

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

ARGENTINA

**SECOND OPERATION UNDER THE CONDITIONAL CREDIT LINE FOR
INVESTMENT PROJECTS (CCLIP)**

(AR-O0006)

**PHASE TWO OF THE PROGRAM TO BUILD CAPACITY AND IMPROVE SAFETY
ON THE ACCESSES TO THE CRISTO REDENTOR BORDER CROSSING**

(AR-L1295)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Reinaldo Fioravanti (INE/TSP), Project Team Leader; Juan Manuel Leaño (TSP/CAR), Alternate Project Team Leader; Alejandro Taddia, Agustina Cocha, and Alba Taveras (INE/TSP); Carolina Benítez (TSP/CAR); Sandra Corcuera (INT/TIN); María Sofía Greco (LEG/SGO); Brenda Álvarez Junco and Juan Carlos Lazo (FMP/CAR); and Julio Rojas Lara and Prem Vidaurre de la Riva (VPS/ESG).

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REQUIRED

1. [Multiyear execution plan and annual work plan](#)
2. [Monitoring and evaluation plan](#)
3. [Environmental and social management report](#)
4. [Procurement plan](#)

OPTIONAL

1. [Program economic evaluation](#)
2. [Technical analysis of the Argentine road sector](#)
3. [Technical studies for the works](#)
4. [Supplementary environmental impact assessment](#)
5. [Regional integration annex](#)
6. [Argentina-Chile binational connectivity study](#)
7. [Cristo Redentor border crossing optimization study](#)
8. [Environmental impact assessment](#)
9. [Joint Report on Multilateral Development Banks' Climate Finance](#)
10. [Road safety annex](#)
11. [Technology annex](#)
12. [Public consultation plan](#)
13. [Cristo Redentor Border Crossing Agreement \(signed\)](#)
14. [Management control system](#)

ABBREVIATIONS

AADT	Annual average daily traffic
AGN	Auditoría General de la Nación [Office of the Auditor General]
CCLIP	Conditional Credit Line for Investment Projects
COSIPLAN	Consejo Sudamericano de Infraestructura y Planeamiento [South American Council of Infrastructure and Planning]
CRBC	Cristo Redentor border crossing
CRSC	Cristo Redentor System Corridor
DNV	Dirección Nacional de Vialidad [Argentine Highway Administration]
EIRR	Economic internal rate of return
eSIDIF	Integrated Financial Information System's virtual interphase
GEAF	Gerencia Ejecutiva de Administración y Finanzas [Administration and Finance Executive Management]
HDM-4	Highway Development and Management Model, Version 4
ICAS	Institutional Capacity Assessment System
ICB	International competitive bidding
IIRSA	Iniciativa de Integración Regional de Suramérica [Initiative for the Integration of South American Regional Infrastructure]
LIBOR	London Interbank Offered Rate
MERCOSUR	Southern Common Market
NCB	National competitive bidding
SCPP	Subgerencia de Coordinación de Programas y Proyectos BID [IDB Programs and Projects Coordination Unit]
SIGEN	Sindicatura General de la Nación [National Audit Office]
UEPEX	System for Execution Units of Projects with External Financing

PROGRAM SUMMARY

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(AR-O0006)

PHASE TWO OF THE PROGRAM TO BUILD CAPACITY AND IMPROVE SAFETY ON THE ACCESSES TO THE CRISTO REDENTOR BORDER CROSSING (AR-L1295)

Financial Terms and Conditions							
Borrower: Argentine Republic			Flexible Financing Facility ^(a)				
			Amortization period:				23.5 years
Executing agency: Dirección Nacional de Vialidad [Argentine Highway Administration] (DNV), a decentralized agency of the Ministry of Transportation			Disbursement period:				6 years
			Grace period:				7 years ^(b)
			Interest rate:				LIBOR-based
			Credit fee:				^(c)
Source	Amount (US\$)	%	Inspection and supervision fee:		^(c)		
IDB (Ordinary Capital):	324,300,000	61	Weighted average life:		15.25 years		
Local:	207,600,000	39	Approval currency:		United States dollar		
Total:	531,900,000	100					
Program at a Glance							
<p>Objective of the operation: The overall objective of the Conditional Credit Line for Investment Projects (CCLIP) is to help enhance cross-border integration between Chile and Argentina by reducing travel times and transportation costs on the Cristo Redentor System Corridor (CRSC) through the provision of transportation infrastructure and a border integration system to facilitate regional connectivity.</p> <p>The specific objective of the second operation is to improve service quality on the CRSC by reducing travel times and transportation costs. This will be achieved by expanding the Caracoles Tunnel, retrofitting the Cristo Redentor Tunnel, constructing bypass roads in urban areas, implementing rehabilitation of works, expanding capacity, improving road safety, and implementing a corridor management system.</p>							
<p>Special contractual conditions precedent to the first disbursement: The Ministry of Finance and the DNV will have signed a subsidiary agreement for the transfer of the loan proceeds and the execution of program activities (paragraph 3.3).</p> <p>Special contractual execution conditions: Prior to the commencement of each of the works, the DNV will have submitted evidence to the Bank of: (i) the release of 30% of the route for each of the works; (ii) the designation or hiring of a leader for each of the works; and (iii) the designation or hiring of works inspectors (paragraph 3.4). See also the environmental and social contractual conditions in Annex B of the environmental and social management report (required link 3).</p> <p>Special contractual condition: The deadline for the physical start of the works for the second operation will be four years (paragraph 3.5).</p>							
Exceptions to Bank policies: None.							
Strategic Alignment							
Challenges ^(d):	SI	<input type="checkbox"/>	PI	<input checked="" type="checkbox"/>	EI	<input checked="" type="checkbox"/>	
Crosscutting topics ^(e):	GD	<input type="checkbox"/>	CC	<input checked="" type="checkbox"/>	IC	<input type="checkbox"/>	

^(a) Under the 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.

^(b) Under the flexible repayment options of the Flexible Financing Facility, changes in the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan and the last payment date as documented in the loan contract.

^(c) The credit fee and inspection and supervision 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.

^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(e) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **General context.** Argentina and Chile share the longest international land border in South America, much of it delineated by 5,150 kilometers of the Andes mountain chain. Both countries have played a leading role in South American integration over the past few decades. Given the importance of physical integration, they have recently developed regional integration strategies ([optional link 5](#)) to plan and strengthen their infrastructure and to optimize and coordinate border management processes.
- 1.2 **Specific context.** Currently, there are 26 international border crossings between Chile and Argentina. Some of them are undergoing projects to enhance connectivity. These projects include the Agua Negra Pass International Tunnel Structuring Program (paragraph 1.18), for which the Bank approved a loan in 2016 to finance preinvestment studies in both countries (operations 3867/OC-RG and 3868/OC-RG) and a Conditional Credit Line for Investment Projects (CCLIP) in 2017 to finance the tunnel works (operations 4338/OC-RG and 4339/OC-RG).
- 1.3 **The Cristo Redentor border crossing (CRBC)** is the crossing between Argentina and Chile with the highest volume of heavy-vehicle traffic, with trucks accounting for 40% of that volume (797 per day). The CRBC connects the Argentine province of Mendoza to the Chilean Region V of Valparaíso. Freight transport through the CRBC totals 5.26 million tons annually and accounts for 77% of all highway trade with Chile.¹ By volume, 70% of the freight crossing the CRBC originates in Argentina, 15% in Chile, and 15% in other countries of MERCOSUR (Southern Common Market), underscoring this border crossing's critical role in regional and international integration.
- 1.4 Located at 3,300 meters above sea level, the CRBC consists of the Caracoles and Cristo Redentor tunnels. It is accessed on the Argentine side via National Route 7, which traverses 208 kilometers of mountainous terrain in the Cuyo region (Figure 1). Access on the Chilean side is provided by Route 60, which cuts across Region V of Valparaíso and passes through 13 municipalities (Figure 1). This corridor, consisting of the access roads in both countries plus the tunnels, is known as the Cristo Redentor system corridor (CRSC).

¹ Development Bank of Latin America, 2007.

Figure 1. Map of the CRSC



Source: Prepared by the project team.

- 1.5 The CRBC was identified by the Consejo Sudamericano de Infraestructura y Planeamiento [South American Council of Infrastructure and Planning] (COSIPLAN) in the Integration Priority Project Agenda as a priority border crossing of the MERCOSUR-Chile Interoceanic Corridor ([optional link 5](#)). The Argentine and Chilean governments, seeking to improve the CRSC's physical connectivity, established the CRSC Integration Committee in January 2016 at the request of the presidents of both countries, and with ratification by the respective foreign ministries, to prioritize and coordinate investments in the CRSC. The Bank is also supporting this effort with technical cooperation operations² to conduct studies on expanding the tunnels' capacity and to optimize the CRBC's control systems ([optional link 14](#)).
- 1.6 **Diagnostic assessment of the problem.** The CRSC's serviceability is frequently disrupted by weather events³ and heavy congestion, especially in urban areas⁴ and at border posts,⁵ reducing the efficiency of freight and passenger transport. A significant number of traffic accidents, many of them serious or fatal, occur on the

² Operations ATN/OC-15803-RG; ATN/OC-10620-RG ([optional link 6](#)); and ATN/OC-14926-RG.

