

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**REGIONAL  
(ARGENTINA AND CHILE)**

**CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP)  
(RG-O1655)**

**FIRST OPERATION OF THE AGUA NEGRA PASS INTERNATIONAL  
TUNNEL CONSTRUCTION PROGRAM  
(RG-L1116)**

**LOAN PROPOSAL**

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## CONTENTS

### PROGRAM SUMMARY

I.	PROGRAM DESCRIPTION AND RESULTS MONITORING.....	1
	A. Background, problem addressed, and rationale.....	1
	B. Objectives, components, and cost.....	7
	C. Key outcome indicators.....	9
II.	FINANCING STRUCTURE AND MAIN RISKS.....	10
	A. Financing instruments.....	10
	B. Environmental and social risks.....	12
	C. Fiduciary risks.....	13
	D. Other program risks.....	14
III.	IMPLEMENTATION AND MANAGEMENT PLAN.....	14
	A. Summary of implementation arrangements.....	14
	B. Summary of results monitoring arrangements.....	16

<b>ANNEXES</b>	
Annex I	Summary Development Effectiveness Matrix
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

<b>ELECTRONIC LINKS</b>
<b>REQUIRED</b>
1. <a href="#">Multiyear execution plan and annual work plan</a>
2. <a href="#">Monitoring and evaluation plan</a>
3. <a href="#">Environmental and social management report</a>
4. <a href="#">Procurement plan</a>
<b>OPTIONAL</b>
1. <a href="#">Socioeconomic assessment of multi-country infrastructure projects with effects on regional integration</a>
2. <a href="#">Economic integration annex</a>
3. <a href="#">Regional integration program</a>
4. <a href="#">Agua Negra Pass International Tunnel – construction phases</a>
5. <a href="#">Agua Negra Pass International Tunnel – economic feasibility study</a>
6. <a href="#">Economic feasibility study review and update</a>
7. <a href="#">Institutional capacity assessment of the Argentine National Highway Administration</a>
8. <a href="#">Environmental impact assessment</a>

## ABBREVIATIONS

AADT	Annual average daily traffic
CBM	Coordinated border management
CCLIP	Conditional Credit Line for Investment Projects
CGR	Office of the Comptroller General of the Republic [Chile]
COSIPLAN	Consejo Suramericano de Infraestructura y Planeamiento [South American Council for Infrastructure and Planning]
DNV	Dirección Nacional de Vialidad [Argentine Highway Administration]
DVC	Dirección de Vialidad [Chilean Highway Administration]
EBITAN	Entidad Binacional Túnel de Agua Negra [Agua Negra International Tunnel Agency]
EIA	Environmental impact assessment
HDM-4	Highway Development and Management Model
ICB	International competitive bidding
IIRSA	Iniciativa para la Integración de la Infraestructura Regional Suramericana [Initiative for the Integration of South American Regional Infrastructure]
MERCOSUR	South American Common Market
MINTRA	Argentine Ministry of Transportation
MOP	Chilean Ministry of Public Works
NPV	Net present value
PETAN	Agua Negra Pass International Tunnel Structuring Program
PTI	Programa Territorial de Integración [Regional Integration Program]
QCBS	Quality- and cost-based selection
SIGFE	State Financial Management Information System [Chile]
UEPEX	Financial Management Control System for External Loan Executing Units
UNSJ	Universidad de San Juan

**PROJECT SUMMARY**

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Financial Terms and Conditions						
<b>Borrowers:</b> Argentine Republic and Republic of Chile				<b>Flexible Financing Facility<sup>(a)</sup></b>		
					<b>Argentina</b>	<b>Chile</b>
<b>Executing agencies:</b> <b>Argentina loan:</b> Argentine Ministry of Transportation (MINTRA), through the Argentine Highway Administration (DNV), and the Agua Negra International Tunnel Agency (EBITAN) <b>Chile loan:</b> Chilean Ministry of Public Works (MOP), through the Chilean Highway Administration (DVC), and the EBITAN				<b>Amortization period:</b>	25 years	15 October 2028
				<b>Original weighted average life:</b>	14.75 years	9.95 years <sup>(b)</sup>
				<b>Disbursement period:</b>	3 years	3 years
				<b>Grace period:</b>	4.5 years	15 April 2027 <sup>(c)</sup>
<b>Source</b>	<b>CCLIP (US\$)</b>	<b>First operation (US\$)</b>	<b>%</b>	<b>Inspection and supervision fee:</b>	(d)	(d)
<b>IDB to Argentina (Ordinary Capital):</b>	1,080,000,000	130,000,000	72	<b>Interest rate:</b>	LIBOR-based	
<b>IDB to Chile (Ordinary Capital):</b>	420,000,000	150,000,000	28	<b>Credit fee:</b>	(d)	
<b>Total:</b>	1,500,000,000	280,000,000	100	<b>Approval currency:</b>	U.S. dollars from the Ordinary Capital	
Program at a Glance						
<p><b>Program objective:</b> The overall objective of the CCLIP is to help improve cross-border integration between Chile and Argentina, expanding the region's access to international markets through the Coquimbo-San Juan-Porto Alegre integration corridor. The specific objectives of the CCLIP are to enhance the connectivity and efficiency of the region's logistics network by building a mountain tunnel that will substantially improve the existing crossing at Agua Negra Pass. The results of this improvement will include reduced travel times, greater resilience of the crossing to the effects of climate change, and increased passenger and freight volume across the Agua Negra Pass. The objective of the first operation is to move forward with the construction of the first sections of the Agua Negra Pass International Tunnel.</p>						
<p><b>Special contractual conditions precedent to the first disbursement of each loan:</b> (i) approval and entry into force of the program Operating Regulations for each country, pursuant to the terms agreed upon with the Bank (paragraph 3.6); (ii) evidence that the contract for the design and construction of the Agua Negra Pass International Tunnel has been bid out, awarded, and signed (paragraph 3.7); and (iii) fulfillment of the special conditions listed in Annex III.</p>						
<p><b>Special contractual conditions for execution:</b> See environmental and social conditions in Chapter V of the environmental and social management report (<a href="#">required electronic link 3</a>).</p>						
<p><b>Exceptions to Bank policies:</b> A partial exception is requested to the requirement in paragraph 1.19 of document GN-2246-9 with respect to the EBITAN which, having been created solely to manage and carry out construction of the Agua Negra Pass International Tunnel, has no experience in that regard (paragraph 2.3).</p>						
Strategic Alignment						
<b>Challenges:<sup>(e)</sup></b>	SI	<input type="checkbox"/>	PI	<input checked="" type="checkbox"/>	EI	<input checked="" type="checkbox"/>
<b>Crosscutting themes:<sup>(f)</sup></b>	GD	<input type="checkbox"/>	CC	<input type="checkbox"/>	IC	<input type="checkbox"/>

<sup>(a)</sup> Under the terms of Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

<sup>(b)</sup> The original average weighted life may be lower, depending on the effective date of the loan contract.

<sup>(c)</sup> Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.

<sup>(d)</sup> The inspection and supervision fee and credit fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

<sup>(e)</sup> SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

<sup>(f)</sup> GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).



## I. PROGRAM DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 **General context.** Argentina and Chile share South America's longest international land border, which notably includes 5,150 kilometers along the Andes Mountain range. Both countries are aware that their development and well-being in a globalized world increasingly require physical integration and satisfactory border management coordination to eliminate bottlenecks in the flow of passengers and goods, paying close attention to projects aimed at strengthening their cross-border linkages.
- 1.2 In recent years, Chile and Argentina have developed regional integration strategies to plan and reinforce their infrastructure so as to optimize and coordinate border control processes. The main objective of these strategies is to boost and facilitate trade flows between the two countries and thereby contribute to regional economic growth. This integration provides: (i) access to Pacific ports for countries in the Atlantic basin; and (ii) access to Atlantic ports for Chile, with the concomitant incentive to enable regional trade to gain a larger share in global value chains through access to fast-growing Asian markets.
- 1.3 **Specific context.** There are currently 26 international crossings between Chile and Argentina (Figure 1). Of these, the Agua Negra Pass, which opened in 1965 and links the Region of Coquimbo (Chile) and the Province of San Juan (Argentina), is also the highest at 4,780 meters above sea level. Climate and topography combine to make this crossing impassable at least six months of the year (from May to October). This severely limits its traffic volume, which in terms of freight transport is practically nonexistent.
- 1.4 The Agua Negra Pass was identified by the South American Council for Infrastructure and Planning (COSIPLAN) as a priority border crossing within the Mercosur-Chile Corridor under the Priority Integration Projects Agenda<sup>1</sup> ([optional electronic link 2](#)). In recent years, Chile and Argentina have started to structure construction of the Agua Negra Pass International Tunnel by creating the EBITAN,<sup>2</sup> and have initiated activities to structure the tunnel project jointly with the Bank through the Agua Negra Pass International Tunnel Structuring Program (PETAN) (3867/OC-RG and 3868/OC-RG)<sup>3</sup> approved in 2016.

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<sup>1</sup> The Agua Negra Pass International Tunnel is included in the project portfolio of the Initiative for the Integration of South American Regional Infrastructure (IIRSA/COSIPLAN), and in the Regional Integration Program (PTI) ([optional electronic link 3](#)), with a strategic analysis of actors, objectives, and plans to bolster and maximize the effects of the Agua Negra Pass International Tunnel construction. Specific PTI actions include an environmental and social, productive and logistical integration, and disaster risk management assessment methodology.

<sup>2</sup> Created by the Complementary Protocol to the Maipú Integration and Cooperation Treaty between Argentina and Chile on 30 October 2009, and approved by Decree 01/2010 in Chile and Law 26,561 in Argentina.

<sup>3</sup> Execution of the PETAN will begin in the final quarter of 2017.

