

TC Document

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	Analysis of the Economic impact of the Capricorn Integration Route
▪ TC Number:	RG-T4763
▪ Team Leader/Members:	Galindo Andrade, Arturo Jose (CSC/CSC) Team Leader; Sanchez, Gabriel Alejandro (CSC/CAR) Alternate Team Leader; Gomez Kort Magali (CSC/CAR); Bonilla Merino, Arturo Francisco (LEG/SGO); Alem, Mauro (INE/TSP); Castello, Romina Alejandra (CSC/CAR); Cortes Arce, Diego (CSC/CSC); Rubio Fernandez, Eva (TTD/TTR); Fasan , Diego Agustin (CSC/CAR); Suber, Stephanie Anne (CSC/CSC); Ruth Petcoff (CSC/CAR); Arraiza, Eduardo Daniel (CSC/CAR) Gomez Kort Magali (CSC/CAR)
▪ Taxonomy:	Research and Dissemination
▪ Operation Supported by the TC:	.
▪ Date of TC Abstract authorization:	.
▪ Beneficiary:	The main beneficiaries will be public agencies in Argentina, Brazil, Chile, and Paraguay responsible for infrastructure (energy, digital, and transport), trade, and planning. The technical cooperation will support these agencies in generating a pipeline of projects that can be prioritized and financed by various financing institutions.
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	OC SDP Window 2 - Infrastructure(W2B); OC SDP Window 2 - Integration(W2D)
▪ IDB Funding Requested:	OC SDP Window 2 - Infrastructure (W2B): US\$350,000.00 OC SDP Window 2 - Integration (W2D): US\$350,000.00 Total: US\$700,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 months
▪ Required start date:	August 15th 2025
▪ Types of consultants:	Individual consultants and firms
▪ Prepared by Unit:	CSC-Southern Cone
▪ Unit of Disbursement Responsibility:	CSC/CSC-Southern Cone
▪ TC included in Country Strategy (y/n):	N
▪ TC included in CPD (y/n):	N
▪ Alignment to the Update to the Institutional Strategy 2024-2030:	Regional integration; Supports sustainable economic growth

II. Objectives and Justification of the TC

2.1. Objectives: The specific objectives include a) the analysis of key gaps (infrastructure, policy, and financing) and risks for effective and impactful interventions, b) the identification of complementary projects, policies, and institutions that promote regional integration and corridor development, and c) a cost-benefit analysis of the Capricorn Integration Route project. The resulting deliverables will include knowledge products that will contribute to installing agenda, policy dialogue, coordination across countries, and the design of effective interventions.

2.2. Specific Objectives. The expected results are: (i) Evaluate improvements in existing logistics infrastructure by considering counterfactual exercises compared to the baseline scenario, and measure economic benefits in terms of well-being, productivity,

and regional GDP growth as a result of population changes associated with business investment decisions and migration toward more prosperous areas with higher wages; (ii) Collect and structure transport and logistics data to estimate the model's transport cost parameters using information derived from observed trade flows in the involved countries; (iii) Disseminate the analysis methodology and its results to improve public investment decision-making at the regional level and lay the groundwork for selecting interventions in the transport network based on territorial analysis and the economic impact of the corridor, and (iv) Build a methodological tool for calculating economic benefits that can be transferred to the entities responsible for regional planning within the framework of the South Connection Program.

2.3. **Problem addressed.** Although there have been significant efforts and progress in regional planning of logistics corridors, the countries associated with the South Connection Program currently lack economic evaluation methodologies that quantify the indirect impacts of major improvements in logistics corridors in terms of territorial-scale growth. This issue makes it difficult to prioritize interventions based on social and economic returns, considering indirect effects on the population (e.g., migration) and the geographic constraints of each area. Developing a tool that enables these calculations promotes efficiency in regional infrastructure planning by helping select alternatives based on improvements in population well-being. The lack of standardized data required by analytical models developed in academic literature prevents proper assessment of the transformative potential of these corridors for regional development.