³ Between 40 and 50 days per year due to snowstorms and snow accumulation.

⁴ In the cities of Mendoza, San Martín, Uspallata, and Luján de Cuyo.

⁵ Due to weaknesses in developing and coordinating the control processes of agencies at the border crossing, as well as deficiencies in building infrastructure, wait times can be 7 to 10 hours.

corridor as well.⁶ The leading causes of these problems include: (i) increased demand for, and a high proportion of, heavy vehicles,⁷ resulting in a need to expand capacity;⁸ (ii) an excessive number of dangerous curves, requiring realignment of curves, expansions with a third lane, and paved shoulders;⁹ (iii) competition between corridor traffic and urban traffic on some segments, requiring urban bypass roads to divide this flow;¹⁰ (iv) a lack of barriers to prevent disruptions caused by rockslides and avalanches¹¹ that cut off traffic flow, with the resulting risk to users; (v) the fact that the Cristo Redentor Tunnel only has a single lane in each direction (3.5 meters per lane) with no evacuation passageways, posing a danger when traffic accidents occur, and the Caracoles Tunnel—which runs parallel to the Cristo Redentor Tunnel—is only 5 meters wide and currently out of service; (vi) pavement defects (e.g. undulations and deformations) in the tunnels¹² and on road segments, with 88.6% of the corridor’s length in poor or average condition and requiring rehabilitation to improve surface conditions; (vii) problems with border post access and border control management,¹³ requiring improved management of border posts and optimized waiting times for passengers; (viii) lack of winter operations that make the route passable when it snows; and (ix) lack of driver information systems, which facilitate the issuing of alerts and warnings.

- 1.7 **Interventions proposed for the CRSC.** To mitigate the problems affecting transportation quality, interventions are planned on the Argentine side to improve road capacity and safety by expanding the Caracoles Tunnel to enable vehicle traffic; realigning the Cristo Redentor Tunnel; constructing bypass roads, passing lanes, snow sheds, and slope-protection works; using the “Safe Roads” design standard¹⁴ with paved shoulders; and realigning dangerous curves. Other planned investments are: (i) improving border post access; and (ii) implementing management systems for tunnels and the road corridor, and a driver information

⁶ In 2015, a total of 65 accidents occurred on National Route 7 between Provincial Route 41 and the Chilean border, leaving 7 people dead and 32 seriously injured. Of these 65 accidents, 20 were caused when vehicles left the road and overturned due to poor road conditions.

⁷ Traffic is growing at an approximate pace of 3% per year nationwide. Traffic on the CRBC increased by 5.3% per year over the past seven years, including a 9.3% increase between 2014 and 2015.

⁸ In Luján de Cuyo, the annual average daily traffic (AADT) is well above that in other segments. However, this route only has a single lane in each direction, which is not sufficient to enable free-flowing, safe travel.

⁹ Ten curves have been identified as dangerous on the 113-kilometer segment between the Guido curve (kilometer 1,115) and the Soberanía Nacional curve (kilometer 1,228), on the Argentine side.

¹⁰ The path of National Route 7 crosses Uspallata, which has a population of 3,810, AADT of 3,400 vehicles, and trucks crossing an urban area. Therefore, there are plans to build a bypass road for this city.

¹¹ Seismic activity and snow cause rockslides in the area. On the Argentine side, 31 spots were identified as particularly prone to landslides and avalanches.

¹² The Cristo Redentor Tunnel has issues due to the presence of approximately 300 meters of broken pavement.

¹³ Diagnostic assessments carried out as part of the consulting services for optimization of the Cristo Redentor border crossing (technical cooperation operation ATN/OC-10620-RG) and for the international design of the Cristo Redentor Management Control System (technical cooperation operation ATN/OC-14926-RG).

¹⁴ This standard calls for interventions in road segments that have safety problems, but also traffic levels below those that would justify road widening. It also calls for the construction of paved shoulders, a third lane for passing, road surface markings, signage, pedestrian bridges, realignment of curves, pedestrian crosswalks, safety enhancements on access routes to schools, and improvements to intersections.

- system.¹⁵ The interventions proposed on the Chilean side focus on Route 60 and include constructing bypass roads around urban areas (San Felipe-Panquehue), a viaduct and bridge in the San Felipe region, and the Los Libertadores border complex. A binational working group will coordinate the two countries' investments (paragraph 3.2).
- 1.8 **Financing for CRSC interventions.** The interventions targeting access roads on the Chilean side involve infrastructure awarded by concession to the private sector, and therefore the concession holder is responsible for the investments under the terms of the contract signed with the Chilean government. Tunnel works projects on the Chilean side will be funded with public resources. The Argentine government has requested Bank financing through this program for interventions on the Argentine side. Moreover, on 20 May 2018, Argentina and Chile signed an agreement setting forth the investment commitments for each country with respect to the works for both tunnels ([optional link 13](#)).
- 1.9 **CCLIP and the first operation.** To finance the works for the CRSC, the IDB approved a CCLIP (paragraph 2.1) in December 2017. In addition to the CCLIP, a first operation (loan 4418/OC-AR) was approved on the same date. It was structured as a multiple-works loan to support the construction of bypass roads in urban areas and supplementary safety-related works. Contracts have been signed and this operation is currently in execution in the Mendoza region through various works, including the Palmira bypass road and access road works for National Route 7 along the segment between San Juan and Mendoza, totaling US\$164.6 million or 82% of the amount approved for the first operation.
- 1.10 **Proposed interventions for the second operation.** These works will help solve the problems described above (paragraph 1.6) and will include specific eligibility criteria (paragraph 2.3). The eligibility of works will be subject to the Bank's no objection. The works projects prioritized by the Argentine government in the CRSC, which constitute the sample for the first operation, include expansion of the Caracoles Tunnel and retrofitting of the Cristo Redentor Tunnel.
- 1.11 **Problems specific to the Caracoles and Cristo Redentor tunnels.** The Caracoles Tunnel was inaugurated in 1910 and has a length of 3,124 meters, of which 1,564 are in Chile and 1,560 in Argentina. The Trans-Andean Railway crossed this tunnel, traveling between the Andes (Chile) and Mendoza (Argentina). This tunnel, which is currently out of service, is only used for emergencies and when the Cristo Redentor Tunnel is congested¹⁶ or obstructed by snow—causing delays in travel times and raising vehicle costs. Given its design characteristics and infrastructure quality, this tunnel poses a high risk of accidents, since it lacks evacuation passageways and the road travels along the railroad tracks. Both tunnels have parallel layouts, with distances that vary approximately from 75 meters to 320 meters (Figures 2 and 3). In addition, the current facilities present shortcomings with respect to safety and operating equipment ([optional link 10](#)).

¹⁵ Interventions that will enable a vehicle and freight tracking system as part of the design for technical cooperation operation ATN/OC-14926-RG, currently in execution.

¹⁶ [Operations manual for the Cristo Redentor and Caracoles tunnels.](#)

Figure 2. Map of the CRSC and works projects planned in Argentina



Source: Argentine Highway Administration (DNV).

Figure 3. Map with tunnel locations



Source: DNV.

- 1.12 **Evidence of the effective impact of infrastructure investments on regional integration.** Infrastructure investments help reduce transport costs with the resulting increases in economies' global competitiveness. Trade flows are highly sensitive to transport costs (Krugman and Livas, 1996). According to Venables (1996), improving transportation infrastructure helps reduce inequalities between the countries of a region, because the location of companies in areas with low logistical costs and high unemployment helps reduce unemployment and raise the population's living standards (Puga, 1999). This contributes to regional economic

convergence, which entails a reduction in the GDP-per-capita gap between member countries of an economic bloc.¹⁷ Lastly, 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 prior to shipment reduces trade by more than 1%, equivalent to a country distancing itself from its trade partners by about 70 kilometers on average.¹⁸ Empirical evidence from Latin American countries (Brazil, Chile, Colombia, Mexico, and Peru) shows that improvements in transport infrastructure with a 1% ad valorem reduction in domestic transport costs may increase exports by an average of 5% (see Moreira et al., 2013).¹⁹

- 1.13 **Evidence of the effective impact of roadworks projects on productivity.**²⁰ According to Fedderke and Bogetić (2009),²¹ interventions on infrastructure, such as interurban roads, facilitate investment or act as a multiplier, decreasing production costs and providing access to new markets. Therefore, they create new production, trade, and economic opportunities. With respect to impacts on transportation effectiveness, research by Felkner and Linkow (2014) on the impact of interurban roads in Georgia concluded that road improvements increased traffic volume an average of 44.2 vehicles per day (4.2%), while the average speed increased by 13.6 kilometers per hour (24.4%). The project also led to increased industrial investments in 19 communities near the improved roads, since the number of industrial facilities rose by 26.9%.
- 1.14 Evidence in Central American countries indicates that shortcomings in transportation infrastructure—especially border crossings—increase the cost of transporting goods by 4% to 12%,²² thus eroding the competitiveness of their economies. Lastly, Fernald (1999)²³ finds significant increases in total factor productivity after the expansion of highways in the United States after 1970.
- 1.15 **Technology and innovation to optimize and modernize the border corridor.** The adoption of cutting-edge technology that incorporates the concept of Intelligent Transportation Systems and is based on international practices such as the European Directive on safety requirements for tunnels will help improve safety monitoring in tunnels and vehicle and freight tracking along the corridor. It will also enhance incident management as well as safety and border control protocols. The design of the tunnels and the road corridor will include sensors, cameras, and fiber laser technology that will gather data to feed into the Integrated Corridor Management System ([optional link 14](#)). This system will assemble the information

¹⁷ The theory of regional convergence is found in Robert A. Mundell, *A Theory of Optimum Currency Areas*, American Economic Review (1961).