Figure 1. Main border crossings between Argentina and Chile (2017)



Source: Argentine Highway Administration (DNV)

- 1.5 **Diagnostic assessment of the problem.** In recent decades, the vehicle flow between the two countries has expanded almost constantly, growing at a 6% annual rate since 2007. This, coupled with a deficient infrastructure and the poor quality of existing highway crossings, functional weaknesses associated with border control processes, and adverse meteorological conditions, means that the existing crossings are insufficient to address freight volume and vehicle traffic, directly affecting accessibility, connectivity, and integration.
- 1.6 The most highly traveled highway corridor between Argentina and Chile is the Cristo Redentor Pass, with annual average daily traffic (AADT) of approximately 2,100 vehicles. The serviceability of this pass is frequently affected by climate conditions that force it to close 30 to 40 days per year. This creates significant delays in transportation services, aggravated by congestion due to limited infrastructure capacity and shortcomings in control processes and systems. One of the Cristo Redentor Pass's nearest alternative crossings is the Agua Negra Pass, located 500 kilometers to the north on the Argentine side and 700 km to the north by road on the Chilean side. Despite the Agua Negra Pass's currently precarious infrastructure, the flow of vehicles through that crossing has grown since 2005 to an



annual figure ranging from 8,000 to 15,000 vehicles, which translates into an AADT of 22 to 29 vehicles.

- 1.7 **Proposed interventions.** To mitigate the problem of lack of connectivity during the winter months and facilitate a reliable logistics link that can accommodate uninterrupted freight and tourist transportation service, it is essential to improve integration infrastructure, i.e. border crossings that are passable all year long. To this end, feasibility studies were conducted for new cross-border tunnels in the region ([optional electronic link 1](#)). Of the crossings examined, Agua Negra Pass stands out since it: (i) forms part of an interoceanic corridor with vast potential as a new logistics link between Porto Alegre on the Atlantic coast and Coquimbo on the Pacific coast; and (ii) has better climate conditions than the existing crossings (snowfall at Agua Negra Pass is approximately one third the current level at the Cristo Redentor Pass, which would mean that Agua Negra Pass closures would be fewer than 10 days per year, as compared with up to 40 days per year at the Cristo Redentor Pass).<sup>4</sup> Based on these studies, both governments have chosen the Agua Negra Pass as the optimal solution for strengthening and expanding alternative cross-border linkages between the two countries.
- 1.8 To help improve the logistics performance of Chile and Argentina, improve serviceability, and foster regional integration, this first operation under the CCLIP will enhance border crossing infrastructure with the construction of a 13.9 km-long tunnel consisting of two bores, one for each direction of traffic (Figure 2). This tunnel will shorten the current crossing by 40 km, help eliminate curves, and reduce the maximum grade, enabling freight trucks to pass. In addition, it will enable the crossing to be used throughout the year. The subsequent individual operations will include the components needed to optimize border management.<sup>5</sup> These improvements will lead to a considerable reduction in passenger and freight crossing times and will significantly shorten wait times due to weather-induced closings. In addition, the technical analysis of the tunnel considered the tunnel's accessibility through the existing infrastructure (Route 41 on the Chilean side and Route 150 on the Argentine side) and carrying capacity throughout the year. Route 150 is in optimal accessibility conditions, having been upgraded and enhanced by means of significant economic investment along practically all of its segments, with the temporary exception of one segment approximately 50 km long running from the proximity to the actual point of connection with the Agua Negra Pass. Route 41, on the other hand, will require full construction of the final segments up to the point of connection with the Agua Negra Pass International Tunnel. In view of this, the ministries of both governments are working with the affected municipios to assess how to manage the traffic arising from the construction works. The IDB-IIRSA economic model ([optional electronic link 6](#)) shows that the Agua Negra Pass International Tunnel would absorb 10% of the Cristo Redentor Pass traffic in the event of saturation. The economic model developed in 2013 by Chile's MOP and

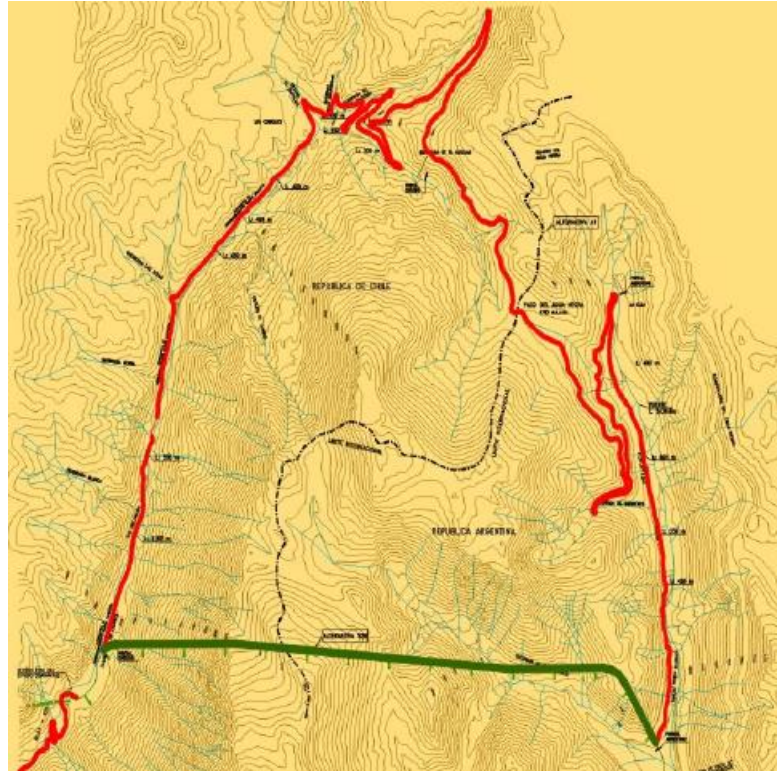
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<sup>4</sup> The Bank has worked on upgrading the Cristo Redentor Pass through several operations aimed at: (i) improving the management control system model (ATN/OC-14926-RG); (ii) improving connectivity (ATN/OC-15803-RG); and (iii) expanding the capacity and safety of the crossing (AR-L1279, in the amount of US\$215 million, i.e. US\$150 million from the IDB and a US\$65 million local counterpart contribution), currently in preparation for approval in December 2017).

<sup>5</sup> These components are projected to consist of the construction of building infrastructure and the optimization of border management systems.

Planning Department indicates that the Agua Negra Pass International Tunnel would move grape and lime exports from San Juan and mining inputs from Coquimbo. The same model indicates that tourism-related traffic would increase due to the shortening of the distance to the Chilean coast.

**Figure 2. Tunnel project**



Source: Universidad de San Juan (UNSJ) (2014)

- 1.9 Lastly, the rationale for the Agua Negra Pass International Tunnel is based on the expected regional integration between Argentina and Chile, specifically between San Juan and Coquimbo, and improvement of the road network in the Mercosur-Chile hub. This project has great strategic importance as it represents the integration efforts of two countries. Accordingly, this international project creates a common work environment, facilitating the development of the necessary binational institutional structure.
- 1.10 **Rationale for the CCLIP.** In 2015, Chile and Argentina requested the Bank's support in structuring the Agua Negra Pass International Tunnel investment program. Given the size, complexity, and lengthy duration of the program, work focused on: (i) a preparatory operation aimed at training the responsible entities, designing the construction project, and defining coordination between the two countries (PETAN); and (ii) the construction of the Agua Negra Pass International

Tunnel, to be carried out through individual operations under the CCLIP,<sup>6</sup> the first of which includes its initial sections—one on the Argentine side and another on the Chilean side ([optional electronic link 4](#)).

- 1.11 The Agua Negra Pass International Tunnel construction program will finance construction of the tunnel as well as the inspection works services and supplementary institutional capacity-building activities (paragraph 1.24). The main reasons Argentina and Chile decided to build the tunnel using a CCLIP included the program's size, long execution period, and prolonged investment schedule, requiring the timely availability of resources to finance the construction of the tunnel's various sections. Using a CCLIP to finance construction facilitates: (i) greater program efficiency and provides the borrowers with timely resources to ensure the program's continuity; (ii) by dividing the program into several individual operations, the ability to identify activities that become necessary as construction progresses; and (iii) reduced finance charges and the streamlining of the Bank's internal processes, since each individual operation is prepared and approved independently, as well as continuous technical and direct support throughout the execution period of the works (paragraph 2.1). The regional nature of the CCLIP promotes joint coordination and responsibility between both countries, as well as their ownership<sup>7</sup> of the program's development strategy by framing the individual projects within the regional scope and objectives envisaged in the CCLIP.
- 1.12 The reason for presenting the CCLIP and this first operation thereunder at this time is due to the great importance and positive impact they will have on the bidding process for the construction of the Agua Negra Pass International Tunnel, by establishing the technical criteria and providing the resources necessary to carry out the tunnel's construction. This will send the market a clear signal that financing is available for construction of the Agua Negra Pass International Tunnel during the bidding process. It is also hoped that Bank's support for this regional program will potentially expand the number of companies or consortia willing to submit bids and boost the competitiveness and quality of such bids (approximately 10 consortia will be prequalified and eligible to participate in the bidding process).
- 1.13 **Evidence of the intervention's effectiveness.** The international evidence indicates that delays have a significant impact on the costs and times involved in international trade. Each additional day that a product is delayed reduces trade by more than 1%, equivalent to a country distancing itself from its trade partners by 70 km on average.<sup>8</sup> For the countries of Central America, shortcomings in transportation infrastructure—especially border crossings—generally increase the cost of transporting goods by an estimated 4% to 12%,<sup>9</sup> eroding the competitiveness

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<sup>6</sup> The possibility is currently being examined of including a provision in the bidding conditions that would require the contractor to operate and maintain the tunnel for a period of three years following the tunnel's completion. The countries will decide on the model before approving the bidding process in the fourth quarter of 2017.

<sup>7</sup> Efficiency, joint coordination and responsibility, and ownership are established as principles for the utilization of CCLIPs in that instrument's guidelines (document GN-2246-11).

<sup>8</sup> Djankov, S., 2006. Trading on Time. World Bank Policy Research Working Paper.

