

DOCUMENTO DEL BANCO INTERAMERICANO DE DESARROLLO

**REGIONAL
(ARGENTINA Y CHILE)**

**PROGRAMA DE CONSTRUCCIÓN DEL TÚNEL INTERNACIONAL DE AGUA
NEGRA Y PRIMERA ETAPA DE CONSTRUCCIÓN DEL TÚNEL
INTERNACIONAL DE AGUA NEGRA**

(RG-O1655 Y RG-L1116)

PERFIL DE PROYECTO

Este documento fue preparado por el equipo compuesto por: Esteban Diez Roux, Jefe de Equipo (INE/TSP); Juan Manuel Leaño, Jefe de Equipo Alterno (TSP/CAR); Ernesto Monter, Borja Castro Lancharro y Olga Mayoral (INE/TSP); Andrés Pereyra (TSP/CUR); Carolina Benítez (TSP/CAR); Steven Collins (VPS/ESG); Mikael Larsson y Sandra Corcuera (INT/TIN); María Eugenia Roca (VPC/FMP); Brenda Álvarez Junco y Juan Carlos Lazo (FMP/CAR); David Salazar y Francisco Lois (FMP/CCH); y Krysia Avila (LEG/SGO).

De conformidad con la Política de Acceso a Información, el presente documento está sujeto a divulgación pública.

PERFIL DE PROYECTO

REGIONAL

I. DATOS BÁSICOS

Nombre del proyecto:	Construcción del Túnel Internacional de Agua Negra y Primera Etapa de Construcción del Túnel Internacional de Agua Negra
Número de proyecto:	RG-O1655 (Línea CCLIP) y RG-L1116
Equipo de proyecto:	Esteban Diez Roux, Jefe de Equipo (INE/TSP); Juan Manuel Leaño, Jefe de Equipo Alterno (TSP/CAR); Ernesto Monter, Borja Castro Lancharro y Olga Mayoral (INE/TSP); Andrés Pereyra (TSP/CUR); Carolina Benítez (TSP/CAR); Mikael Larsson y Sandra Corcuera (INT/TIN); María Eugenia Roca (VPC/FMP); Brenda Álvarez Junco y Juan Carlos Lazo (FMP/CAR); David Salazar y Francisco Lois (FMP/CCH); Steven Collins y Julio Rojas (VPS/ESG); y Krysia Avila (LEG/SGO)
Prestatario:	República Argentina y República de Chile
Organismos ejecutores:	República Argentina, por medio del Ministerio de Transporte (MT); República de Chile, por medio del Ministerio de Obras Públicas (MOP); y Entidad Binacional Túnel de Agua Negra (EBITAN) ¹

Plan financiero:		<u>Primer préstamo</u>	<u>CCLIP (estimado)</u>
	BID a Argentina (CO):	US\$130 millones	US\$1.080 millones
	BID a Chile (CO):	US\$150 millones	US\$420 millones
	Total:	US\$280 millones	US\$1.500 millones
Salvaguardias:	Políticas activadas:	OP-102; OP-704; OP-710; OP-761; OP-765; y OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.8, B.9, B.10, B.11, B.17)	
	Clasificación:	A	

II. JUSTIFICACIÓN GENERAL Y OBJETIVOS

- 2.1 **Contexto general.** En los últimos años, Chile y Argentina han desarrollado estrategias de integración regional para planificar y fortalecer su infraestructura y para optimizar y coordinar los procesos de control fronterizo. Estas estrategias tienen como objetivo principal potenciar y facilitar los flujos comerciales entre ambos países para contribuir al crecimiento económico regional. Dicha integración permite: (i) el acceso de los países de la cuenca atlántica a puertos al océano Pacífico; y (ii) el acceso de Chile a los puertos atlánticos. Todo ello con el incentivo para el comercio regional y el fortalecimiento de las cadenas de

¹ Para este programa y en el marco del Tratado de Maipú de Integración y Cooperación firmado entre Argentina y Chile, se creó la Entidad Binacional Túnel de Agua Negra (EBITAN) con personalidad jurídica internacional.

valor globales a través del acceso a mercados de gran crecimiento económico de Asia.