¹⁸ International evidence indicates that delays have a significant harmful impact on international trade (Djankov, S., et al., 2006. *Trading on Time*. World Bank Policy Research Working Paper 3909). Moreover, each day that a good is in transit accounts for between 0.6% and 2% of its value (David Hummels, 2012). www.researchgate.net/publication/5081736_Time_as_a_Trade_Barrier.

¹⁹ Moreira, Mesquita, et al., 2013. *Too Far to Export: Domestic Transport Costs and Regional Export Disparities in Latin America and the Caribbean*. Special Report on Integration and Trade. IDB.

²⁰ Djankov, S., C.S. Phan et al., 2006. *Trading on Time*. World Bank Policy Research Working Paper.

²¹ Fedderke, J. W., and Ž. Bogetić. *Infrastructure and growth in South Africa: Direct and indirect productivity impacts of 19 infrastructure measures*. World Development (2009).

²² *Competitive Advantage: Moving Ahead of the Global Competition*. IDB (2013).

²³ Fernald, John G. *Roads to prosperity? Assessing the link between public capital and productivity*. American Economic Review (1999).

- provided by the various systems installed in the tunnels and along the corridor and transmit it to authorities and monitoring stations, enabling real-time monitoring and control of the corridor. This innovative system provides a “smart tunnel and corridor”²⁴ ([optional link 11](#)).
- 1.16 **Road safety considerations** ([optional link 10](#)). The expansion to two one-way tunnels will help reduce the potential for serious head-on collisions.²⁵ Complemented by expanded clearances and cross-section widths, the project will enable large vehicles to use these tunnels (even those recently included in Argentine law). There will also be safe stopping locations for emergencies, as well as safer spaces for pedestrian traffic. Road safety will also be improved with modern lighting inside²⁶ and in tunnel-exit transition zones.²⁷ The implementation of the technologies mentioned in the previous paragraph will significantly contribute to road safety, because users can be informed about what is occurring in the tunnel, and can be prevented from entering when accidents happen inside. Connections between the tunnels will reduce further problems in case of accidents by providing evacuation routes. In addition, improvements to the National Route 7 corridor will help reduce accidents and subsequent fatalities by improving horizontal curves.²⁸
- 1.17 **Climate change.** During the design and construction of the road works under this operation, the potential effects of climate change in the Center-West region of Argentina were taken and will be taken into account. A study by the Argentine Institute of Snow Science, Glaciology, and Environmental Science²⁹ shows that climate change has resulted in very high variability of snowfall, with years of excess and deficit. However, in the region the trend is toward a decrease, with periods of higher rainfall coinciding with particular atmospheric circulation conditions such as the El Niño phenomenon. In addition to reinforcing drainage and bridge structures in a manner that takes into account the increased rainfall amounts, some specific infrastructure such as snow sheds and slope-protection works will be designed to address the snowfall and rainfall variability in the area.
- 1.18 **The Bank’s experience supporting regional transportation integration projects.** The Bank has broad experience in supporting efforts to design and implement regional transportation projects. Through the Fund for Initiatives for

²⁴ A management system enables monitoring departments to have real-time data (weight, license plate, type of vehicle, security seals, passengers, etc.) to verify the safety of the freight, vehicle, or driver based on the information declared.

²⁵ *Manual of Road Tunnels*. World Road Association (PIARC) (2015).

²⁶ Studies in Norway and Switzerland estimate that tunnel lighting can reduce injury accidents inside by 35%. *The Handbook of Road Safety Measures*. Elvik, R., and T. Vaa.

²⁷ International evidence shows that accident rates in tunnels are higher in the transition zones between the tunnel and the road above ground, because of changes in lighting as well as the wet conditions or slippery roads often found in these locations. The number of injury accidents per million vehicle kilometers in the last 50 meters before tunnels goes up to 0.30, compared with 0.13 for the center zone of tunnels. *The Handbook of Road Safety Measures*. Elvik, R., and T. Vaa.

²⁸ The effect of road reconstruction and rehabilitation, including road signs and improved road layouts in rural areas, was studied in several countries. Results showed an average reduction of 20% in road accident fatalities. *The Handbook of Road Safety Measures*. Elvik, R., and T. Vaa.

²⁹ *Impacto del cambio climático en los oasis del oeste argentino*, CONICET (2014).

Regional Infrastructure Integration, nine technical cooperation operations³⁰ have been financed in South America alone, including regional border and multimodal corridor studies. Between 2016 and 2017, the Bank approved: (i) a US\$40 million loan for the Agua Negra Pass International Tunnel Structuring Program to finance the preinvestment studies for the Agua Negra Tunnel (loans 3867/OC-RG and 3868/OC-RG);³¹ and (ii) a CCLIP to finance the Agua Negra Pass International Tunnel works (loans 4338/OC-RG and 4339/OC-RG). The Bank has been recognized for facilitating dialogue through coordination of multinational monitoring committees. This mechanism produced greater ownership of outcomes and has laid the foundation for coordinated implementation of future programs. The Bank's experience in electrical integration, both in the Central American Electric Interconnection System and in the Pacific Alliance, is noteworthy as it relates to integration infrastructure and harmonization of institutions and regional policies.³²

- 1.19 **The Bank's road sector expertise.** The Bank has financed many highway programs in Argentina and Chile. Since 2000, it has provided loans to 25 transportation operations in Argentina ([optional electronic link 2](#)) for more than US\$2 billion. It is currently executing the National Route 19 project (loan 3836/OC-AR) in Córdoba province, Argentina—which is part of the interoceanic corridor where the Agua Negra Pass International Tunnel is located—as well as the operation for the structuring of the Agua Negra Pass International Tunnel between Argentina and Chile (loan 3867/OC-RG). The Bank has also been a leader in the design and execution of border crossing operations with Ecuador-Colombia, Guatemala-Nicaragua, Argentina-Chile, and Costa Rica-Panama.³³
- 1.20 **Lessons learned.** The main lessons learned from regional integration projects and integration-related road projects have been incorporated in the design of this operation. These include: (i) interventions should follow a comprehensive and complementary approach; (ii) binational coordination is essential, at both the project management and technical levels; and (iii) bidding documents must be complete and include engineering designs of high technical quality. The Bank has taken these lessons into account by, respectively: (i) using the CCLIP instrument; (ii) forming a binational working group; and (iii) financing preinvestment studies.
- 1.21 **The Bank's country strategy.** The program is aligned with the IDB Group Country Strategy with Argentina 2016-2019 (document GN-2870-1) through the strategic objective of improving infrastructure for investment and inclusion. This results in improved road infrastructure quality and reduced logistics costs. The CCLIP, in its regional integration capacity, is aligned with the objective of improving export insertion levels and profile through the outcome of reduced export costs and times. This operation is included in the Update to Annex III of the 2018 Operational Program Report (document GN-2915-2).

³⁰ 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.

³¹ The Agua Negra Tunnel Binational Entity is operating and coordinating activities to ensure that the conditions precedent to disbursement of this loan are met in each country. The technical cooperation operations for this program are supporting the preparation of bidding documents.

³² [La integración de la infraestructura regional en los países andinos](#) (IDB), 2013.

³³ Operations 3324/OC-EC, 3484/BL-NI, 3488/OC-CR, PN-L1107, ATN/JF-14202-RG, and ATN/OC-14926-RG.

- 1.22 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is strategically aligned with the following development challenges: (i) productivity and innovation, under the criterion of provision of suitable, reliable, and affordable infrastructure and public services, as the interventions will enhance accessibility and facilitate connectivity by reducing travel times and transportation costs; (ii) economic integration, through improvements to transnational road infrastructure, by connecting not only the two countries involved in the project, but also the other countries in the region that will benefit from an upgraded road system on the MERCOSUR-Chile and the Pacific Alliance-Argentina axis of integration and development; and (iii) the crosscutting theme of climate change and environmental sustainability, as design and construction of the roadworks and snow sheds will address the recurrence of snowslides, rockslides, and flooding in the area of influence (paragraph 1.17). Approximately 6.06% of program resources will be invested in climate change mitigation activities, in accordance with the [Joint Multilateral Development Banks' Report on Climate Finance](#). These resources contribute to the IDB Group's target of increasing financing for climate change projects to 30% of all operations approved by the end of 2020.
- 1.23 The operation will contribute to the Corporate Results Framework 2016-2019 (document GN-2727-6) through the outcome indicator of kilometers of roads built or upgraded.
- 1.24 The program is also aligned with the Sector Strategy to Support Competitive Global and Regional Integration (document GN-2565-4) in the following criteria: (i) cross-country focus, as it will support national actions aimed at facilitating access to international markets; (ii) national subsidiarity, as it will help implement a project identified as a priority by the supranational initiative COSIPLAN/IIRSA; and (iii) regional additionality, through greater cooperation and its contribution to regional and local economic development.
- 1.25 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 transport infrastructure and fostering private-sector involvement in building and operating infrastructure; (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 Integration and Trade Sector Framework Document (document GN-2715-6) by prioritizing support for the development of integration corridors.
- B. Objectives, components, and cost**
- 1.26 The overall objective of the CCLIP is to help enhance cross-border integration between Chile and Argentina by reducing travel times and transportation costs on the CRSC through the provision of transportation infrastructure and a border integration system to facilitate regional connectivity.
- 1.27 The specific objective of the second operation is to improve service quality on the CRSC by reducing travel times and transportation costs. This will be achieved by expanding the Caracoles Tunnel, retrofitting the Cristo Redentor Tunnel, constructing bypass roads in urban areas, implementing rehabilitation of works,

expanding capacity, improving road safety, and implementing a corridor management system.