2.4. Available methodologies for evaluating the benefits and potential costs of investments in transport and logistics infrastructure are limited to measuring direct benefits to users, for example, in the case of a road, but do not capture the potential indirect contribution of these improvements in generating greater opportunities for economic and social development. In recent years, academic research has succeeded in incorporating geographic aspects (Allen-Arkolakis, 2014) into a dynamic economic model at the territorial scale (Desmet et al., 2018), thereby constructing counterfactuals to quantify indirect effects on the population (i.e., migration) and on GDP growth resulting from initial changes in trade flows. The improved corridor not only facilitates trade between connected regions but also affects trade costs in surrounding areas, which in turn creates incentives for businesses to invest and for people to migrate to more prosperous areas with higher wages.

2.5. This TC constitutes a key operational support instrument (OS-TC) and research and development tool (R&D-TC), as it will provide solid empirical evidence to guide decisions on regional public investments and lay the groundwork for identifying regional operations, such as the development of the Capricorn Corridor. The primary beneficiaries of this TC are the public institutions and regional agencies of the member countries involved in the South Connection initiative, which are eligible to receive Bank financing. The information generated will support these entities in the technical and economic design of operations aimed at improving logistics infrastructure, by measuring the social and economic returns of regional interventions.

2.6. **Justification for Authorization Outside the ERM/QRR.** Authorization for this TC is requested outside the ERM/QRR cycle due to the strategic relevance of supporting the client in developing an empirically based calculation tool to enhance their ability to identify and assess potential investment opportunities along the Capricorn Corridor. By strengthening the client's analytical capacity through a technically rigorous counterfactual exercise, the TC will enable better-informed decision-making aligned with regional priorities. Early initiation is necessary to ensure timely delivery of results that will directly benefit the client's planning and project pipeline.

2.7. **Alignment with IDB's Institutional Strategy and Ongoing Programs.** This TC is aligned with the IDB Group's Institutional Strategy 2024-2030: Transforming for Scale and Impact (CA-631), which aims to increase the impact and scale of its operations in Latin America and the Caribbean. In line with the three core objectives of the strategy (reducing poverty and inequality, addressing climate change, and fostering sustainable regional growth) the TC will contribute to generating a rigorous analysis of the Capricorn Corridor to boost regional growth, particularly in territorial economies with productive potential that are currently isolated from the intermodal transport network, helping to reduce territorial disparities; and promoting the mobilization of public and private resources through solid technical evidence, strengthening synergies with the private sector. Additionally, the TC supports key cross-cutting areas of strategy: (i) Regional focus, promoting sustainable territorial development and (ii) Institutional capacity, by providing methodologies and evidence for decision-making.

2.8. **Alignment with Country Strategies and OC and the Ordinary Capital Strategic Development.** This TC aligns with the Ordinary Capital Strategic Development Program – OC SDP (GN-2819-14) under priority areas 1 and 4 of the second window, that are *Sustainability* and *Regional and Global Integration*, respectively. The operation contributes to sustainability by promoting evidence-based methodologies for the evaluation and prioritization of logistics infrastructure investments that enhance the resilience and efficiency of regional transport systems. In turn, it strengthens regional and global integration by facilitating cross-border connectivity among Argentina, Brazil, Chile, and Paraguay through the Capricorn Integration Route, thereby fostering trade flows, reducing transportation costs, and enhancing territorial cohesion. Besides, it is directly linked to the Country Strategies ([Chile 2022-2026](#) (GN-3140-3); [Argentina 2025-2028](#) (GN-3288-1); [Paraguay 2025-2029](#) (GN-3261-3); [Brazil 2024-2027](#) (GN-3243-3), ensuring coherence with national programs in transport, integration, and regional development. In Argentina, it supports the strategic objective of unlocking private investment and promoting regional development; in Brazil, it aligns with efforts to enhance productivity through stronger infrastructure; in Chile, it contributes to the goal of enabling the economy of the future through strategic integration; and in Paraguay, it reinforces the pillar of productivity and regional integration. The development of a replicable evaluation tool and the provision of technical training to national and regional counterparts ensure institutional strengthening, which is another cross-cutting priority of the IDB's Institutional Strategy 2024–2030.

2.9. This TC will be funded with the W2B and W2D funds in equal proportions for a total amount of US\$ 700,000. It is aligned with both these funds as it will estimate the economic and social impacts of enhanced transportation infrastructure and logistics and ensuing improved regional economic integration in the beneficiary countries.

