data to improve accuracy and consistency across the platform.
- 3.2 **Component 2: Al Model Development and Implementation (US\$100,000).** The objective of this component is to design, develop and integrate Gen Al Systems that provide advanced macro-fiscal insights by leveraging historical data and trends. The Al system will incorporate natural language processing (NLP) and Retrieval Augmented Generation (RAG) techniques to ensure intuitive and seamless interactions with users. The expected result of this component is to enable the virtual assistant to offer insights on macro-fiscal variables and regional and country-specific fiscal risks. This component will finance the following activities: (i) Development of Al systems capable of analyzing macro-fiscal insights, including detailed assessments of debt levels and fiscal risks; and (iii) Integration of NLP and RAG capabilities to facilitate user-friendly interactions, allowing policymakers to access insights through natural language queries.

² The platform will be develop using available public data, and reports from the IDB and from other multilaterals.

- 3.3 Component 3: AI User Interface (UI) Design, Integration, and User Training (US\$45,000). The objective of this component is to create a user-friendly interface that facilitates seamless interaction with the AI virtual assistant and provides training for users. The expected outcome of this component is to enhance the capacity of policymakers to analyze economic trends and risks using FISLAC AI Insights. This component will finance the following activities: (i) design a user-friendly interface to ensure seamless interaction with the AI virtual assistant; (ii) integrate the platform with popular communication channels (e.g., WhatsApp) to expand accessibility; and (iii) conduct user testing and training to refine the interface and enhance the overall user experience for policymakers and fiscal institutions. This will include (a) in-house training that will involve fiscal specialists, upper management, country and regional economists, and the research department; (b) technical staff from the departments of finance, central banks, and former finance ministers; and (c) dissemination to the finance ministers of the region. The platform will be hosted in the IDB Cloud for LAC and it will be developed in close collaboration with the Information Technology (ITE) Department of the Bank, building over the FISLAC development experience.
- **Expected results.** At the conclusion of the execution period of this TC, the funded 3.4 initiative will result in an Al-powered virtual assistant "FISLAC AI Insights" that will empower LAC countries by providing robust support for fiscal policy decisions and enhanced capacity for policymakers to analyze economic trends and risks, leveraging harmonized and reliable data from various sources. Governments contemplating fiscal reforms, such as modifications to VAT and income tax, will be able to utilize the platform to model the impacts of these changes on tax revenue and distribution across economic sectors, while comparing the effects of previous reforms. The assistant will support the analysis of liquidity and solvency risks that could affect fiscal policy and macroeconomic sustainability, enhancing the capacity to assess and manage potential vulnerabilities in public finances. Additionally, countries planning to implement medium-term fiscal frameworks will benefit from the analysis of historical income and expenditure data, allowing them to set realistic fiscal objectives and ensure proper implementation based on best practices observed in similar regional contexts. FISLAC AI Insights will also assist Finance Ministries in implementing new fiscal rules by analyzing historical data, conducting international benchmarking, and offering evidence-based recommendations informed by successful implementations in other countries. This capability will enable comprehensive analysis and strategic advice to improve long-term fiscal sustainability.
- 3.5 The total cost of this TC will be US\$245,000, which will be financed with resources from the OC SDP Economic Growth Priority Area (W2F). No local counterpart is expected. The execution and disbursement period of this TC will be 36 months.

Component	Description	IDB/W2F	Total Funding
Component 1. Collection and Integration of Data	Provide the FISLAC AI-Insights assistant with accurate, up-to-date macro-fiscal information, allowing it to deliver more precise insights for policymakers.	100,000	100,000
Component 2. Al Model Development and Implementation	Develop AI models that provide advanced macro-fiscal insights by leveraging historical data and trends	100,000	100,000

Indicative Budget (US\$)

Component 3. Al User Interface Design, Integration, and User Training	Create a user-friendly interface that facilitates seamless interaction with the AI virtual assistant and provides training for users	45,000	45,000
	Total	245,000	245,000

- 3.6 **Supervision, monitoring, and evaluation.** The project team leader of IFD/FMM will supervise, monitor, and execute the operation financially. 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.** In the monitoring and evaluation of TC, lessons learned, and good practices derived from the proposed interventions will be identified and systematized. These lessons learned will serve as input for future operations.
- 3.8 **Sustainability.** To give continuity to the results of this TC, once the project is concluded, guides, documents, events, and training will be prepared that will allow the knowledge generated in this TC to be disseminated over time to beneficiary institutions in beneficiary countries.

IV. Executing agency and execution structure

- 4.1 Due to the regional nature of this TC the Bank will be the executing agency through IFD/FMM in accordance with the Bank's Technical Cooperation Policy (GN-2470-2), the Procedures for the Processing of TC Operations (OP-619-4). The Bank is recognized for its highly specialized technical knowledge in addressing the topics of the required studies and its expertise in international best practices related to the matters addressed by the TC, facilitated through networks of experts and efficient contracting processes.
- 4.2 **Execution structure.** The technical and fiduciary responsibility of this TC will be led by the team leader, who will coordinate with the specialists in both FMM, COFs, and other relevant sectors in the country offices, in which technical or financial assistance will be granted. The project team will also coordinate with similar or complementary efforts of other institutions (i.e. other MDBs or IFIs) in beneficiary countries.
- 4.3 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.
- 4.4 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.

V. Major issues

5.1 The risks for this project are low, but a significant risk is associated with the availability and harmonization of quality information from various data sources, including the Ministries of Finance and similar agencies. Ensuring that these disparate data sources can be effectively integrated poses challenges for the development of the Al assistant's tools. To mitigate this risk, the models will rely on public and official sources that facilitate the replicability of estimates and the ongoing maintenance of the models. Additionally, both the data and models will be utilized in the future for continuous monitoring and analysis of the countries.

VI. Exceptions to Bank policy

6.1 This TC does not involve exceptions related to Bank's policies

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:

Results Matrix_27678.pdf

Terms of Reference_2111.pdf

Procurement Plan_16907.pdf