- 1.28 **Component 1. Infrastructure works and technology (US\$526.4 million).**
- 1.29 **Subcomponent 1.1. Civil works (US\$521.9 million).** In Argentina, this subcomponent includes widening the Caracoles Tunnel; construction of tunnel cross-connection passageways; retrofitting and repair of pavement in the Cristo Redentor Tunnel;³⁴ construction of bypass roads in urban areas, snow sheds, and slope-protection works;³⁵ works for capacity expansion, rehabilitation, and curve realignment; and other road safety works.
- 1.30 **Subcomponent 1.2. Corridor Management Control System (US\$4.5 million).** This subcomponent includes improvements to access roads to border posts, installation of fiber optics throughout the corridor to establish communications links, and other interventions related to implementing an Intelligent Transportation System.³⁶
- 1.31 **Component 2. Preinvestment studies (US\$5 million).** This component includes works supervision as well as preinvestment studies (engineering, economic, and socioenvironmental studies) for works and systems to be financed under this operation.³⁷
- 1.32 **Audits (US\$500,000).** Financing will be provided for an external audit and monitoring and evaluation costs.
- 1.33 **Cost.** Table 1 presents the consolidated budget by component:

Table 1. Budget by component (US\$)

Components	IDB contribution	Local contribution	Total
Component 1: Infrastructure works and technology	318,800,000	207,600,000	526,400,000
1.1: Civil works	314,300,000	207,600,000	521,900,000
Caracoles Tunnel	57,813,375	38,186,625	96,000,000
Cristo Redentor Tunnel	50,586,702	33,413,298	84,000,000
Supplementary rehabilitation and safety works in National Route 7	205,899,923	136,000,077	341,900,000
1.2: Corridor Management Control System	4,500,000	0	4,500,000
Cristo Redentor Management Control System and access to border posts	4,500,000	0	4,500,000
Component 2: Preinvestment studies	5,000,000	0	5,000,000
Studies, preinvestment, and support for civil works supervision	5,000,000	0	5,000,000
Audits	500,000	0	500,000
Total:	324,300,000	207,600,000	531,900,000

³⁴ Technical and socioenvironmental designs are available for tunnel works ([optional electronic link 3](#)).

³⁵ One of the purposes of reinforcing the structure of snow sheds, drains, and bridges is to increase the infrastructure's resilience to climate change, which is necessary due to fluctuations in snowfall and rainfall in the area.

³⁶ These include message signs with LED technology, video-surveillance cameras, and vehicle height detectors.

³⁷ Studies for works that are not part of the sample will be financed.

C. Key results indicators

- 1.34 The main impact expected is an increase in the volume of freight transported through both tunnels. The expected outcomes are: (i) fewer number of days per year that the CRSC is closed; (ii) increase in the number of vehicles traveling on the tunnel system; (iii) reduced operating costs and travel-time costs; (iv) reduced waiting times for passengers; (v) reduced waiting times for freight; and (vi) reduced waiting times for passengers to complete customs and immigration formalities.
- 1.35 **Technical and economic viability of the corridor projects and the sample project.** The approach selected to determine the technical and economic viability³⁸ was to evaluate the benefits of a road project by establishing transport cost savings for users, comparing “with project” and “without project” scenarios.
- 1.36 To determine the viability, there was a technical and economic evaluation of 21 homogeneous segments³⁹ consisting of all the specific projects for the CRSC (Figure 2), including road investments and the two tunnels.
- 1.37 The incremental economic benefits were quantified using the Highway Development and Management Model, Version 4 (HDM-4) to analyze the “with project” and “without project” scenarios, as determined by savings in overall transport costs (vehicle operating costs plus travel time costs) and savings in investment and maintenance costs. For the tunnels, the following additional benefits were calculated: (i) reduce the annual number of impassable days by 25; and (ii) reduce the opportunity cost for carriers due to delays by 25 days per year.
- 1.38 The evaluation parameters were: (i) analysis period of 20 years; (ii) discount rate of 12%; (iii) financial to economic value conversion factor of 0.707;⁴⁰ (iv) deadlines for works execution were prepared based on an estimated execution program for the entire corridor; (v) annual average daily traffic updated as of the startup year, with a 3% annual increase; (vi) normal traffic growth rate of 3% starting in 2018; (vii) for bypass road execution, traffic is detoured toward these roads with shorter paths and using a four-lane speed-capacity model; and (viii) third-lane segments use a three-lane speed-capacity model.
- 1.39 **Cost-benefit analysis results.** Based on this analysis, the program is found to be robust, with an economic internal rate of return (EIRR) of 22.4% and a net present value of US\$253.52 million. The total invested from 2019 to 2024 will be US\$543.6 million, which will be invested in 188.5 kilometers to develop the corridor for National Route 7 and its access roads, from the intersection with National Route 40 in Luján de Cuyo to the border with Chile. The sensitivity analysis showed that by increasing costs by 20%, the EIRR is 18.8%. With a 20% decrease in benefits, the EIRR is 18.1%. In a combined scenario of 15% in cost increases and 15% in benefit reductions, the EIRR is 16.8%. One of the sensitivity analysis scenarios estimated investments in tunnels independently, yielding an EIRR of 10.7%. The

³⁸ The evaluation involved technical aspects because it included a simulated deterioration for every homogeneous segment that was assessed.

³⁹ This includes road widenings, third lanes, rehabilitations, curve realignments, bypass roads, and investments in both tunnels. The comprehensive plan resulted in the design of 21 homogeneous segments that took into account demand characteristics, surface conditions, and type of road (concrete or asphalt), since the deterioration models are different.

⁴⁰ Office of the Cabinet Chief through the Argentine Public Investment Administration.

results showed that investments in the CRSC are profitable. In addition, tunnel investments showed reasonable rates of return that are aligned with estimates for these types of investments.⁴¹

- 1.40 **Direct beneficiaries.** The direct beneficiaries are passengers and freight carriers who pass through the cities of Mendoza, Potrerillos, Uspallata, and cities near the corridor. These direct beneficiaries are quantified through the average vehicle volume traveling on National Route 7 and National Route 40 to the border with Chile on the Argentine side. The average flow is between 7,650 vehicles per day at the start of the corridor and 2,350 vehicles per day at the border crossing with Chile. They will benefit from reduced vehicle operating costs and travel times, and increased safety levels.
- 1.41 **Indirect beneficiaries.** The indirect beneficiaries of the program are the 1,266,822 residents of the cities in Mendoza province that are located in the seven⁴² departments through which National Route 7 passes on the segment from Palmira to the vicinity of Potrerillos, as all of them will benefit from the socioeconomic impact of the work, taking into account the first and second operations under the CCLIP. The indirect beneficiaries also include transportation service providers, because reduced travel times for products enable them to increase the number of daily trips undertaken with the same number of vehicles.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 **Type of financing.** This operation is structured as a multiple-works investment loan of up to US\$531.9 million, consisting of US\$324.3 million from the Bank's Ordinary Capital and US\$207.6 million in local counterpart funding, with a six-year disbursement period. A CCLIP was selected due to its strategic nature, because it provides for medium- and long-term horizons for planning and a frame of reference for resources. The multiple-works instrument was chosen in order to include smaller works with similar characteristics but independent of each other.

Table 2. Disbursement schedule

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
US\$ millions	33.02	140,836	135,006	112,607	102,950	7.48	531.9
%	7	26	25	21	19	2	100

- 2.2 **Eligibility of the second operation.** This operation meets all the eligibility criteria set forth in documents GN-2246-9 and OP-1622-1: (i) the executing agency of the program is the same as that of the previous program; (ii) the program (AR-L1279) in execution with the credit line is satisfactory and will probably meet its development objectives; (iii) the executing agency has the same capacity; (iv) at least 75% of the funds of the previous program within the credit line have been committed

⁴¹ *Tasa de descuento social y evaluación de proyectos: algunas reflexiones prácticas para ALC*, IDB (2016); *Discounting Costs and Benefits in Economic Analysis of World Bank Projects*, OPSPQ (May 2016).

⁴² These include the provincial capital city of Mendoza and the departments of Guaymallén, Maipú, Junín, Godoy Cruz, Las Heras, and Luján de Cuyo.

(paragraph 1.9); and (v) financial and operational reports were prepared and submitted in a timely manner and are of acceptable quality.