III. **Description of activities/components and budget**

3.1. **Main activities and components:** The TC is structured around four main components:

3.2. **Component 1 - Economic Benefits of the Capricorn Corridor (US\$100,000):** Geographic identification of the logistics corridor to be evaluated; definition of the baseline scenario and collection of information on the corridor's characteristics; application of a dynamic territorial-scale growth model to estimate the corridor's impact in terms of economic well-being (as a % of GDP), and population migration toward urban centers, based on a counterfactual scenario involving cost reductions (e.g., construction of a main road) that make the corridor passable for freight vehicles.

3.3. **Component 2 - Georeferenced Platform of Transport Costs at the Territorial Scale (US\$300,000):** Collection of trade flow data and characteristics of the multimodal transport network by mode of transport; validation with counterparts through workshops;

estimation of model parameters using data from countries in the region; development of a georeferenced platform (expansion of the Integration and Transport Hub); and development of outcome indicators to measure the impact of specific interventions.

3.4. Component 3 - Economic Benefit Calculation Tool (US\$160,000):

Development of a tool that frames the model parameters within the analysis of intervention alternatives, enabling the construction of counterfactual scenarios related to the construction of new transport routes (e.g., interoceanic railway), and allowing for the estimation of economic benefits associated with such interventions, considering geographic aspects, network resilience, and indirect impacts on territorial economies distant from the intervention area. Technical support to countries in methodological guides and implementation.

3.5. Component 4 - Knowledge Dissemination and Outreach (US\$140,000):

Development of workshops, working seminars with counterparts, and dissemination forums; preparation of methodological guides for the proper use of the evaluation tool; and costs associated with the dissemination and publication of the content generated by the TC.

3.6. Expected Development Results. The expected development results are: i. technically replicable tool to prioritize investments in logistics corridors based on quantified economic and territorial returns; ii. Generation of territorial-scale information to evaluate interventions at subnational government levels regarding the value of logistics investments; iii. Technical training transferred to national and regional counterparts in the use of geospatial evaluation tools; and iv. Improved regional planning through the production of methodological publications and studies with evidence-based results to support decision-making on multimodal transport and connectivity.

3.7. These results are measurable, replicable, and directly linked to improving the quality of public policies for logistics investment, avoiding vague or general formulations.

3.8. Deliverables to be Produced. The TC will produce (i) a **technical report on Corridor Characterization** which is a Document defining the counterfactual exercise for calculating the economic benefits of improvements in the Capricorn Corridor, describing its current infrastructure, logistics conditions, connectivity levels, and segment-specific constraints. Includes georeferenced maps and technical data sheets by section; (ii) a **Calibrated Counterfactual Model** which is an Econometric and territorial models are parameterized with corridor-specific data (scenarios with and without investment) to estimate effects on well-being (GDP), migration, and the location of economic activity; (iii) an **economic Benefits Report** which is an analytical document with quantified results on the corridor's impact on regional development (including social return rates, changes in population distribution, and indirect effects on urban centers); (iv) a **Georeferenced Database** which is a set of standardized GIS layers with information on infrastructure, logistics, trade, and relevant territorial variables; (v) a **Digital Viewer or Platform (Prototype)** which is an Interactive tool to visualize the economic impacts of the corridor under different scenarios (transferable to counterparts for institutional use); (vi) a **Methodological and Replication Manual** which is a Document explaining the methodology used, its assumptions, data sources, and steps to replicate the analysis in other corridors; and (vii) a **Validation Report with Counterparts which is a Record** of workshops, technical meetings, and validation of results with key stakeholders from the countries involved (ministries, public agencies, etc.). This TC does not include any counterpart financing.

3.9 Indicative Budget

The TC is financed by the funds W2B and W2D, each contributing US\$ 350,000, for a total funding amount of US\$ 700,000.