<sup>9</sup> Competitive Advantage: Moving Ahead of the Global Competition. IDB, 2013.

of their economies.<sup>10</sup> Similarly, following completion of a road rehabilitation project on the regional highway linking Kazakhstan and Kyrgyzstan, traffic volume rose by 25% and exports from Kyrgyzstan to Kazakhstan were up by 160% between 1998 and 2007.<sup>11</sup>

- 1.14 **The Bank's experience in supporting regional transport integration projects.** The Bank has accumulated expensive experience in supporting countries in the design and implementation of regional projects. Through the Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII), nine technical cooperation operations have been financed<sup>12</sup> in South America alone, including regional border and multimodal corridor studies. In this context, the Bank has been recognized for its work in facilitating dialogue by coordinating multicountry monitoring committees. This mechanism has produced greater ownership of outcomes, and has laid the foundation for coordinated implementation of future projects. In addition, regional support for pre-investment has resulted in coordinated loans, such as the twin cross-border operations between Costa Rica and Panama (loans 3488/OC-CR and 3577/BL-NI), approved by the Bank's Board of Directors in 2015. Lastly, it is worth noting the Bank's experience in electrical integration, both in the Central American Electric Interconnection System (SIEPAC) and in the Pacific Alliance, as past examples of institutional harmonization and regional policies.
- 1.15 **The Bank's road sector expertise.** The Bank has financed multiple highway projects in Argentina and Chile. Since 2000, it has approved 25 transportation-related operations in Argentina for more than US\$2 billion. At present, the Bank is executing the Route 19 road project (loan 3836/OC-AR) in the province of Córdoba, as part of the interoceanic corridor that includes the Agua Negra Pass International Tunnel, and an operation for the PETAN structuring program between Argentina and Chile (loan 3867/OC-RG). In addition, the Bank is preparing a Cristo Redentor Pass improvement project involving the two countries (loan AR-L1279) and has led the design and execution of border crossing operations in Ecuador-Colombia, Guatemala, Nicaragua, Argentina-Chile, Costa Rica, and Panama.<sup>13</sup>
- 1.16 **Lessons learned (paragraphs 1.14 and 1.15).** The main lessons learned in regional integration projects and large-scale projects include: (i) leadership at the highest political level is needed in both countries; (ii) binational coordination is essential, at both the project management and technical levels; (iii) bidding documents must be complete and include engineering designs of high technical quality; and (iv) clear rules and responsibilities must be established for operating and maintaining regional integration infrastructure. The Bank has taken those lessons into account in the design and implementation of a Coordinated Border Management

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<sup>10</sup> Each day that goods are in transit is equivalent to 0.6% to 2% of the value of the goods. Hummels, 2012. [https://www.researchgate.net/publication/5081736\\_Time\\_as\\_a\\_Trade\\_Barrier](https://www.researchgate.net/publication/5081736_Time_as_a_Trade_Barrier).

<sup>11</sup> Asian Development Bank, Kyrgyz Republic: Road Rehabilitation Project, Second Road Rehabilitation Project, and Third Road Rehabilitation Project. 2010.

<sup>12</sup> Technical cooperation operations ATN/OC-10620-RG, ATN/OC-10847-RG, ATN/OC-11400-RG, ATN/OC-10774-RG, ATN/OC-13350-RG, ATN/OC-13632-RG, ATN/OC-13872-RG, ATN/OC-13289-RG, and ATN/FG-15606-RG.

<sup>13</sup> Operations 3324/OC-EC, 3484/BL-NI, 3488/OC-CR, PN-L1107, ATN/JF-14202-RG, and ATN/OC-14926-RG.

- (CBM) model,<sup>14</sup> which includes parameters universally accepted as good practices for integrated and efficient border management, as well as through ongoing coordination between the two countries and the EBITAN.<sup>15</sup>
- 1.17 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is strategically aligned (i) with the development challenges of economic integration under the criteria<sup>16</sup> of: (a) cross-country focus, by supporting national actions aimed at facilitating access to international markets (paragraph 1.28); (b) national subsidiarity, by supporting the implementation of a project recognized as a priority by COSIPLAN/IIRSA (paragraph 1.4); and (c) regional additionality, since construction of the Agua Negra Pass International Tunnel requires coordinated action at the regional level, establishing a regional institutional framework (EBITAN) ([optional electronic link 2](#)); and (ii) with the productivity and innovation challenge by introducing improvements in the region's logistics network.
- 1.18 In addition, the program is consistent with: (i) the IDB Infrastructure Strategy – Sustainable Infrastructure for Competitiveness and Inclusive Growth (document GN-2710-5) by contributing to an improvement in the quality of transportation infrastructure and fostering private-sector involvement in the construction and operation of the project; (ii) the Transportation Sector Framework (document GN-2740-7) by contributing to improvements in the coverage, capacity, quality, and connectivity of transportation infrastructure and associated services; and (iii) the Trade and Integration Sector Framework (document GN-2715-6) by prioritizing support to the development of integration corridors.
- 1.19 **The Bank's strategy with the countries.** Under the IDB Group Country Strategy with Argentina 2016-2019 (document GN-2870-1), the program is aligned with the strategic objectives of improving road infrastructure and reducing logistics costs (as part of improving the business environment) and of reducing export costs and times (as part of strengthening integration). Under the country strategy with Chile 2014-2018 (document GN-2785), the program falls under the priority strategic areas of transportation and logistics dialogue and regional integration, since it envisages supporting specific aspects of freight transport integration and infrastructure.

## **B. Objectives, components, and cost**

- 1.20 **Overall objective.** The CCLIP's overall objective is to help improve cross-border integration between Chile and Argentina, expanding the region's access to the international markets through the Coquimbo-San Juan-Porto Alegre integration corridor.
- 1.21 **Specific objectives.** The specific objectives are to enhance the connectivity and efficiency of the region's logistics network by building a mountain tunnel that will

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<sup>14</sup> CBM includes: (i) adoption of international standards; (ii) establishment of interoperable advance information systems; (iii) implementation of risk management; (iv) certification of authorized economic operators; (v) implementation of operating processes at border agencies and deployment of border management control systems and joint inspection systems; (vi) implementation of infrastructure and deployment of technological control equipment; and (vii) focus on socioeconomic and environmental issues.

<sup>15</sup> CBM will be implemented by the executing agencies.

<sup>16</sup> Classification criteria set forth in the Sector Strategy to Support Competitive Global and Regional Integration (document GN-2565-4).

- substantially improve the existing crossing at Agua Negra Pass. The outcomes of this improvement include reduced travel times, greater resilience of the crossing to the effects of climate change, and increased passenger and trade flows across the Agua Negra Pass. The objective of the first individual operation is to move forward with the construction of the first sections of the Agua Negra Pass International Tunnel.
- 1.22 To accomplish these objectives, the operation is divided into the following components:
- 1.23 **Component 1. Technical and management support for the EBITAN (US\$8,100,000).** Includes technical assistance to the EBITAN in the form of a team of highly specialized technical experts, assisted by a back-office support staff who will provide technical criteria for decision-making purposes and examine any problems that arise during the first phase of construction. This component will also provide support to the EBITAN Executive Committee for audits and the program's environmental and social management and communication activities. This component, to be executed by the EBITAN, may also be used to finance any administration costs or outputs identified that help enhance program quality and control, provided that these were not established in the PETAN.<sup>17</sup>
- 1.24 **Component 2. Support for the program's national and regional technical units (US\$15,000,000).** This component will be executed by Argentina's MINTRA through the DNV, and by the Chile's MOP through the DVC, respectively. It will finance activities,<sup>18</sup> including training and hiring of qualified personnel, aimed at reinforcing technical capacity in the area of tunnels, underground works, specific risk management, management of large contracts, and other disciplines that can help optimize management of the program's funds as well as limit the risks of deviations from budget and schedule in the medium and long term. The envisaged activities include technical training courses for the staff given by panels of experts, the addition of highly specialized personnel brought in from the private sector, and technology transfers from existing and completed works both in the countries involved and in other nations.
- 1.25 **Component 3. Construction and supervision (US\$256,900,000).** This component will finance the construction and supervision of the first sections of the Agua Negra Pass International Tunnel. With respect to Argentina, it includes civil, workshop installation, temporary access roads, excavation and support of portals, workshop access roads, boring, and testing. With respect to Chile, it includes the transformer station, excavation and support of portals, installation of the workshop and its access roads, excavation, support of portals, and temporary access roads.
- 1.26 **Cost.** Table 1 below presents the consolidated budget by component:

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<sup>17</sup> The PETAN includes an institutional strengthening component for the EBITAN that supplements this operation. Given the protracted execution period of the PETAN, financed by various loans, this component will be executed once execution of the PETAN has been finalized, thus providing continuity to activities initiated under that program.

<sup>18</sup> With respect to the Republic of Chile, this component will finance activities of the DVC and the Regional Government of Coquimbo that support the work of the EBITAN.

**Table 1. Budget (US\$)<sup>(i)</sup>**

<b>Component/Activities</b>	<b>Argentina</b>	<b>Chile</b>	<b>Total</b>
<b>Component 1. Technical and management support for the EBITAN</b>	<b>4,050,000</b>	<b>4,050,000</b>	<b>8,100,000</b>
Technical assistance	2,250,000	2,250,000	4,500,000
Executive Committee training	1,000,000	1,000,000	2,000,000
Audits: internal and external	400,000	400,000	800,000
Environmental and social management and communication	250,000	250,000	500,000
Program administration	150,000	150,000	300,000
<b>Component 2. Support for the program's national and regional technical units</b>	<b>8,000,000</b>	<b>7,000,000</b>	<b>15,000,000</b>
Consulting services to strengthen national and regional technical units	8,000,000	7,000,000	15,000,000
<b>Component 3. Construction and supervision</b>	<b>117,950,000</b>	<b>138,950,000</b>	<b>256,900,000</b>
Tunnel construction works	110,950,000	131,950,000	242,900,000
Supervision and monitoring	7,000,000	7,000,000	14,000,000
<b>Total</b>	<b>130,000,000</b>	<b>150,000,000</b>	<b>280,000,000</b>

(i) The amounts reflect cost estimates in each country for the first two sections of tunnel construction. Similar progress is expected on the two construction fronts, with slightly higher costs on the Chilean side due to the existing geological conditions, since this includes the start of construction of the ventilation shaft.