- 2.2 **Contexto específico.** Hoy hay 26 pasos internacionales entre Chile y Argentina. De estos, el Paso de Agua Negra (AN), entre la Región de Coquimbo (Chile) y la Provincia de San Juan (Argentina), es definido por el Consejo Suramericano de Infraestructura y Planeamiento (COSIPLAN) en la Agenda de Proyectos Prioritarios de Integración (API) como un paso fronterizo prioritario dentro del Corredor Bioceánico Mercosur-Chile (El Corredor)². En los últimos años, Chile y Argentina han comenzado a estructurar la construcción del Túnel de Agua Negra (TAN) mediante la creación de la Entidad Binacional Túnel de Agua Negra (EBITAN) y han iniciado actividades en la estructuración del proyecto del túnel junto con el apoyo del BID, a través del Programa de Estructuración del Túnel Internacional Paso de Agua Negra (PETAN) ([RG-L1074 - 3867/OC-RG/3868/OC-RG](#)) aprobado en 2016.
- 2.3 **Diagnóstico del problema.** En las últimas décadas, el flujo vehicular entre ambos países ha aumentado de manera casi constante, un 6% anual desde 2007. Esto, unido a una deficiente infraestructura y de baja calidad de los pasos viales, a debilidades funcionales asociadas a los procesos de control fronterizo, y a las condiciones meteorológicas adversas durante el invierno, hace que los pasos existentes no sean suficientes para atender el volumen de carga y tráfico vehicular que circula, lo que afecta directamente la accesibilidad, conectividad e integración.
- 2.4 La transitabilidad del principal corredor vial entre Argentina y Chile a través del Paso Cristo Redentor se ve frecuentemente afectada por las condiciones climáticas, lo que obliga a cerrar el paso entre 30 y 40 días al año. Esto produce importantes retrasos en los servicios de transporte, que se agravan por el congestionamiento causado por la limitada capacidad de la infraestructura y por las deficiencias en los procesos y sistemas de control. Desde 2005, el flujo de vehículos que utiliza el paso de AN ha crecido hasta alcanzar entre 8.000 y 10.500 vehículos anuales, implica un Tránsito Medio Diario Anual (TMDA) de entre 22 y 29 vehículos.
- 2.5 **Justificación de la Línea de Crédito.** Para mitigar el problema de la falta de conectividad durante la época invernal y facilitar un vínculo logístico estable que permita el servicio continuado del transporte de carga y turistas, es imprescindible mejorar en primera instancia la infraestructura vial de integración dotándolos de pasos fronterizos transitables durante todo el año. Para ello, se realizaron estudios de viabilidad de nuevos túneles transfronterizos. De todos los pasos analizados, el Paso de AN ocupa un lugar relevante por: (i) formar parte de un corredor bioceánico de gran potencial, como nuevo vínculo logístico entre Porto Alegre (en el Atlántico) y Coquimbo (en el Pacífico); y (ii) tener mejores condiciones climatológicas que los existentes (la precipitación en forma de nieve en el TAN es un tercio de la observada actualmente en el Paso de Cristo Redentor, lo que supone cierres del TAN menores a los 10 días anuales, en comparación con los 40 de Cristo Redentor).

² El TAN está incluido en la cartera de proyectos de IIRSA/COSIPLAN.