Activity/Component	Description	W2B	W2D	Total Funding
Comp 1: Economic benefits of Capricorn Corridor	Corridor delimitation, preliminary data collection, and technical coordination with national counterparts.	US\$ 50,000	US\$ 50,000	US\$ 100,000
Comp 2: Georeferenced Platform of Transport Costs at the Territorial Scale	Transport data collection and processing, validation with countries, development of GIS layers and economic parameters.	US\$ 300,000	US\$ 0,00	US\$ 300,000
Comp 3: Economic Benefit Calculation Tool	Construction of counterfactual scenarios related to the development of new transport routes (e.g., interoceanic railway) and technical support to countries in methodological guides and implementation	US\$ 0,00	US\$ 160,000	US\$ 160,000
Comp 4: Knowledge Dissemination and Outreach	Development of workshops, working seminars with counterparts, and dissemination forums; publication of methodological guides and study results.	US\$ 0,00	US\$ 140,000	US\$ 140,000
Total		US\$ 350,00	US\$ 350,000	US\$ 700,000

3.10 This budget is intended to be executed over a 36-month period, with constant monitoring by the team leader and other team members to ensure progress in the delivery of the required outputs.

IV. Executing agency and execution structure

4.1. The execution of the Technical Cooperation (TC) will be carried out by the Bank, in accordance with Annex II of the document “Procedures for the Processing of Technical Cooperation Operations and Related Matters” (OP-619-4), and in line with the request of the beneficiary governments. The Countries of the Southern Cone Department will be responsible for executing the TC and coordinating activities with the involved institutions¹. The Disbursement Responsible Unit (UDR) will be CSC/CSC, and the execution period will be 36 months.

¹ The development of specific work in the countries will be carried out once the Request Letter from the respective Government is received. Under no circumstances will any work proceed without first obtaining the Government’s No Objection Letter, which will be incorporated into the Bank’s corresponding systems. The Beneficiary’s Letter will state that the Bank is the executor of the Technical Cooperation.

The responsibility for obtaining the No Objection Letters for Technical Cooperation operations that are already underway, in newly identified countries after approval, or in countries for which the Letters were not obtained prior to approval (allowed only in exceptional cases), lies with the Team Leader and the corresponding Approval Authority.

4.2. The execution structure is justified by the Bank's experience in developing activities related to the operational and technical instruments proposed for this type of regional investment operations, drawing from the experience of IIRSA (Initiative for the Integration of Regional Infrastructure in South America) and the South Connection Program. Additionally, it is justified by VPC and CSC's knowledge and leadership in regional integration within the region and the collaboration of TSP. The Bank's prior experience will also allow for the establishment of logical and robust guidelines for the development of this TC. Moreover, execution by the Bank will promote impartiality and independence in the development of consulting products for key activities. All of the above positions the Bank as an actor capable of delivering added value by acting as the executor of this TC. For this reason, the beneficiary governments support this execution structure and view the Bank as playing a strategic role in achieving the expected results of this TC.

4.3. The Bank will hire individual consultants, consulting firms, and non-consulting services in accordance with the Bank's current policies and procedures. 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. Additionally, the knowledge products generated from Bank-executed activities within this technical cooperation will be the property of the Bank and may be made available to the public under a creative commons license. However, at the request of the beneficiaries, in accordance with the provisions of AM-331, the intellectual property of said products may also be licensed through specific contractual commitments that shall be prepared with the advice of the Legal Department.

V. Major issues

5.1. Due to the nature of the activities described in this Technical Cooperation (TC), no significant risks have been identified. The risks that have been identified are minor and do not pose an obstacle to its development. One potential risk, stemming from the nature of this TC, is the possible lack of coordination, communication, and ownership—both internally and externally—among the parties involved, including various local counterparts and external consultants. Although the potential impact is low, successful execution will require strong collaboration between the different government institutions and the contracted consultants to ensure the necessary information is provided for the proper development of the proposed activities. To mitigate this risk, the Bank will be responsible for coordinating the activities and will closely monitor progress through follow-up meetings.

VI. Exceptions to Bank policy

6.1. No exceptions to the Bank's policies are considered.

VII. Environmental and Social Aspects

7.1. This TC does not intend to finance pre-feasibility or feasibility studies for specific investment projects, nor related social or environmental studies. Therefore, the requirements of the Bank's Environmental and Social Policy Framework (ESPF) do not apply to this TC.

Required Annexes:

[Request from the Client_74151.pdf](#)

[Results Matrix_90995.pdf](#)

[Terms of Reference_22770.pdf](#)

[Procurement Plan_51275.pdf](#)