### **C. Key outcome indicators**

- 1.27 Once the tunnel is built, the CCLIP's main impact will be to facilitate international trade through the optimization of Argentina-Chile border crossings as a result of increased resilience in high-capacity border crossings (tunnel crossings) between the two countries. This impact will be reflected in a reduction in the number of days per year on which the countries have no high-capacity crossings in operation. This international trade facilitation is expected to bring about an increase in economic activity and productive diversification and expansion in the tunnel's surrounding areas.
- 1.28 **Expected outcomes.** The final outcome of the CCLIP will be a reduction in the days per year on which the high-capacity border crossings (tunnels) between Argentina and Chile are closed. In addition, completion of the program will result in time savings for travelers using the Agua Negra Pass and an increase in freight tons and passengers using the border crossing. The specific expected outputs of the first operation are the tunnel's mining portals, transformer stations, and the kilometers of tunnel construction completed in the first and second sections (Annex II). The main expected outcomes and outputs of the operation will be assessed based on the proposed indicators in the results matrix. The outcome indicators will be measured directly or indirectly in accordance with the methods set forth in the monitoring and evaluation plan ([required electronic link 2](#)).
- 1.29 **Economic viability.** The main rationale for the program is its strategic importance for both countries, primarily in view of the resilience it provides to the current system of border crossings. Due to the program's characteristics, high initial investment cost, lengthy execution period, and long useful life, the traditional methods of economic assessment of projects are not necessarily the most appropriate for evaluating this program, since they tend to limit the counting of benefits to a shorter period than this program's useful life. In addition, the program's benefits depend on

future estimates of long-term demand and are therefore hard to estimate and entail a high degree of variability. Nonetheless, the analyses performed show that the program's success depends on its ability to generate new regional transport flows (generated traffic). Economic assessments of multicountry infrastructure projects ([optional electronic link 1](#)) analyze their impact on users, producers, and taxpayers. In this case, this assessment yields a negative net present value (NPV) with a discount rate of 12% but limits the analysis to the transportation flow along the San Juan-Coquimbo corridor. Other economic assessments that expand the analysis to regional flows encompassing the Porto Alegre-Coquimbo interoceanic corridor show more favorable results. An example of this is the UNSJ study ([optional electronic link 5](#)), which yields a NPV of approximately US\$38 million<sup>19</sup> (discount rate of 12%) and an internal rate of return of 12.37%.

- 1.30 **Program beneficiaries.** The investment project study ([optional electronic link 1](#)) counts the regional population in the area adjacent to the Central Interoceanic Corridor as direct and indirect beneficiaries, encompassing a total of 20 million inhabitants. However, considering just the population of San Juan and Coquimbo, the total amounts to 1,510,044 (a more realistic option in the feasibility study ([optional electronic link 6](#))). If one segregates the population that depends on the sectors directly benefitting from construction of the Agua Negra Pass International Tunnel (primarily agriculture, mining, and tourism) (paragraph 1.6), the total beneficiary population is 1,151,545. In addition, the socioeconomic evaluation lists tunnel users as the main beneficiaries, ahead of producers and taxpayers. Furthermore, the responsible government agencies in each country (DNV and DVC) are also program beneficiaries, since they will be strengthened through the program's and the EBITAN's activities, which will in turn improve their capacity to manage the program. The other border agencies will also benefit from the existence of a cutting-edge crossing with cross-border control facilities and automated control centers, which will enhance their capacity to manage international traffic, reducing timeframes and human effort.

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 **Modality.** Construction of the Agua Negra Pass International Tunnel will be financed through a US\$1.5 billion CCLIP with a 12-year disbursement period. The first operation is structured for a total of US\$280 million that encompasses two loans: one for US\$130 million to Argentina and another for US\$150 million to Chile, with a disbursement period of three years and no local counterpart. The first operation will be executed under a design-build modality, in which the design and construction of the project are put out for bids under a single contract.<sup>20</sup> The bidding is expected to take place in October 2017. The PETAN will cover the costs associated with the designs, and the first operation under the CCLIP will cover the costs associated with

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<sup>19</sup> See comparison among the three economic assessments respectively performed by IDB/IIRSA, MOP, and UNSJ ([optional electronic link 6](#)).

<sup>20</sup> At present, the bidding process is in the prequalification stage. The process is being coordinated by the DVC, the DNV, and the EBITAN and is the only bidding process carried out under the Bank's rules, with a single contractor and a single contract with the EBITAN. There will be a single supervision process, coordinated by the EBITAN.



the first sections of tunnel construction.<sup>21</sup> Construction of the tunnel is slated to begin once its designs have been finalized (in or around 2020) (paragraph 1.12).

**Table 2. Disbursement plan for the first operation under the CCLIP**

Source	2020	2021	2022	Total
IDB	84,160,000	84,160,000	111,680,000	<b>280,000,000</b>
%	30%	30%	40%	100%

- 2.2 **CCLIP eligibility criteria.** In accordance with section D(1)(a) of the Proposed Modifications to the Conditional Credit Line for Investment Projects (document GN-2246-9), the executing agency must have completed a similar project in the last five years, with a satisfactory track record and expected satisfactory performance. This operation partially complies with this requirement, since: (i) the DVC (paragraph 3.3) and the DNV (paragraph 3.2) have in recent years worked together with the Bank both in preparing the PETAN and in other, already completed transportation operations;<sup>22</sup> (ii) the DVC, the DNV, and the EBITAN, as coexecuting agencies, have coordinated the structuring of the PETAN, exhibiting an adequate track record; (iii) the DNV has extensive experience executing other IDB loans (e.g. AR-X1016 for US\$2.5 billion and 2185/OC-AR for US\$150 million); and (iv) the relevant institutional analyses ([optional electronic link 7](#))<sup>23</sup> performed during preparation of the PETAN have demonstrated the institutional capacity of all the executing agencies. In addition, the areas that will be financed under the CCLIP are included in the priorities set out in Bank's current country strategies with Argentina and Chile.
- 2.3 **Partial exception.** A partial exception is requested to the aforementioned requirement, namely, paragraph 1.19 of document GN-2246-9, with regard to coexecuting agency EBITAN, which has no comparable experience since it was created solely to manage and carry out construction of the Agua Negra Pass International Tunnel. It is worth noting that the EBITAN has linkages with, and will receive continuous support from, the other coexecuting agencies (DNV and DVC), both of which have the required experience, and will receive extensive institutional capacity-building support through the PETAN.
- 2.4 **Eligibility criteria of the first individual operation.** The first individual operation meets the eligibility criteria established in section D(1)(b) of document GN-2246-9, insofar as: (i) it is envisaged in the sector and components of the CCLIP; and (ii) it was included in the aides-mémoire on the programming updates for both countries.<sup>24</sup>

<sup>21</sup> Construction will be a single process; however, it will encompass one section in each country.

<sup>22</sup> The DNV has completed the following notable works with international lending agencies in the last five years: (i) Provincial Road Infrastructure Project (World Bank loans 7301 and 7833/AR); and (ii) First Productive Road Infrastructure Program (IDB loan 2185/OC-AR). Over the past five years, the DVC has made investments amounting to US\$7.3 billion in the areas of border crossings, urban road connectivity, reconstruction and maintenance plans, and specific highway and bridge projects. Among other projects, it has paved and added 2,502 kilometers of new and two-lane roads to Chile's national road network.

<sup>23</sup> Since operation 3836/OC-AR is being executed by the DNV, reference is made to the institutional assessment performed for that project.

<sup>24</sup> Update to the aide-mémoire on the programming agreement with Argentina of 2 May 2017, and aide-mémoire on the programming agreement with Chile of 9 March 2017.

Subsequent individual operations will be required to meet the eligibility criteria of the aforementioned section D(1)(b) of document GN-2246-9.

**B. Environmental and social risks**

- 2.5 **Environmental and social safeguards.** The program is classified as category “A” in accordance with the Environment and Safeguards Compliance Policy (Operational Policy OP-703) due to its potential to generate moderate-to-high environmental and social impacts, primarily affecting the quality of surface and ground water, glaciers located near the project, and local flora and fauna, due to morphological modifications of the topography and loss of habitat resulting from the tunnel construction and related works, such as temporary site facilities, workshops, quarries, and materials storage and disposal centers. These impacts will be temporary and localized in the vicinity of the project site, and can be controlled with mitigation measures and good construction practices. The main impact will be indirect, as the tunnel will generate an increase in traffic, including freight trucks, resulting in a deterioration of air quality due to vehicle emissions, as well as increased noise, social impacts, and the possibility of traffic accidents, affecting the quality of life for residents in the area of influence along Route 150 and Route 41 across the Elqui Valley on the Chilean side. Both governments are aware of these impacts as well as of the opportunities to bolster the positive effects. Consequently, the effects of the tunnel are included in the Regional Integration Program (PTI) ([optional electronic link 3](#)) promoted by the two governments with Bank assistance. In addition, the MOP will conduct studies aimed at examining two road interconnection options on Route 41 to prevent freight vehicles from passing through the community of Vicuña and part of this highway.
- 2.6 The program has an environmental impact assessment (EIA) ([optional electronic link 8](#)) approved by the environmental authority of San Juan. Argentina was not subject to the environmental assessment process in Chile owing to regulatory changes in effect at the time the EIA was prepared. Moreover, that country’s transportation authorities expect that the consortium awarded the bid for the program’s construction will initiate the process of securing the environmental authorizations and permits, and will take responsibility for adapting the EIA to Chile’s regulatory requirements. To ensure compliance with Bank requirements (Operational Policy OP-703, subsection B.5), the EIA has been supplemented by an analysis of issues on the Chilean side, such as impacts on glaciers, noise and vibrations, indigenous settlements, and indirect and cumulative impacts. The Bank, in coordination with the EBITAN, defined the scope of activities and hired an specialized international consulting firm to prepare a supplemental EIA, as well as update the mitigation and monitoring measures and the environmental and social management report ([required electronic link 3](#)). Having prepared the supplemental EIA and having held the public consultations, the program is in compliance with the Bank’s environmental and social policies.
- 2.7 **Outcome of the consultations.** The aforementioned specialized consulting firm was also hired to help the MOP disseminate information to the public on the supplementary EIA, support that agency in planning the public consultations, and verify their quality in Chile. Public consultations were conducted in La Serena on 24 June and in Vicuña on 6 May and 2 September 2017, with approximately 300 participants. The September consultation identified issues of concern to the

- population and highlighted opposition to the project by certain groups due to the impacts that an increase in traffic, particularly freight vehicles, can have on the Elqui Valley. To address these concerns and search for solutions with the affected interest groups or persons interested in the program, the Bank will require that, within 90 days following approval of the loan by the Board of Executive Directors, the executing agencies provide evidence that a mechanism agreeable to the Bank has been set up for information disclosure, dialogue, consultation with the interest groups or persons interested in the program, and receipt of complaints and claims. Moreover, the borrowers, through the executing agencies, will provide evidence that the mechanism is operational as of the date of signature of the loan contracts to enable monitoring by the Bank ([required electronic link 3](#)). This community relations process will include both Argentina and Chile with the aim of developing a strategy for social communication and public consultation that ensures full participation by the various groups interested in the project.
- 2.8 Prior to commencing construction, the Bank will inquire with the borrowers to ensure that the successful consortium in the bidding process for the construction of the Agua Negra Pass International Tunnel adapts the EIA to the information provided from the final designs and conducts a new series of consultations. These activities will modify and supplement the environmental and social management plans that the builder is to submit, to the Bank's satisfaction, prior to the start of construction.
- 2.9 The program has been categorized as high risk in accordance with the Disaster Risk Management Policy (Operational Policy OP-704). The geological risk has been identified as medium as the region is susceptible to earthquakes and landslides due to the presence of faults, which may become exacerbated as a result of climate change. With Bank support, an analysis of natural disasters was performed in which this risk and others were examined and mitigation measures were identified. These measures will be considered when preparing the final design with a view to reducing seismic risk. Unit prices will be requested to cover all tunnel relining possibilities, and multiple geological and geotechnical scenarios will be contemplated.
- 2.10 Since the EBITAN was only recently created, there is a medium risk of institutional weakness on environmental and social issues during program execution. To mitigate this risk, the Bank will continue to strengthen the institution in order to ensure a system of comprehensive management of environmental and social issues by both countries in the course of program execution (e.g. coordination, supervision, reporting, review of claims), including responsible parties, roles, training, and resources.