- 2.3 **Eligibility criteria for works in the second operation.** The eligibility criteria for works financed by the second operation are: (i) to be located on the CRSC or its access roads; (ii) to be classified as one of the following: (a) expansion or retrofitting of tunnels; (b) construction of bypass roads in urban areas; (c) expansion of road capacity and construction of passing lanes; (d) realignment of curves; (e) snow sheds and slope-protection works; or (f) safety-related works; (iii) to have a sufficient level of technical, environmental, and social feasibility, including that they cannot be classified as a category “A” operation; and (iv) to be economically feasible, as measured by the EIRR. The eligibility of works will be subject to the Bank’s no objection.
- 2.4 **Works of the sample project.** The works of the representative sample on the Argentine side of the border consist of the expansion of the Caracoles Tunnel, the comprehensive upgrading of the Cristo Redentor Tunnel, and the construction of interconnection galleries between the two tunnels ([optional electronic link 3](#)). These works will consolidate the tunnel system’s operability with modern features and a high level of safety, based on international standards. The estimated cost for the Caracoles Tunnel expansion and passageway construction is US\$96 million, while the estimated cost for the Cristo Redentor Tunnel enhancement is US\$84 million. These works represent approximately 33% of the total amount for the second operation.

B. Environmental and social risks

- 2.5 **Environmental and social safeguards.** The expansion of the Caracoles Tunnel and retrofitting of the Cristo Redentor Tunnel are a representative sample of the program, which has been classified as a category “B” operation. There are no homes located in the work area, or economic activities that would be significantly impacted by the works, since there are no plans for road closures. The program will not have an impact on natural habitats, cultural sites, or indigenous populations. There is a business in the area of the sample works, which will remain accessible during construction.
- 2.6 The socioenvironmental impacts during construction and operation will be localized and of short to medium term, and there are effective mitigation measures with which the transportation and construction sector has experience. The construction stage presents the following environmental risks or impacts: (i) soil and water pollution caused by hazardous materials, including pollution of groundwater due to excavation activities; (ii) changes in the terrain (generation of new pit slopes) due to borrow pits and garbage dumps; (iii) impacts on rivers and the runoff regime due to filling of borrow pits, garbage dumps, and water intakes; (iv) landscape changes; and (v) generation of hazardous waste by removing fiber cement containing asbestos. There will also be impacts from setting up temporary campsites during construction. To mitigate these risks, specific measures were included in the environmental and social management plan. These include management programs for explosives, asbestos, and remediation of environmental liabilities (quarries and garbage dumps used for tunnel construction several decades ago); risk management for natural disasters; and occupational and community health and safety management.

- 2.7 **Social impacts.** The arrival of foreign workers may impact the quality of public services due to increased demand from more people or construction workers (electricity, drinking water, telecommunications services, and healthcare). In addition, increased traffic from heavy machinery could cause accidents that impact the population or road users. Specific plans were developed to mitigate these potential social impacts. A mechanism to address complaints and claims was developed and implemented.
- 2.8 **Gender.** As part of the framework of the Argentina-Chile Meeting of the CRBC Integration Committee, the Working Group on Gender⁴³ was established to mainstream gender actions in the dialogue between the two countries. The Bank will support this endeavor with its experience and best practices for integrating women into the workforce and providing transport infrastructure services with a gender inclusion perspective.
- 2.9 During the operation stage, having more traffic in the tunnel is not expected to have a significant negative socioenvironmental impact, since the works will improve traffic safety inside the tunnel. In addition, the cross-connection passageways for vehicles and pedestrians will enable a more efficient response in emergencies.
- 2.10 If future works have impacts with respect to resettlement, indigenous populations, economic displacement, or other impacts other than those related to the sample, specific mitigation measures will be implemented based on the environmental and social management framework included in the strategic environmental and social assessment that was prepared for the operation.
- 2.11 An evaluation of the environmental and social impacts of this operations was conducted. Accordingly, and in fulfillment of the Bank's operational policies, programs to manage and mitigate these impacts have been instituted. In addition, robust public consultations have been held in both Argentina and Chile.

C. Fiduciary risks

- 2.12 **Fiduciary considerations.** The institutional capacity assessment of the Administration and Finance Coordination Office (GEAF) performed using the Institutional Capacity Assessment System (ICAS) tool in 2018—coupled with the fiduciary team's experience with the operations currently in execution by the DNV—demonstrates that the DNV's execution capacity is acceptable to the Bank and has a low level of risk, as indicated in Annex III. However, opportunities for improvement were identified, which will strengthen internal coordination among the program's managing units. Therefore, fiduciary strengthening measures will be implemented, as necessary, to ensure effective program execution. The ICAS report details the suggested strengthening actions, which include: (i) formalizing monitoring and supervision mechanisms or procedures to help fulfill program commitments and objectives; (ii) reviewing and improving, as necessary, the fiduciary processes in order to streamline them; and (ii) including outcome indicators and means of verification in the annual work plan and the monitoring and evaluation plan ([required link 2](#)).

⁴³ Operating since 2011, the Working Group is attached to the Integration and Gender Commission. According to its last minutes of meeting (May 2018) the Women's Rights Office, a dependency of the Argentine Foreign Affairs Ministry, also participates.

D. Other risks

- 2.13 **Public management and governance risks.** To mitigate the identified medium-level risk related to potential coordination issues between Argentina and Chile for tendering and execution of tunnel works, the binational technical working group will be strengthened (paragraph 3.2). This working group will be responsible for managing the timetable of CRSC-related works in both countries, as well as for validating technical solutions and supervising design work, procurement processes, and execution of tunnel works.
- 2.14 **Macroeconomic risk.** There are macroeconomic risks associated with high public and external financing needs, the existence of excess liquidity due to high short-term debt stocks at the Central Bank, and a high current account deficit. These factors make the country vulnerable to increased tightening of global financial and trade conditions. The government has taken significant measures to mitigate these risks, starting with a US\$50 billion Stand-By Arrangement with the International Monetary Fund. Under this arrangement, the government agreed to significantly accelerate fiscal consolidation and suspend monetary financing of the Treasury, contributing to the targets of disinflation and reduced financial vulnerability. In addition, a decision was made to eliminate the Central Bank's draft stock by year-end 2018, which will ease the pressure on external liquidity. Amid growing financial volatility, however, the government reformulated its economic program in September 2018, reaching a new arrangement with the IMF. The new program increases IMF financing by US\$7.1 billion through 2021, and provides for the advance payment of the disbursements scheduled for 2018 and 2019, amounting to US\$19 billion. The devaluation of the currency and inflation may result in price increases above projections, thus impacting the cost of the works. Accordingly, bids and contracts will be closely monitored to ensure that physical scope of the works proposed in the operation is attained.
- 2.15 **Sustainability of investments.** To ensure that the investment is sustainable, the DNV will be responsible for maintaining the roads addressed in this operation and will include them as part of its force-account funding allocated to District IV of the national road network in Mendoza.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower and executing agency.** The borrower for this operation will be the Argentine Republic, and the executing agency will be the DNV, a decentralized agency of the Ministry of Transportation. The operation will be coordinated by the GEAF, through the IDB Programs and Projects Coordination Unit⁴⁴ (SCPP) already in place at the DNV for the execution of Bank loans. A program leader will be designated. The responsibilities of the SCPP will include: (i) monitoring fulfillment of contractual clauses established in the loan contract; (ii) assisting in procurement processes for works, goods, and services; (iii) processing loan disbursements with the Bank and submitting updates on the physical progress of the works; (iv) making arrangements for the external audit and dealing with control agencies;

⁴⁴ Formerly the program coordination unit.

- (v) coordinating the preparation and submission of mandatory periodic reports to the Bank, including the financial plan, the procurement plan ([required link 4](#)), and the annual work plan ([required link 1](#)); (vi) submitting reports—including audit, progress, and evaluation reports—and other program documents to the Bank; (vii) assisting in supervision and monitoring of works and service contracts;⁴⁵ (viii) coordinating portfolio reviews among the National Office of Projects with International Lending Agencies, the Office of the Chief of the Cabinet of Ministers, and the DNV; and (ix) coordinating the progress of indicators and financing matrices established in the loan contract. The DNV has fiduciary experience in Bank-financed programs and, acting through its different areas, will carry out strategic monitoring of the program and ensure coordination between the areas involved in program execution.
- 3.2 **Binational coordination.** To coordinate the interventions to be carried out in the CRSC, Argentina and Chile formed a binational technical working group to manage the timetable for studies and works on the corridor and to validate the technical solutions for the tunnels. The working group meets every two months, is tied to the infrastructure group of the CRSC (paragraph 1.5), and has a coordinator from each country, representing Argentina's DNV and Chile's Ministry of Public Works (paragraph 1.8). The countries jointly prepared the studies and preliminary bidding documents (with support from the Bank and a binational technical-cooperation operation). The bidding will take place separately in each country. Consequently, the bidding documents will be adapted to local regulations.⁴⁶ Chile already included the tunnel works in its budget. Argentina is in the process of preparing bidding documents. During the bidding and execution of works stages, both highway administrations will include in the binational working group the qualified specialists needed for each stage of the program. This will facilitate progress monitoring and ensure the continuity of the construction systems.⁴⁷
- 3.3 **As a special contractual condition precedent to the first disbursement of the financing, the Ministry of Finance and the DNV will have signed a subsidiary agreement for the transfer of loan proceeds and the execution of program activities,** in order to fulfill the country's domestic requirements, at the borrower's request.
- 3.4 **Special contractual execution conditions.** Prior to the commencement of each of the works, the DNV will have submitted evidence to the Bank of: (i) the release of 30% of the route for each of the works, so as to ensure uninterrupted execution for the first year; (ii) the designation or hiring of a leader for each works project to serve as the point of contact in dealing with the Bank, and to be linked to the DNV's functional units, to ensure the integration of all program activities, including procurement, financial, socioenvironmental, and technical aspects; and (iii) the

⁴⁵ Works supervision will be carried out by an in-house team at the DNV, coordinated by a program leader and with support from a works supervisor.