### **C. Fiduciary risks**

- 2.11 The main fiduciary risks stem from potential delays in execution due to the complex technical characteristics of the tunnel and the design-build contract modality. To mitigate this high risk, the bidding conditions will include clauses and explicit guarantees providing a deadline for signing the contract, including an indemnification or penalty clause. In addition, the medium risk of inadequate budget and cost overruns, as well as of lack of financing resources, will be mitigated by outlining the specifications in the financing agreements and including compensation measures for the contractor. With regard to execution capacity, no significant risks were identified. However, plans call for improvement actions, which are described in Annex III (paragraphs 3.1 to 3.3).

#### **D. Other program risks**

- 2.12 **Macroeconomic and fiscal sustainability risk.** The operation may be affected by cost increases associated with inflation and exchange rate variations. This problem would translate into price adjustments during contract execution. The risk analysis categorizes this risk as medium in terms of both probability and impact. In view of this, the bidding conditions and the construction contract will establish a single bidding and payment currency and will require that the contractor obtain foreign exchange insurance against all major currencies associated with its costs, as well as interest rate insurance.
- 2.13 **Bidding/award risk.** The start of execution of the Agua Negra Pass International Tunnel may be held back by delays in the bidding process for and award of the design-build contract. This medium risk needs to be mitigated through EBITAN coordination with the DNV and DVC in managing the timetable for the Agua Negra Pass International Tunnel bidding and contracting process. In addition, the risk of lack of participation and/or interest among potential contractors is mitigated by carrying out a rigorous bidder prequalification process (to be completed in September 2017) and by early approval of the financing (paragraph 1.12). This is currently being done with the assistance of international specialized expert consultants.
- 2.14 **Public management and governance risk.** In addition, there is a high risk of failure to adhere to the construction schedule due to lack of licenses and other relevant permits. To mitigate this risk, the bidding conditions should require listing the permits and licenses already obtained and securing temporary licenses and permits while the final ones are being processed. There is also a risk of delay in signing the construction contract. To mitigate this risk, the bidding conditions will establish a deadline for signing the contract and provide an indemnification or penalty clause. The risk of coordination among the actors will be mitigated through the use of project management for results (PM4R) instruments. In addition, the political risk stemming from a potential change in government priorities as a result of the presidential elections that will be held in both countries during execution will be mitigated by entering into contractual conditions that include guarantees with exit clauses for the countries.

### **III. IMPLEMENTATION AND MANAGEMENT PLAN**

#### **A. Summary of implementation arrangements**

- 3.1 **Borrowers and executing agency.** The borrowers will be Argentina and Chile. The coexecuting agencies will be: (i) for Argentina, the MINTRA, through the DNV, and the EBITAN; and (ii) for Chile, the DVC of the MOP and the EBITAN.
- 3.2 The DNV has extensive experience in the execution of loans from international lending institutions in general and the IDB in particular, both as executing agency and coordinator and as subexecuting agency for other loans. The institutional capacity assessment performed in July 2016 yielded a low level of risk. In the coming months, changes are anticipated in the structure of the DNV, but these are not expected to adversely impact the assessed capacity. Thus, no difficulties in execution are foreseen. In view of this executing agency's level of experience and its organizational structure, plans call for additional strengthening in the form of

contracting two procurement-related consultants. With regard to financial management, the Bank considers that no specific measures are required for the execution of this operation.

- 3.3 The DVC is the Chilean technical agency responsible for carrying out the PETAN program and for supporting the strengthening of the EBITAN. The DVC is in charge of the construction and maintenance of Chile's highway network of approximately 80,000 kilometers, including tunnels, bridges, overpasses, and other structures. A significant portion of the network's construction has been financed by multilateral agencies. The DVC has experience in, and the institutional capacity for, project management. Therefore, there are no foreseeable problems in execution, especially since capacity-building activities are planned for the DVC in light of the scale and particulars of the program. The DVC operates within the public financial management system, using the State financial management information system for budget, accounting, and payment functions. In addition, the DVC has a solid internal audit unit and is overseen by Chile's Office of the Comptroller General of the Republic (CGR). The Bank has assessed the DVC's fiduciary risk as low, and has also confirmed a high level of development in the ministry's use of country systems for budgeting, cash management, accounting, and internal and external audits.
- 3.4 The EBITAN will be responsible for the technical coordination aspects, commissioning, and conducting the studies and other activities to be carried out under Components 1 and 3 ([optional electronic link 3](#)). Accordingly, the EBITAN will be responsible for: (i) implementing the activities needed for program execution; (ii) tracking and monitoring progress in and performance of the consulting, construction, and goods procurement contracts; and (iii) providing any information required by the DNV and the DVC to enable them to fulfill their responsibilities to the Bank. The EBITAN will coexecute Components 1 and 3 without transferring resources to the EBITAN. Component 2 will be executed by the DNV and the DVC, respectively.
- 3.5 As contractual conditions of the PETAN, the EBITAN is in the process of signing: (i) financing agreements with Argentina and Chile, respectively, specifying the manner in which the EBITAN is to request and obtain financing for the Agua Negra Pass International Tunnel; and (ii) payment agreements with both highway administrations with a view to delineating the responsibilities of each regarding the manner in which the EBITAN will issue the construction certificates and other payment instruments, as well as their delivery to the DNV and DVC, as applicable, for prompt payment.
- 3.6 **Execution arrangements.** To ensure effective execution and minimize the risk of delays, **the approval and entry into force of the program Operating Regulations for each country, in accordance with the terms agreed upon with the Bank, will be a special condition precedent to the disbursement of each loan.** They will detail the roles and responsibilities and contain the arrangements for execution, communication, and coordination between the executing and coexecuting agencies. To that end, these arrangements also envisage the contracting of specialized technical advisors, while management of the program will remain in the hands of the EBITAN Technical Committee and Administrative Committee, with support from said specialized technical advisors. While the EBITAN Administrative Committee will be supported by the specialized technical advisors for Agua Negra Pass International

Tunnel-related decision-making, the EBITAN Executive Committee, jointly with the works inspector, will be responsible for supervising the building contractor and any other consultants and/or suppliers that may need to be contracted in the course of program execution, and will be supported as part of the specialized technical assistance to facilitate operational management of the program.

- 3.7 **Evidence that the Agua Negra Pass International Tunnel design and construction contract has been put out for bids, awarded, and signed will also be a special condition precedent to the first disbursement of each loan**, thereby mitigating the completion risk and ensuring effective execution of the program within the established timeframes (paragraph 2.13).
- 3.8 The DNV and DVC, as applicable, will be individually responsible for: (i) administration and execution of the proceeds of each loan; and (ii) payments in a manner consistent with the works certificates and set of documents evidencing the consulting services to be performed and those already completed.
- 3.9 **Procurement.** The DNV and the EBITAN will procure goods and nonconsulting services and contract consulting services in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-9). The DVC will procure goods and nonconsulting services and contract consulting services using Chile's country procurement system pursuant to the terms approved by the Bank in December 2011 (document GN-2642-1) and as described in Annex III. All procurement must be included in the procurement plan approved by the Bank through the procurement plan execution and monitoring system to be determined by the Bank and the methods and ranges set forth therein, as described in Annex III. The procurement plan ([required electronic link 4](#)) includes the procurement to be carried out in the first 18 months. Financial management will be conducted in accordance with the principles and criteria set forth in the Financial Management Policy for IDB-financed Projects (document OP-273-6), the provisions of the Second Complementary Protocol to the Maipú Integration and Cooperation Treaty between Argentina and Chile relating to the Agua Negra Pass International Tunnel, which provides a framework for this program, and the legislation of each country.

## **B. Summary of results monitoring arrangements**

- 3.10 **Monitoring and evaluation.** The monitoring and evaluation plan ([required electronic link 2](#)) will cover execution of the operation in accordance with the indicators and objectives set out in the results matrix. To this end, the following EBITAN contractual and administrative documents have been used as means of verification: (i) signed contracts; and (ii) final reports completed and approved by the DNV and the DVC. In addition, the DNV and DVC will maintain supporting documents (e.g. attendance records, bibliographic material used, and contracting of experts) for the training conducted as a means of verifying its implementation. The Bank will supervise the program through inspection visits and administrative missions. The program execution units will maintain appropriate systems for compiling periodic information on physical and financial progress, and will keep such information up to date.

- 3.11 When tunnel construction has been completed and the tunnel has been in operation for three years, an ex post evaluation of the program will be conducted to measure the fulfillment of program objectives ([required electronic link 2](#)). This evaluation will include measurements of the new tunnel's operating performance, including the number of tunnel closing days per year (tunnel management reports), measurements and description of freight and passengers using the tunnel (customs and immigration reports from both countries), and measurements of travel time and cost savings for tunnel users. In addition, the tunnel's effect in facilitating international trade and its contribution to integrating the regional economies will be evaluated through information collected in surveys of tunnel users.

Development Effectiveness Matrix		
Summary		
<b>I. Corporate and Country Priorities</b>		
<b>1. IDB Development Objectives</b>	Yes	
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Economic Integration	
Country Development Results Indicators		
<b>2. Country Development Objectives</b>	Yes	
Country Strategy Results Matrix	GN-2870-1	Improvement of infrastructure for investment and inclusion.
Country Program Results Matrix		The intervention is not included in the 2017 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
<b>II. Development Outcomes - Evaluability</b>		
<b>3. Evidence-based Assessment &amp; Solution</b>	Evaluable	
3.1 Program Diagnosis	8.4	
3.2 Proposed Interventions or Solutions	3.0	
3.2 Proposed Interventions or Solutions	2.4	
3.3 Results Matrix Quality	3.0	
<b>4. Ex ante Economic Analysis</b>	8.5	
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0	
4.2 Identified and Quantified Benefits	0.0	
4.3 Identified and Quantified Costs	1.5	
4.4 Reasonable Assumptions	1.5	
4.5 Sensitivity Analysis	1.5	
<b>5. Monitoring and Evaluation</b>	5.5	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	3.0	
<b>III. Risks &amp; Mitigation Monitoring Matrix</b>		
Overall risks rate = magnitude of risks*likelihood	High	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation	Yes	
Environmental & social risk classification	A	
<b>IV. IDB's Role - Additionality</b>		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting, Internal Audit. Procurement: Information System, Comparison, Contracting Individual Consultant.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Gender Equality		
Labor		
Environment		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Operation AR-T1187 will support TAN with technical studies for its development and training and knowledge transfer for its institutional strengthening. Operation RG-T1230 will support TAN with a diagnostics of the transport system in border crossings.
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan		

Note: (\*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

This is the first operation of a conditional credit line for investment projects (CCLIP). The objective of the CCLIP is to contribute to improving cross - border integration between Chile and Argentina, expanding the region 's access to international markets through the Coquimbo - San Juan - Porto Alegre bi-oceanic corridor. The specific objectives are to improve the connectivity and efficiency of the logistics network of the region by building a high mountain tunnel, which will result in a substantial improvement of the existing crossing in the Paso de Agua Negra (PAN), time reduction of travel, increase of the resilience of the crossing to climate change (CC), and increase of the passengers and commerce that use the PAN. The specific objective of the first operation is to build the first two stages of the Agua Negra Tunnel (TAN). Not only will the TAN decrease the number of days that border crossings through tunnels are closed due to weather conditions from 40 to 10 per year, but it will also reduce travel time in the San Juan-Coquimbo corridor by four hours, with expected impacts on the Atlantic-Pacific trade integration, in the Coquimbo - San Juan - Porto Alegre corridor.

The economic analysis is well developed and uses reasonable assumptions and standard methodologies to measure ex-ante the expected benefits of the program. These methods, however, are not necessarily appropriate to measure the long-term benefits of such an intervention, nor can they easily monetize the benefits of economic integration. This is reflected in an economic analysis that shows that, using the standard horizon, the present value of benefits is less than the present value of costs. However, an extended economic analysis, even in the standard time horizon, which tries to quantify additional benefits, subject to uncertainty, shows that the economic analysis of the project is positive.

Given the uncertainty identified in the economic analysis, it is important that at the end of the CCLIP it is indicated that an ex-post cost-benefit analysis will be conducted. In particular this analysis will attempt to quantify empirically the gains associated with trade integration.

The overall risk of the operation is high, and this classification appears as appropriate, as well as the proposed risk mitigation actions.



## RESULTS MATRIX

<b>Project objectives:</b>	<p>The overall objective of the CCLIP is to help improve cross-border integration between Chile and Argentina, expanding the region's access to international markets through the Coquimbo-San Juan-Porto Alegre integration corridor.</p> <p>The specific objectives of the CCLIP are to enhance the connectivity and efficiency of the region's logistic network by building a mountain tunnel that will substantially improve the existing crossing at Agua Negra Pass. The results of this improvement will include reduced travel times, greater resilience of the crossing to the effects of climate change, and increased passenger and freight volume across the Agua Negra Pass. The objective of the first individual operation is to move forward with the construction of the first sections of the Agua Negra Pass International Tunnel.</p>
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### EXPECTED IMPACT

Indicators	Unit of measurement	Baseline		Targets		Means of verification	Comments
		Value	Year	Value	Year		
<b>Expected impact</b>							
Number of days per year on which high-capacity border crossings (tunnels) are closed	Number of days per year	40	2020	10	2032	Management reports on Argentina-Chile cross-border tunnels	The impact of the program will be felt when construction of the Agua Negra tunnel is completed

### EXPECTED OUTCOMES OF THE CCLIP (RG-O1655)

Indicators	Unit of measurement	Baseline (2020)	Target (2032)	Means of verification
<b>Outcome 1. Time savings for travelers using the Agua Negra border crossing</b>				
Travel time (hours) in the San Juan-Coquimbo corridor <sup>1</sup>	Hours	9	5 <sup>2</sup>	Assessment using HDM-4 to measure travel time, performed by consultants contracted by the EBITAN
<b>Outcome 2. Increase in number of users of the Agua Negra border crossing</b>				
Number of passengers passing through the Agua Negra border crossing	Annual traffic	61,950	260,609 <sup>3</sup>	Measurement report on users of border crossings approved by the EBITAN
<b>Outcome 3. Increase in regional trade</b>				
Freight volume transported through the Agua Negra border crossing	Thousands of tons of freight cleared through the customs offices of Argentina and Chile	0	Freight from Argentina to Chile: 202 Freight from Chile to Argentina: <sup>4</sup> 88	Argentine and Chilean customs clearance reports for the Agua Negra border crossing

<sup>1</sup> The San Juan-Coquimbo corridor includes Route 150 in Argentina, which spans 389 kilometers from the city of Patquía to the border with Chile, and Route 41 in Chile, spanning 255 kilometers from the Agua Negra border crossing to the port city of Coquimbo.

<sup>2</sup> [Optional electronic link 1.](#)

<sup>3</sup> [Optional electronic link 1.](#)

<sup>4</sup> The projected volume increase was taken from the socioeconomic assessment ([optional electronic link 1](#)), which considers freight volume as the sum total of detoured traffic and generated traffic, defined as follows: Detoured traffic is equal to 4% of the non-captive freight projected for the Cristo Redentor Pass. Generated traffic is equal to generated traffic in 2027, which is equal to annual average daily traffic generated by freight vehicles times 365 days of tunnel operation times the 2015 Cristo Redentor Pass load factor. According to the projected schedule, traffic through the Agua Negra border crossing will begin in 2027. A 12% annual growth in freight volume is assumed as of that date, based on a random Monte Carlo simulation that uses the variability rates of the Cristo Redentor Pass. Starting in 2033, the growth rate is expected to stabilize at 5%.

**OUTPUTS OF THE FIRST OPERATION UNDER THE CCLIP (RG-L1116)**

Outputs	Unit of measurement	Baseline	2020	2021	2022	Final target	Means of verification
<b>Component 1. Technical and management support for the EBITAN</b>							
Output 1. Technical assistance reports	Units	0	1	1	1	3	Receipt of reports approved by the EBITAN
Output 2. Environmental management report	Number of reports	0	1	1	1	3	Number of prepared reports approved by the EBITAN and by the highway administrations of both countries
Output 3. Social management report	Number of reports	0	1	1	1	3	Number of prepared reports approved by the EBITAN and by the highway administrations of both countries
Output 4. Communication and disclosure plan	Number of plans	0	1	1	1	3	Communication reports approved by the EBITAN
<b>Component 2. Support for the program's national and regional technical units</b>							
Output 5. Consulting services in support of the highway administrations	Number of consulting assignments	0	1	1	1	3	Completed consulting services reports approved by the DVC and the DNV
Output 6. Consulting services in support of regional governments	Number of consulting assignments	0	1	1	1	3	Completed consulting services reports approved by the DNV and the DVC
<b>Component 3. Construction and supervision</b>							
Output 7. Transformer station <sup>5</sup>	Number of stations	0	2	0	0	2	Certificate of construction and report of commissioning of the stations
Output 8. Construction site facilities	Number of studies	0	2	0	0	2	Builder installation reports approved by the EBITAN
Output 9. Works supervision reports	Number of reports	0	1	2	1	4	Semiannual outcome reports approved by the EBITAN
Output 10. Mining portal of the ventilation shaft on the Chilean side	Certificate of construction	0	0	1	0	1	Receipt of ventilation shaft construction report by the EBITAN
Output 11. Tunnel's mining portal <sup>6</sup>	Supervision report	0	0	4	0	4	Construction report prepared by the contractor and delivered to the EBITAN

<sup>5</sup> There is a transformer station at each of the tunnel entrances in both countries.

<sup>6</sup> There is a total of four mining portals: two in each country and two for each tunnel (north and south).

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

<b>Countries:</b>	Regional (Argentina and Chile)
<b>Project number</b>	RG-O1655 and RG-L1116
<b>Project name:</b>	Conditional Credit Line for Investment Projects (CCLIP) and First Operation of the Agua Negra Pass International Tunnel Construction Program
<b>Executing agencies:</b>	Argentine Republic: Ministry of Transportation (MINTRA) through the Highway Administration (DNV) Republic of Chile: Ministry of Public Works (MOP) through the Highway Administration (DVC) Agua Negra International Tunnel Agency (EBITAN)
<b>Fiduciary team:</b>	Brenda Álvarez and Juan Carlos Lazo (FMP/CAR); Francisco Lois (FMP/CCH); and David Salazar (FMP/CUR)

### I. EXECUTIVE SUMMARY

- 1.1 The Bank assessed the institutional capacity of the three coexecuting agencies: (i) the EBITAN; (ii) Argentina's MINTRA through the DNV; and (iii) the DVC of Chile's MOP.
- 1.2 The institutional capacity of the DNV was assessed in July 2016, covering the following systems: programming of activities and components; administrative organization; personnel management; goods and services administration; financial administration; and internal and external control.
- 1.3 Considering that the DVC works within the public financial management system, institutional capacity was assessed on the basis of the level of development and use of country systems, including matters relating to the financial accounting system, audits, procurement, and transparency legislation.
- 1.4 The EBITAN's institutional capacity was assessed on the basis of its founding documents and the actions currently under way to strengthen it.
- 1.5 The program does not include financing from other multilateral sources.