⁴⁶ Because the bidding processes are being held separately, the works may be awarded to different contractors.

⁴⁷ With the view to coordinating the execution and supervision of works, a protocol is being developed to govern the specific activities, management, and monitoring of this operation between the two highway administrations.

- designation or hiring of works inspectors to ensure that they assist in the works from their inception and on a full-time basis.
- 3.5 **Special contractual condition.** The deadline for the physical start of all program works will be four years, given that as part of the planned timetable, smaller works are expected to start during the fourth year.
- 3.6 **Procurement.** Works, goods, and consulting services will be procured in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9). All procurement processes must be included in the procurement plan ([required link 4](#)) approved by the Bank through the Procurement Plan Execution System and adhere to the methods and ranges indicated therein, as described in Annex III.
- 3.7 **Disbursements.** The program will disburse resources using the advances of funds modality, based on actual liquidity needs. The DNV may request a new advance of funds when justification has been provided for at least 80% of the total previous advance. Supervision will be on an ex post basis, as in previous loans to the same executing agency, which were free of qualifications by external auditors in their annual reviews.
- 3.8 **External audit.** The borrower will submit to the Bank, on an annual basis within 120 days after the end of each fiscal year, the operation's financial statements duly audited by an independent auditing firm acceptable to the Bank. The cost of the audit will be financed with the loan proceeds.
- B. Summary of arrangements for monitoring results**
- 3.9 **Monitoring and evaluation.** The objective of the monitoring and evaluation plan ([required link 2](#)) is to track program execution, implementation of the proposed activities, and physical and financial execution of the outputs. The plan consists of three principal areas of monitoring: (i) program administration and control; (ii) activities and outputs; and (iii) program outcomes. Ex ante and ex post methodologies and ex post cost-benefit analyses will be used to monitor and evaluate program outcomes. The evaluation is based primarily on use of HDM-4 (paragraph 1.37), an empirical methodology to estimate the benefits of road infrastructure improvements for highway users (reductions in vehicle maintenance costs, fuel consumption, and travel times). The executing agency will prepare a final evaluation report and submit it to the Bank within 90 days after the date of the last disbursement of the loan proceeds. This report will serve as an input for the program completion report.

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Economic Integration -Climate Change and Environmental Sustainability	
Country Development Results Indicators	-Roads built or upgraded (km)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2870-1	Infrastructure improvement for investment and inclusion
Country Program Results Matrix	GN-2915-2	The intervention is included in the 2018 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		
3. Evidence-based Assessment & Solution	Evaluable	
3.1 Program Diagnosis	9.6	
3.2 Proposed Interventions or Solutions	3.0	
3.3 Results Matrix Quality	3.6	
3.3 Results Matrix Quality	3.0	
4. Ex ante Economic Analysis	9.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	3.0	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	1.0	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	0.0	
5. Monitoring and Evaluation	8.5	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	6.0	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Medium	
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	B	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting.
Non-Fiduciary	Yes	Strategic Planning National System.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
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		

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

The Corredor Sistema Cristo Redentor (CSCR for its initials in Spanish) is a roadway that connects Argentina and Chile and receives 77% of total terrestrial commerce between the two countries. The government of Argentina is seeking to improve its physical condition given a high demand for its use and that its transitivity is affected by frequent interruptions due to storms and snow and high congestion as well as existing roadway conditions that sometimes result in grave accidents. One of its main tunnels has only one lane in each direction and does not have evacuation capacity and the other tunnel is inoperative. Thus, this second operation under the CCLIP will contribute to improving the quality of service in the CSCR reducing both the time and transport costs by widening the Caracoles Tunnel and reopening the Cristo Tunnel through rehabilitation works and investments in higher capacity and security. The Results Matrix is adequate and captures benefits such as the reduction in the number of days a year the CSCR is closed as well as in the costs and times to traverse it. The cost benefit analysis shows the project is viable. At closure, this economic analysis will be updated.

RESULTS MATRIX

Program objective:	<p>The overall objective of the Conditional Credit Line for Investment Projects (CCLIP) is to help enhance cross-border integration between Chile and Argentina by reducing travel times and transportation costs on the Cristo Redentor System Corridor (CRSC) through the provision of transportation infrastructure and a border integration system to facilitate regional connectivity.</p> <p>The specific objective is to improve service quality on the CRSC by reducing travel times and transportation costs. This will be achieved by expanding the Caracoles Tunnel, retrofitting the Cristo Redentor Tunnel, constructing bypass roads in urban areas, implementing rehabilitation of works, expanding capacity, improving road safety, and implementing a corridor management system.</p>
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EXPECTED IMPACT

Indicator	Unit of measure	2016 baseline	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Means of verification	Comments
Impact 1: Increased volume of freight transported on the Libertadores and Caracoles tunnels										
Volume of freight transported on the Libertadores and Caracoles tunnels	Millions of tons per year	2.39 ¹	2.61	2.69	2.77	2.85	3.05	3.27 ²	Sources: 2016 traffic studies by the DNV and average freight per truck. ³ DNV annual activity report.	Baseline: 2.39 million tons per year, for baseline year 2016. Target: 3.27 million tons per year in 2024 after the opening of the two improved tunnels in 2023.

¹ The baseline is for 2016, with 94 light trucks per day (freight load of 18 tons per truck) and 249 heavy trucks (average freight load of 30 tons per truck), and with 74% of heavy trucks and 59% of short-distance light trucks carrying freight. The annual traffic growth is 3% until the year when both tunnels are in service, and an additional 4% for traffic generated when both tunnels are in service in 2023 and 2024.

² Target for 2024 after the two tunnels are in service (2023). Based on traffic studies updated to 2016 by the Argentine Highway Administration (DNV) and projected to 2024, with the Caracoles Tunnel being in operation by 2021 and the Cristo Redentor border crossing (CRBC) by year-end 2023.

³ Source: [DNV origin/destination inspections](#). The baseline was calculated from 2016 inspections. The ex post analysis will include new inspections.

EXPECTED OUTCOMES

Indicators	Unit of measure	2016 baseline	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Total	Means of verification	Comments
Outcome 1. Reduced number of days per year of road closures on the CRSC											
Number of days per year that the CRSC is closed ⁴	Number of days per year	40 ⁵	40	40	40	40	15	15 ⁶	-	DNV management reports with statistics on road closures per year on the CRSC.	Baseline: 40 days per year on average. Target: The risk of road closures at locations prone to avalanches, landslides, and snowslides will be reduced by building snow sheds. The target will be to build 15 snow sheds and slope-protection works during the second operation, thereby reducing the average number of road-closure days per year by 25 days (reduction from 40 to 15 days).
Outcome 2. Increased number of vehicles traveling on the Libertadores and Caracoles tunnel system⁷											
Cars traveling on the system	No. of vehicles per day	1,974	2,157	2,222	2,288	2,357	2,522	2,699	-	Annual traffic measurements by the DNV. Annual average daily traffic (AADT) and vehicle characteristics indicators measured by the DNV. ⁸	Baseline: "Without project" equals 0 for AADT on the Caracoles Tunnel and the current traffic on the Libertadores Tunnel. Target: AADT on the tunnels is estimated on the basis of the DNV's traffic study.
Buses traveling on the system		33	36	37	38	39	42	45	-		

⁴ Due to avalanches and landslides resulting from adverse weather and geotechnical conditions.

⁵ Snowslide- and rockslide-related road closures occur on an estimated 40 days per year, requiring the construction of additional snow sheds ([DNV project profile](#)).

⁶ The construction of 16 snow sheds on the corridor is expected to reduce road closures from 40 to 15 days per year.

⁷ No vehicles travel on the Caracoles Tunnel, which is currently out of service. Once improvements are completed in the Caracoles Tunnel (2021) and the CRBC (2023), capacity will increase and traffic will be divided between the two tunnels.

⁸ Idem 3.

Indicators	Unit of measure	2016 baseline	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Total	Means of verification	Comments
Light trucks traveling on the system		94	103	106	109	112	120	129	-		
Heavy trucks traveling on the system		249	272	280	289	297	318	341	-		
Outcome 3. Reduced operating cost and travel-time cost as part of the overall travel cost⁹ by vehicle type on the Libertadores and Caracoles tunnel system											
Operating cost per km per vehicle in the tunnel system (cars)	US\$ per km per vehicle	0.57	0.57	0.63	0.63	0.63	0.52	0.52	-	DNV annual activity report, based on HDM-4	<p>Baseline: The total annual operating cost for cars, buses, light trucks, and heavy trucks.</p> <p>Target: Overall travel cost based on the expanded capacity with the Caracoles Tunnel being in service and the expansion and improvement of the Libertadores Tunnel.¹⁰</p> <p>Source: HDM-4. Modeling of the economic evaluation “with project” and “without project.” HDM-4 output reports on vehicle operating costs and travel-time costs.</p>
Operating cost per km per vehicle in the tunnel system (buses)		4.52	4.50	5.10	5.12	5.13	4.09	4.09	-		
Operating cost per km per vehicle in the tunnel system (light trucks)		1.08	1.08	1.17	1.17	1.18	1.00	1.00	-		
Operating cost per km per vehicle in the tunnel system (heavy trucks)		1.85	1.84	2.05	2.06	2.06	1.63	1.63	-		

⁹ The overall travel cost was adopted as an indicator that includes operating and travel-time costs. Operating cost includes expenditures for gas and lubricants, tires and vehicle parts, labor costs, depreciation, interest, taxes, and insurance; it varies by vehicle type, travel speed, and road deterioration. Travel-time cost includes the value of time (work + leisure).