### II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCIES

- 2.1 The EBITAN will be responsible for coordination, commissioning, contracting and technical approval of the studies and advisory services for the Agua Negra Pass International Tunnel. Initially, the EBITAN will work with the two countries' highway administrations to manage fiduciary processes until such time as it is in a position to do so independently, in accordance with the agreements to be signed between the EBITAN and Chile, and between the EBITAN and Argentina.
- 2.2 The EBITAN will sign special financing agreements with the ministries of finance of the two countries. These agreements will specify the procedures through which the EBITAN will request and obtain financing for the Agua Negra International Tunnel. In addition, the EBITAN will present the payment

- statements to each country, the information that each country will need in order to process the respective payments, and information indicating the highway administrations' participation in the procurement processes ([optional electronic link 6](#)).
- 2.3 Argentina's MINTRA and Chile's MOP, acting through the DNV and the DVC, respectively, will be the technical agencies responsible for carrying out the program's activities by creating their respective execution units. Their institutional capacity has been assessed and the associated fiduciary risk is considered low.
  - 2.4 The EBITAN, the DVC, and the DNV will be the governmental technical agencies responsible for carrying out construction of the Agua Negra International Tunnel. In the case of Chile, the DVC has been responsible for the construction and maintenance of the country's highway network of approximately 80,000 kilometers, including tunnels, bridges, overpasses, and other structures. A significant portion of that network's construction has been financed by multilateral agencies. In the case of Argentina, the DNV has broad and proven experience executing loans from international lending agencies in general, and from the IDB in particular, both as executing agency and coordinator and as subexecuting agency of other loans executed by the former Ministry of Federal Planning, Public Investment, and Services (MINPLAN).
  - 2.5 The DVC uses the State Financial Management Information System (SIGFE) for budgeting, accounting, and payment functions. It also has a solid internal audit unit, which is overseen by the Office of the Comptroller General of the Republic (CGR). The Bank has conducted a diagnostic assessment on the level of development of the ministry's use of the following country systems: budget; cash management; accounting; government internal audit (CAIGG); and external audit, and found them to have a high level of development, consistent with the diagnostic assessment at the country level. The DNV uses the Integrated Financial Information System (e-SIDIF) and the unified local system (SLU) as financial administration systems, the use of which are mandatory for Argentine government agencies. These systems make it possible to identify program funds and financing sources. In addition, it uses the Financial Management Control System for External Loan Executing Units (UEPEX) as an information system. Internal control is in the hands of the DNV's execution unit. External control of funds from the IDB is audited by independent audit firms, but this is a decision to be taken at the time of annual contracting.
  - 2.6 To manage the procurement of goods, nonconsulting services, works, and consulting services, the DVC uses ChileCompra, a robust system with a modern and efficient electronic platform, through which most of the country's public procurement and contracting is transacted. For the contracting of studies and construction of public works, the DVC has extensive experience with systems for registering contractors and for qualifying and managing bidding processes. It has successfully achieved transparency in the allocation of resources and has established an image of credibility both among the general public and within the specialized industry. The advanced use of Chile's procurement system in Bank-financed operations was approved by the Bank's Board of Executive Directors through document GN-2642-1.

- 2.7 In late 2015, in the context of changes introduced by the executive branch, the DNV became an autonomous agency under the MINTRA. While the DNV is in the process of amending its organizational structure, including its primary responsibilities and activities, its execution capacity has reached 90% and the total value of the systems evaluated is 83.94%, indicating a low level of risk. The staff recently added to the financial management area have quickly adapted and are performing satisfactorily in close coordination with the Bank.
- 2.8 In both countries, the EBITAN will enter into a payment agreement with the execution unit of the DNV and DVC, respectively, spelling out the responsibilities of the parties as to the manner in which the EBITAN will issue payment statements, construction certificates, and other instruments, as well as the manner in which the highway administrations will supervise the works. This agreement, to be signed between the EBITAN, Chile's MOP, and Argentina's MINTRA, as applicable, will be a condition precedent to the first disbursement of the loan between the Bank and the respective country.

### III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 3.1 **Fiduciary risk relating to procurement and financing.** The main fiduciary risks involve potential delays in execution stemming from the design-build contract modality and the tunnel's technical complexity. A possible, albeit low, financial risk on the Chilean side concerns budget allocation and the preparation of the program's annual budgets, due to the magnitude of the budgets handled by the MOP, the experience of the execution unit, and the impact of potential adjustments to the procurement plans and annual work plans, owing to the reasons explained above. With respect to the DNV, however, the assessment identified the following areas for improvement, which will be verified during the first six months of the operation's execution: (i) monitoring mechanisms and procedures need to be formalized to ensure compliance with plans and programs; (ii) while the organization and its organizational chart have been validated, via resolution of the General Administrator, it is important to ensure that the approval decree is adopted, in accordance with public sector regulations; and (iii) the formal annual work plan must include outcome indicators and means of verification, identify those responsible for executing/coordinating activities, and include risks associated with the programming process.
- 3.2 **Mitigation measures.** Potential delays in the signing and execution of the design and construction contract will be mitigated through clauses and explicit guarantees in the bidding conditions, providing a deadline for signing the contract and including an indemnification or penalty clause. In addition, technical assistance will continue to be provided through the consulting firm contracted for the Agua Negra Pass International Tunnel to provide high-level technical support for procurement as necessary for execution. Similarly, the execution unit will continue to be staffed with professionals, including the hiring of additional staff with the capacities required by the unit. The execution unit will have a procurement specialist with public contracting knowledge and experience to ensure that procurement is conducted in a timely manner. The Bank will provide training for this specialist.
- 3.3 **Chile.** Chile:(i) will make full use of country financial management systems, and the DVC will make all procurement payments using the loan proceeds, whether

- such payments are made pursuant to contracts with the EBITAN or with the DVC; (ii) the highway administration's execution unit will include a financial management specialist to facilitate budget programming, prepare and remit to the Bank disbursement requests and supporting documentation for expenditures, and prepare the program's financial statements jointly with the finance and accounting division; (iii) program transactions will be recorded in the MOP's finance and accounting system and reported to the SIGFE through the transactions unit for international agencies; the program will also have its own chart of accounts; (iv) the program will be audited by an institution acceptable to the Bank; (v) the internal audit unit will follow up on any recommendations of the external audit; and (vi) the Bank will conduct ongoing training workshops.
- 3.4 **Argentina.** Argentina will follow the system being used in the operations in execution: (i) accounting through UEPEX; (ii) budget and cash management in coordination with the relevant national authorities; and (iii) management of internal and external control activities in accordance with the provisions of the program Operating Regulations.

#### **IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE CONTRACT**

- 4.1 **As a special condition precedent to the first disbursement, in addition to the conditions indicated in the Proposal for Operation Development, evidence will be provided of compliance with the special conditions described in clauses 3.01, 3.05, and 4.08 of the loan contract with Chile and clauses 3.01, 3.04, and 4.06 of the loan contract with Argentina with regard to operations 3867/OC-RG and 3868/OC-RG.** Both the entry into effect of the financing and payment agreements and the existence of program Operating Regulations are essential for execution of the operation. Therefore, despite this being described in the PETAN, it is important from a legal standpoint to include it in this and any successive agreements.
- 4.2 The exchange rate to be used for the rendering of accounts will be the rate provided in Article 4.10(b) of the loan contract. To determine the equivalence for reimbursement of expenditures charged against the loan or expenditures incurred in local currency that may be charged to the local counterpart, the agreed-upon exchange rate will be the prevailing rate on the first business day of the payment month. Due to limitations in the UEPEX system, the exchange rate to be used for an expenditure paid with IDB funds and local counterpart funds will be the rate for conversion of disbursements into local currency (pesification).
- 4.3 New advances may be requested once at least 65% of the total disbursed by the Bank has been justified, with supporting documentation to be provided within nine months.
- 4.4 The coexecuting agencies undertake to deliver, during the loan disbursement period and within 120 days following the close of each fiscal year, the program's financial statements prepared and audited by the accounting and finance department (DCyF) and duly audited by independent auditors acceptable to the Bank pursuant to previously agreed-upon terms of reference. The last of these statements will be submitted within 120 days of the date of the last loan disbursement.

## V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Procurement execution.** The DNV and the EBITAN will procure goods and nonconsulting services in accordance with the Policies for the Procurement of Goods and Works Financed by the IDB (document GN-2349-9) and contract consulting services in accordance with the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-9). The DVC will procure goods and nonconsulting services and contract consulting services through the use of Chile's country procurement system on the terms approved by the Bank in December 2011 (document GN-2642-1).
- (i) Plans call for direct selection, based on continuity of service, of the firm selected and contracted under the PETAN to provide technical assistance to the EBITAN. Accordingly, this firm will continue to provide its services in the context of the present operation, as provided in paragraph 3.10(a) of document GN-2350-9.
  - (ii) For purposes of renewing the contracts of consultants who were contracted under the PETAN and will continue to provide their services, a performance evaluation rating of at least "satisfactory" by the program's general coordinator will be sufficient. The executing agency will submit to the Bank a list of the consultants who are carrying out assignments and will continue to do so, with respect to whom the direct selection procedure will be applicable as provided in section V, paragraph 5.4(a) of the aforementioned policies. Review of the terms of reference for the contracting of services is the responsibility of the program's sector specialist.
  - (iii) **Training.** The training activities included in the program will be carried out through the contracting of consulting services or of individual consultants, as stipulated in subparagraph (i) hereof.
  - (iv) **Use of country procurement systems:** In Argentina, the information system of the country subsystems approved by the Bank will be used. In Chile, advanced use of the Bank-approved<sup>1</sup> country procurement system will apply to the procurement of: (i) goods and nonconsulting services, up to the threshold provided for national competitive bidding; (ii) consulting services, up to the threshold for the shortlist made up of domestic firms; and (iii) individual consultants, with no threshold. Above these thresholds, contracting and procurement wholly or partially financed by the Bank must comply with the procedures set out in the Bank's procurement policies (documents GN-2350-9 and GN-2349-9). Any system or subsystem subsequently approved by the Bank will be applicable to the operation. The procurement plan for the operation and its updates will indicate which procurement processes are to use the approved country systems.<sup>2</sup>

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<sup>1</sup> In December 2011, the Bank's Board of Executive Directors approved the advanced use of Chile's national procurement system in Bank-financed operations (document GN-2642-1), within the scope and thresholds established for Chile, which are currently: (i) US\$350,000 for works; (ii) US\$350,000 for goods and services; (iii) US\$500,000 for consulting services; and (iv) no Bank-established threshold for individual consultants.

<sup>2</sup> In the event that the Bank approves another system or subsystem, that system will be applicable to the operation, in accordance with the provisions of the loan contract.

- (v) **Advance procurement/ retroactive financing.** No retroactive financing is anticipated.
- (vi) The review of the technical specifications or terms of reference for the procurement items deemed of primary importance in the procurement plans to be prepared during execution of this loan operation will carry the Bank's prior no objection.

**Table 1. Threshold amounts for international competitive bidding and international shortlist (US\$ thousand)**

Method	ICB works	ICB goods and nonconsulting services	International shortlist for consulting services
Chile	5,000	350	500
Argentina	5,000	500	500

**Table 2. Main procurement items**

Activity	Type of bidding	Estimated date	Estimated amount (US\$)
<b>Consulting services</b>			
Technical assistance	QCBS	2018	4,500,000
Ongoing audit	QCBS	2018	350,000
Environmental and social management and communication	QCBS	2018	500,000
Supervision of tunnel construction	QCBS	2018	15,250,000
<b>Works</b>			
Tunnel construction	ICB	2017	244,100,000

\* Procurement plan (18 months) ([required electronic link 4](#)).

- 5.2 **Procurement supervision.** The procurement supervision method will be defined in the procurement plan. The thresholds are established in accordance with the executing agency's fiduciary capacity and may be amended by the Bank as that capacity changes.
- 5.3 The ex post procurement supervision method will be used primarily when Chile's validated country systems are used. For Argentina, ex post supervision will be defined as indicated in the preceding paragraph. Ex post review will look at process rather than the technical relevance of the expenditure, which will be reviewed ex ante by the program team leader in cases where the procurement plan so indicates.
- 5.4 Ex post review reports will not include physical inspection visits, given the executing agency's low level of risk; such visits will be replaced by verification of proof of receipt of the goods by the beneficiary entities during ex post reviews.
- 5.5 **Records and files.** Documentation of procurement processes will be kept at the offices of the EBITAN as the managing entity, as well as at the offices of the two highway administrations. For ex post reviews, it is very important to keep orderly procurement records and files, with all documentation classified and up to date.



## VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

- 6.1 **Programming and budget.** As established in the Framework Law on Financial Management (LAFE), the budget of the MOP is part of the national budget. The Ministry of Finance, through the Budget Office (DIPRES), is responsible for preparing the public-sector budget. The executing agency uses the SIGFE for budgetary management and control. Given the interrelationship between the budgeting systems, loan operations must be included in the national budget in order to have access to the resources, and therefore no problems affecting execution are foreseen in using the budgeting system. However, the general conditions of the contract require that the annual allocation of resources be documented and, accordingly, the executing agency will submit the budget law to the Bank.
- 6.2 In Argentina, the General Coordination Office for Administration and Finance is responsible for budgets and payments. Committed expenditures will be made by the appropriate financial areas and charged to the financial coordinator, reporting to the general coordinator of administration. If there is a need to expand or reallocate items, the execution unit requests the changes and takes steps to secure their approval. Budgetary credits are executed through quarterly and monthly commitment quotas on an accrual basis, allocated by the National Budget Office (Ministry of Finance). No problems are foreseen in terms of budget management, timeliness of local contribution, or system delays that might affect execution.
- 6.3 **Accounting and information systems.** In Chile, the CGR is responsible for keeping the national accounts and defining principles and rules for this purpose. However, the accounting function is decentralized and institutions record their transactions in their own accounts while the CGR consolidates them. The program will have a chart of accounts for recording activities in the SIGFE under a transactional unit. The executing agency has an adequate financial information system and internal control structure. The semiannual progress reports that the execution unit will present to the Bank must include a follow-up to the observations in the audit reports, as well as a reconciliation between the program accounting records of the DVC and those of the Bank.
- 6.4 The DNV uses the e-SIDIF and the SLU as financial administration systems that are valid for government agencies. These systems make it possible to identify program funds as well as the sources of financing. The UEPEX system is also used, although solely as an information system, not a management system. Consistent with the catalogue of accounts approved by the Bank, UEPEX records investments in the program by expenditure matrix category, both for the loan proceeds and for *pari passu* funds. Reconciliation of these systems is not automatic; thus, periodic reconciliations between them must be done manually. Accounting records will be kept on a cash basis and will follow International Financial Reporting Standards, as applicable, under the established country criteria. The required financial reports will be: (i) financial execution plan for up to 180 days following the request for advances of funds; (ii) audited annual financial statements for the program; and (iii) other reports as requested by the fiduciary specialists.

- 6.5 **Disbursements and cash flow.** The following disbursement methods established in the Financial Management Policy for IDB-financed Projects (document OP-273-6) may be used.
- 6.6 **Disbursement requests.** The Bank will process disbursement requests in accordance with the formulas required in the “Disbursement Guide,” once the conditions precedent to the first disbursement have been met. They must be approved by a designated official of the executing agency whose signature is on record with the IDB. Banking costs associated with the disbursements are the responsibility of the executing agency.
- 6.7 **Supporting documentation.** The rendering of accounts must include supporting documentation for payments (original receipts or photocopies thereof). The executing agency will keep the required accounting records and retain the originals of all supporting documentation, properly cross-referenced to the corresponding approved requests. Expenditure or payment information will be reviewed subsequent to the Bank’s disbursement of the funds.
- 6.8 **Eligible expenses.** The Bank will consider expenses that: (i) are necessary for the program and are in line with its objectives; (ii) obey policies and contracts or legal agreements of the program; and (iii) are appropriately recorded and supported in the executing agency.
- 6.9 **Final justification period and closing date.** The executing agency must submit the last advance request at least 30 days prior to the date of last disbursement, with the understanding that the justification of this advance will be submitted to the Bank during the closing period. No funds will be disbursed after the date of last disbursement. The executing agency will have a term of no more than 90 days after the date of last disbursement to submit the final justification for the advance, to return unjustified funds, and to carry out any other activity necessary to complement the full accounting of the operation. The period following the closing date (30 days) should be used solely for making final adjustments to the audited financial statements and for the executing agency to finalize the required signature and approval procedures.
- 6.10 **Internal control and internal audit.** The arrangements established for operations 3867/OC-RG and 3868/OC-RG are maintained with respect to both Chile and Argentina.
- 6.11 **External control and reports.** These will be as indicated in paragraph 4.4.
- 6.12 **Financial supervision plan.** Audited annual and final financial statements will be required, as well as semiannual financial information. The Bank will review the reports of the external auditors or internal audit units when it deems it appropriate.
- 6.13 **Execution mechanism.** The governments will provide financing resources for any procurement carried out by the EBITAN. This relationship between the EBITAN and each of the countries will be documented in an agreement known as the EBITAN-Country-Financing Agreement. The Bank will transfer the proceeds of the loan to the General Treasury of the Republic via a single current account held in the Central Bank for these purposes, as and when requested by the executing agency pursuant to the procedures and documentation that the Bank has established to this end. The executing agency will ask the Treasury to

- transfer the funds to a special account that will be opened to manage the proceeds of the loan.
- 6.14 The EBITAN will determine the scope, content, and term of the contracts to be negotiated for the design and construction of the tunnel; will sign the contracts for the studies and activities in question; and will oversee and approve the outputs prepared. It will also contract the studies and advisory services included under Component 1, and the activities associated with the contract included under Component 3, as the sole signatory to the corresponding contracts. In order for these activities to be paid by the countries, the EBITAN will send requests, reports, and other documents to the execution units of the countries so that they can proceed with payment in accordance with the domestic administrative provisions of their respective institutions.
  - 6.15 The DNV's IDB Coordination Unit (UCB) is being strengthened as part of that administration's restructuring, and is in the process of rounding out its staff, having already named the coordinator and some of the individuals who will work with him (mainly from the financial area). This unit is now formalizing its makeup and is in the process of hiring its remaining members, essentially technical personnel (a total of 11 individuals, all with broad experience in administering various aspects of loan management).
  - 6.16 For recording transactions, the program will have charts of accounts for the accounting and financial systems of the MOP approved in the SIGFE under the transactional unit for operations with international agencies and the UEPEX of the respective country.
  - 6.17 The semiannual reports presented to the Bank will show the status of the auditors' observations and a reconciliation of balances with the Bank's records.
  - 6.18 Any matter not clearly defined herein will be subject to the provisions of Operational Policy OP-273-6.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/17

Regional. Conditional Credit Line for Investment Projects (CCLIP) RG-O1655  
Agua Negra International Tunnel Construction Program

The Board of Executive Directors

RESOLVES:

1. To authorize the President of the Bank, or such representative as he shall designate, to enter into such agreement or agreements as may be necessary with the Argentine Republic and with the Republic of Chile to establish the Conditional Credit Line for Investment Projects (CCLIP) RG-O1655, for an amount of up to US\$1,500,000,000 chargeable to the resources of the Ordinary Capital of the Bank, to cooperate in the execution of the Agua Negra International Tunnel Construction Program.

2. To determine that the resources allocated to the above-mentioned Conditional Credit Line (CCLIP) RG-O1655 shall be used to finance individual loan operations in accordance with: (a) the objectives and regulations of the Conditional Credit Line for Investment Projects approved by Resolution DE-58/03, as amended by Resolutions DE-10/07, DE-164/07, and DE-86/16; (b) the provisions set forth in documents GN-2246-9 and GN-2564-3; and (c) the terms and conditions included in the Loan Proposal for the corresponding individual operation.

(Adopted on \_\_\_\_ 2017)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/17

Regional. Loan \_\_\_/OC-RG to the Argentine Republic. Agua Negra International Tunnel Construction Program. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) RG-O1655

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Argentine Republic, as Borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the Agua Negra International Tunnel Construction Program, which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) RG-O1655 approved on \_\_\_ 2017 by Resolution DE-\_\_\_/17. Such financing will be in the amount of up to US\$130,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_ 2017)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/17

Regional. Loan \_\_\_/OC-RG to the Republic of Chile. Agua Negra International Tunnel Construction Program. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) RG-O1655

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Chile, as Borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the Agua Negra International Tunnel Construction Program, which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) RG-O1655 approved on \_\_\_ 2017 by Resolution DE-\_\_\_/17. Such financing will be in the amount of up to US\$150,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_ 2017)