¹⁰ Costs increase from 2019-2022 due to deterioration of the Cristo Redentor Tunnel. Cost reductions apply at the end of the investment stage for both tunnels. This is based on expanding the level of service capacity by executing works for the Caracoles Tunnel (completion in 2021) and Cristo Redentor border crossing (completion in 2023). Therefore, the overall travel cost target decreases starting in 2023.

Indicators	Unit of measure	2016 baseline	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Total	Means of verification	Comments
Outcome 4. Reduced travel times for passengers due to delays resulting from disruptions in the CRSC											
Average waiting times for passengers throughout the corridor ¹¹	Thousands of total hours per year for the passengers affected by road closures	90.2	92.9	95.7	98.6	101.6	40.8	39.2	-	DNV annual report. Times measured by DNV in ex post scenario.	Baseline: Weighted average waiting times for passengers of the vehicle fleet. Target: Reduced average waiting times for the entire standard fleet, set by means of surveys and measurements. ¹² Reduced average waiting times per passenger. Reduction of 63%, due to the decrease in road closures from 40 to 15 days per year.
Outcome 5. Reduced waiting times for freight due to delays caused by disruptions in the CRSC											
Volume of freight delayed per year ¹³	Millions of tons per year	262.0	286.3	294.8	303.7	312.8	125.5	134.3	-	DNV report based on origin/destination inspections and records of disruptions.	Baseline: 262 million tons affected by interruptions of 40 days per year. Target: Reduction in tons affected by 63%, achieving a target of 134.3 million tons by 2024 as a result of reducing disruptions from 40 to 15 days per year.
Outcome 6. Reduced waiting times for passengers to complete customs and immigration formalities, as a result of improvements to border control posts											
Reduced average waiting times per vehicle to complete customs and immigration formalities ¹⁴	Reduced average hours of waiting time per vehicle for cars, buses, and trucks	0	0	0	0	0.5	0.5	0.5	1.5	DNV report. Baseline to be measured by the DNV.	Baseline: Average waiting times for the vehicle fleet to complete both customs and immigration formalities. The DNV will determine the baseline at the startup of the operation by measuring waiting times. Target: Reduced average waiting times per vehicle ¹⁵ as a result of streamlined immigration formalities and improved facility infrastructure.

¹¹ Resulting from the number of days per year with disruptions caused by weather factors.

¹² The number of people affected annually per day of road closure was calculated, based on traffic and average vehicle occupancy. For the “without project” evaluation, the average was 40 days of road closures per year (2019-2022); for 2023 and 2024, with the completion of works, the target adopted is 15 days per year. These are calculations for the number of people affected by the 40 days, the intermediate values, and the 15-day target. The number of people per day was multiplied by the number of days of disruption per year, and then multiplied by 24 hours per day to obtain the total number of hours per year that passengers wait.

¹³ Freight affected by waiting times for trucks due to days per year with disruptions.

¹⁴ As a result of improvements in infrastructure, fiber optics, and other Intelligent Transportation System elements throughout the corridor.

¹⁵ Based on studies financed under technical cooperation operation ATN/OC-10620-RG, by using technology and infrastructure investments that take into account integrated optimization methods, the reduction in average waiting times would be 0.75 hours/vehicle for cars, 1.55 hours/vehicle for buses, and 1.22 hours/vehicle for trucks (1.49 hours/vehicle into Chile and 0.95 hours/vehicle into Argentina). The weighted average based on the standard fleet’s composition shows reduced times of 0.9 hours/vehicle. An average reduction of 0.5 hours was estimated after part of the solution has been implemented, which consists of investments in technology and other infrastructure works

OUTPUTS

Indicators	Unit	Baseline 2016	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Total	Means of verification	Comments
Component 1. Subcomponent 1.1. Civil works.											
1.1.1 Kilometers of expansion of the Caracoles Tunnel	km	0	-	-	-	3.17	-	-	3.17	DNV annual activity report.	Tunnel length in kilometers.
1.1.2 Kilometers of expansion and improvements of the Cristo Redentor Tunnel	km	0	-	-	-	-	-	3.08	3.08	DNV annual activity report	Tunnel length in kilometers.
1.1.3 Kilometers of road widenings built in the CRBC	km	0	1.6	3.6	4.1	3.5	1.2	-	14	DNV annual activity report	Uspallata and Soberanía bypass roads.
1.1.4 Kilometers of roadway rehabilitated and improved through safety-related works	km	0	16.3	32.7	32.6	32.6	32.7	16.3	163.2	DNV annual activity report	The target is indicative and includes potential safety-related works, at an average cost to be established through detailed designs.
1.1.5 Number of snow sheds and slope-protection works built	Number	0	0	2	4	4	5	-	15	DNV annual activity report	Target will be to build snow sheds to protect against snowslides. To be established through detailed designs.
Component 1. Subcomponent 1.2. Corridor Management Control System											
1.2.1 Developed and implemented improvements to the border control system	Number	0	0	0	1	1	1	-	3	DNV annual activity report, including approved works certification and completed technological services	Includes access roads, fiber optics, and other Intelligent Transportation System elements throughout the corridor. Measured as a whole based on the location to be targeted for intervention, in three border-control locations (to be determined)

Indicators	Unit	Baseline 2016	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Year 5 2023	Year 6 2024	Total	Means of verification	Comments
Component 2. Preinvestment studies											
Prepared studies for other CRSC works	Projects	0	1	2	1	2	-	-	6	DNV annual activity report	Deliverables: Preinvestment studies, including engineering, economic, and socioenvironmental studies.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Argentina
Program number:	AR-O0006 and AR-L1295
Program name:	Second Operation under the Conditional Credit Line for Investment Projects (CCLIP). Phase Two of the Program to Build Capacity and Improve Safety on the Accesses to the Cristo Redentor Border Crossing
Executing agency:	Dirección Nacional de Vialidad [Argentine Highway Administration] (DNV)
Fiduciary team:	Brenda Álvarez and Juan Carlos Lazo (FMP/CAR)

I. EXECUTIVE SUMMARY

- 1.1 The Bank conducted an institutional capacity assessment for the program using the Institutional Capacity Assessment System (ICAS) report and the evaluation of institutional capacity for procurement, which were prepared in July 2016.
- 1.2 The borrower will be the Argentine Republic. The executing agency will be the DNV, which will execute program activities through its technical, administrative, and operational units in accordance with its organizational structure and the responsibilities assigned to each area under current rules and regulations, and in coordination with the IDB Programs and Projects Coordination Unit (SCPP). The DNV has fiduciary experience in Bank-financed projects (e.g. operations 1851/OC-AR, 2698/OC-AR, 3050/OC-AR, 2185/OC-AR, 2655/OC-AR, 3836/OC-AR, 3867/OC-RG, 4338/OC-RG, and 4418/OC-AR).
- 1.3 The program does not include financing from other multilateral organizations.

II. THE EXECUTING AGENCY'S FIDUCIARY CONTEXT

- 2.1 The DNV has extensive proven experience in executing loans from international lending organizations in general, and from the IDB in particular, not only as an executing agency and coordinator but also as a subexecuting agency for other loans to the former Ministry of Federal Planning, Public Investment, and Services. In late 2015, as a result of changes made by the executive branch, the DNV became an autonomous agency under the Ministry of Transportation. The DNV is in the process of modifying its organizational structure, including primary responsibilities and activities, which will be carried out by Ministry staff. While the reorganization process has impacted the fluidity of some of its processes, the DNV identified the main risk factors and has been addressing them.¹ Immediate actions, as well as the agency's commitment to continue working with a consulting firm and on the actions recommended in the ICAS report, show that the DNV maintains a

¹ A consulting firm is analyzing workflows. For the first stage, it is mapping all processes. The next stage will be to propose a process improvement plan.

high level of execution capacity, associated with a low level of risk in the short and medium term for the executing agency.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The institutional capacity assessment that the Administration and Finance Coordination Office (CGAF) performed using the ICAS, coupled with the fiduciary team's experience with the operations currently in execution by the DNV, demonstrated a low level of risk in the DNV's institutional capacity for program execution. The most significant opportunities for improvement identified in the ICAS, and which still remain so to this day, were as follows: (i) to formalize monitoring and supervision mechanisms or procedures to help fulfill program commitments and objectives; (ii) to review, and improve where necessary, fiduciary processes in order to streamline them; and (iii) to include outcome indicators and means of verification in the annual work plan and the monitoring and evaluation plan. Moreover, the program risk management analysis identified no medium- or high-level financial risks.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

A. Conditions precedent to the first disbursement

- 4.1 No fiduciary conditions precedent to the first disbursement are anticipated.

B. Disbursement management

- 4.2 The advances-of-funds modality will be used for disbursements in accordance with the financial plan covering a maximum of 180 days. A new advance of funds may be requested when justification has been provided for at least 80% of the immediately preceding advance and the balance on any previous advances.
- 4.3 The exchange rate to be used for purposes of rendering accounts will be specified in Article 4.10(b)(i) of the loan contract. To determine the equivalency of expenditures incurred in local currency from local contribution proceeds or the reimbursement of expenditures from the loan proceeds, the agreed exchange rate will be the one in effect on the first business day of the month of the payment. Due to limitations in the System for Execution Units of Projects with External Financing (UEPEX), for expenditures paid with IDB funds and with local counterpart funds the exchange rate used will be the one that was used to convert disbursements to local currency ("pesification").

C. Financial supervision

- 4.4 In order to have flexibility in the process of procuring audit services for the operation, the option to commission any of various eligible entities to audit Bank-financed operations will be kept open. At the time scheduled to initiate the contracting process, the executing agency will ask the Bank for the shortlist of institutions that may be invited to participate.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

5.1 The fiduciary agreements and requirements regarding procurement establish the provisions that apply to the execution of all of the operation's planned procurements.

A. Procurement execution

5.2 The Policies for the Procurement of Works and Goods Financed by the Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Bank (document GN-2350-9) will apply.

5.3 The Bank-approved national subsystem that will be used is the information system.

- (i) **Procurement of works, goods, and nonconsulting services:** Works, goods, and nonconsulting services² arising under the program and subject to international competitive bidding (ICB) will be procured using the standard bidding documents issued by the Bank. Bidding processes subject to national competitive bidding (NCB) will be executed using national bidding documents agreed upon with the Bank. The program sector specialist is responsible for reviewing the technical specifications of procurements during preparation of the selection processes. Direct contracting is not anticipated.
- (ii) **Selection and contracting of consultants:** Consulting service contracts arising under the program will be executed using the standard request for proposals issued by the Bank. The program sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services.
- (iii) **Selection of individual consultants:** Individual consultants will be selected on the basis of their qualifications to do the work, based on a comparison of the qualifications of at least three candidates. The program sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services. No single-source contracting of individual consultants is anticipated in this operation.

Table 1. Threshold amounts for international competitive bidding and international shortlist

Works			Goods			Consulting services	
ICB	NCB	Shopping	ICB	NCB	Shopping	Consulting international advertising	Shortlist 100% national
≥25,000,000	<25,000,000 ≥350,000	<350,000	≥ 1,500,000	<1,500,000 ≥100,000	<100,000	>200,000	≤1,000,000

² Policies for the Procurement of Goods and Works Financed by the Bank (document GN-2349-9), paragraph 1.1: Nonconsulting services are treated as goods.

B. Main procurement processes

Table 2. Procurement type and amount

Activity	Type of bidding	Estimated date	Estimated amount (US\$)
Works			
Cristo Redentor Tunnel	ICB	2022	84,000,000
Caracoles Tunnel	ICB	2019	96,000,000
Supplementary rehabilitation and safety works along National Route 7 and access roads to cities	ICB	2021	341,900,000

C. Procurement supervision

- 5.4 Procurement will be supervised on an ex ante basis, with the exception of shopping and individual consultants, which will be supervised ex post. Ex post review visits will take place every 12 months. Ex post review reports will include at least one physical inspection visit, selected from procurement processes subject to ex post review. At least 10% of the reviewed contracts will be physically inspected during the program.

Table 3. Thresholds for ex post review³ (US\$)

Works	Goods	Consulting services	Individual consultants
<5,000,000	<500,000	<500,000	<50,000

D. Special provisions

- 5.5 **Measures to reduce the likelihood of corruption:** The provisions of documents GN-2349-9 and GN-2350-9 concerning prohibited practices (multilateral organizations' lists of ineligible firms and individuals) will apply.

E. Records and files

- 5.6 The documentation of procurement processes will be kept in the offices of the DNV, as the agency responsible for program procurement. For the purposes of ex post review, records and files from all documentation generated from procurement processes will be kept duly organized, sorted, and updated.

VI. FINANCIAL MANAGEMENT

- 6.1 The Financial Management Policy for IDB-financed Projects (document OP-273-6) and the Financial Management Operational Guidelines (document OP-274-1) will apply.

³ The thresholds for ex post review reflect the executing agency's fiduciary capacity for execution and may be modified by the Bank in the event of any changes in such capacity.

A. Programming and budget

- 6.2 The CGAF is responsible for budgeting and payments. Expenditure commitments will be made by the corresponding financial units under the responsibility of the financial coordinator, who reports to the CGAF. As the need arises to expand or reallocate budget items, the SPPP will request the changes and facilitate the process for their approval. Budget appropriations will be executed through quarterly commitment and monthly accrual amounts, which are allocated by the National Budget Office (Ministry of Treasury and Public Finance). No problems are anticipated in terms of budgetary management, timeliness of local counterpart funds, or system delays affecting execution.
- 6.3 The timely availability of local counterpart funds must be ensured.

B. Treasury and disbursement management

- 6.4 Disbursements will be made on the basis of a detailed financial plan, a template of which has been agreed upon with the Ministry of Transportation, the Ministry of Finance, and the Office of the Cabinet Chief. The plan will be shared with SPPP staff.
- 6.5 Once the DNV's structure for the execution of programs financed from sources originating abroad is determined, the Bank will request that the DNV migrate to using e-Disbursements—the IDB web-based system that enables the SPPP to prepare and send disbursement requests to the Bank electronically. This system lowers transaction costs and allows the Bank to review and process the requests sent remotely.

C. Accounting, information systems, and reporting

- 6.6 The DNV uses the Integrated Financial Information System's virtual interphase (eSIDIF) and the UEPEX as its financial administration systems, as do all government agencies in Argentina. These systems help to identify program funds and sources of financing. The UEPEX system, in accordance with the list of accounts approved by the Bank, classifies program investments by expenditure category, both for loan proceeds and for other funds. Reconciliation between the aforementioned systems is not automatic, and therefore manual reconciliations are performed periodically. Cash-basis accounting will be used and the International Financial Reporting Standards will be followed when applicable in accordance with established national criteria. The required financial reports will be: (i) financial execution plan for up to 180 days following a request for an advance of funds; (ii) audited financial statements for the program; and (iii) other reports as requested by the fiduciary specialists.
- 6.7 The exchange rate to be used for purposes of rendering accounts for the financing will be the exchange rate in effect on the date of conversion from the approval currency or disbursement currency to the borrower's local currency: Article 4.10 (b)(i) of the loan contract.
- 6.8 For disbursements in a currency other than U.S. dollars and Argentine pesos, equivalence to the loan currency will be determined on the basis of the amount actually disbursed by the Bank in situations involving direct payment or reimbursement of a letter of credit guarantee.

D. Internal control and internal audit

6.9 The national internal control body is the National Audit Office (SIGEN). Internal audit of each executing agency is performed through the Internal Audit Unit. The unit, reporting directly to the Minister, is responsible for conducting audits and making recommendations in accordance with the powers conferred under Law 24156 (Financial Administration Act).

E. External control: External financial audit and program reports

6.10 In 2011, the Bank completed a diagnostic assessment of government audit practices by the Office of the Auditor General (AGN). This assessment, performed in accordance with Bank guidelines to determine the degree of development of the public finance management systems, concluded by validating the AGN as an auditor of Bank programs.

6.11 However, based on the history of timeliness in submitting audited financial statements in recent years, an agreement was reached with Argentina in October 2014 to reduce the AGN's portfolio in keeping with its actual compliance capabilities.

6.12 In order to have flexibility in the process of procuring audit services for the operation, the option to commission any of various eligible entities to audit Bank-financed operations will be kept open. At the time scheduled to initiate the contracting process, the executing agency will ask the Bank for the shortlist of institutions that may be invited to participate.

F. Financial supervision plan

6.13 The initial financial supervision plan is based on risk and fiduciary capacity assessments conducted on the basis of onsite and desk reviews scheduled for the program and includes the scope of operational, financial, and accounting activities; compliance and legal considerations; frequency; and identification of responsible parties. One financial inspection visit per year will be made. Disbursements will be reviewed on an ex post basis.

G. Execution mechanism

6.14 The executing agency will delegate program execution and management to the CGAF, through the SCPP. The SCPP will coordinate program activities with the applicable DNV areas for proper execution of program components, procurement processes, and financial administration, as well as to monitor and supervise progress and evaluate program outcomes.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/18

Argentina. Loan ____/OC-AR to the Argentine Republic. Phase Two of the Program to Build Capacity and Improve Safety on the Accesses to the Cristo Redentor Border Crossing. Second Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) AR-O0006

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 Phase Two of the Program to Build Capacity and Improve Safety on the Accesses to the Cristo Redentor Border Crossing, which constitutes the second individual operation under the Conditional Credit Line for Investment Projects (CCLIP) AR-O0006 approved on 1 December 2017 by Resolution DE-100/17. Such financing will be in the amount of up to US\$324,300,000, 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 ____ 2018)