- 2.6 Para contribuir a la mejora del desempeño logístico de Chile y Argentina, mejorar la transitabilidad y fomentar la integración regional, se mejorará la infraestructura del paso de frontera a través de la construcción de un túnel de 13,9 km de largo de dos ductos, uno en cada sentido de circulación. Este reducirá la longitud del paso actual en 40 km, disminuirá la sinuosidad del mismo, reducirá las pendientes máximas del paso permitiendo el tránsito de camiones de transporte de carga y permitirá la utilización del paso durante los doce meses del año. Estas mejoras lograrán una importante reducción de los tiempos de paso de personas y mercancías, y disminuirán significativamente los tiempos de espera por cierres debido a condiciones climatológicas. El estudio del proyecto de inversión realizado para el PETAN estimó cerca de 20 millones de beneficiarios directos e indirectos.
- 2.7 En 2016, Chile y Argentina solicitaron apoyo al BID para estructurar el proyecto de inversión del TAN, que se materializó con la aprobación del PETAN que financia estudios técnicos, diseño final, asistencia técnica especializada y fortalecimiento institucional para apoyar a los países en preparar la documentación necesaria para realizar el proceso de licitación para la construcción del túnel y asistir a los gobiernos en la ejecución del proceso de evaluación de ofertas y adjudicación.
- 2.8 El presente programa financiará la obra de construcción del túnel y los servicios de inspección de obra. Se ha optado por realizar la financiación en etapas a través de una Línea de Crédito Condicional para Programas de Inversión (CCLIP), dada la magnitud de la obra y su largo período de ejecución que requiere un calendario prolongado de aplicación con inversiones continuas para las distintas etapas de la construcción: el costo total se estima preliminarmente en US\$1.500 millones, que se ejecutarán en ocho años y medio. La primera etapa se llevará a cabo con una operación de US\$280 millones que engloba dos préstamos: US\$130 millones para Argentina y US\$150 millones para Chile. El plazo de ejecución del CCLIP es de 10 años y el plazo de la primera operación es de 3 años.
- 2.9 La Dirección de Vialidad (DV) de Chile, la Dirección Nacional de Vialidad (DNV) de Argentina y la EBITAN, se consideran elegibles como unidades ejecutoras del CCLIP ya que: (i) en los últimos años han trabajado de manera conjunta con el BID para preparar el PETAN, así como en otras operaciones de transporte ya completas; y (ii) la DV, la DNV y la EBITAN como ejecutores han coordinado la estructuración del programa anterior con una trayectoria adecuada. Además, la DNV cuenta con una experiencia amplia ejecutando otros préstamos del BID (AR-X1016 de US\$2.500 millones y AR-L1199 de US\$420 millones, entre otros).
- 2.10 **Estrategia del Banco con los países.** Dentro de la Estrategia de País del Banco (EPB) con Argentina 2016-2019 (GN-2870-1), el programa se alinea con el objetivo estratégico de mejora de la infraestructura vial y reducción de costos de logística (del área de mejora del ambiente de negocios) y con la reducción de costo y tiempo de exportación (del área de fortalecimiento de la integración). En relación a la EPB con Chile 2014-2018 (GN-2785), se inscribe en el área de diálogo de transporte y logística y con el de integración regional, ya que se prevé apoyar temas específicos de integración e infraestructura de transporte de cargas.

- 2.11 **Alineación estratégica.** El programa es consistente con la Actualización de la Estrategia Institucional (UIS) 2010-2020 (GN-2788-5) y está alineado con los desafíos de desarrollo de integración económica ya que contribuirá a mejorar la infraestructura regional y la conectividad internacional, y con el de productividad e innovación al introducir mejoras en la red logística de la región y con el área transversal de Cambio Climático (CC) y sostenibilidad ambiental al incorporar aspectos de adaptación al CC en la definición de los diseños de ingeniería finales. Además, está alineado al Marco de Resultados Corporativos (CRF) de 2016-2019 (GN-2727-6), por el indicador carreteras construidas. También está alineado con la estrategia institucional de Infraestructura Sostenible para la Competitividad y el Crecimiento Inclusivo (GN-2710-5), por contribuir a la mejora de la calidad de la infraestructura de transporte y fomentar el involucramiento del sector privado en la construcción y operación de la infraestructura; con el Marco Sectorial de Transporte (GN-2740-3) por contribuir a la dimensión de la calidad de la infraestructura de transporte y servicios; y con el Marco Sectorial de Integración y Comercio (GN-2715-6) al priorizar el apoyo al desarrollo de corredores de integración.
- 2.12 **Objetivo.** El objetivo general del CCLIP es contribuir a mejorar la integración transfronteriza entre Chile y Argentina, ampliando el acceso de la región a los mercados internacionales a través del corredor bioceánico Coquimbo - Porto Alegre. Los objetivos específicos son mejorar la conectividad y la eficiencia de la red logística de la región, mediante la construcción de un túnel de alta montaña, que resultará en una mejora sustancial del cruce existente en AN, reducción de tiempos de viaje, incremento de la resiliencia del cruce a efectos de cambio climático, e incremento de la redundancia del sistema de cruces fronterizos. El objetivo específico de la primera operación es construir la primera fase del túnel.
- 2.13 **Componente 1 (US\$260.000.000). Realización de las obras de construcción del túnel.** Incluye las primeras fases de construcción del TAN.
- 2.14 **Componente 2 (US\$20.000.000). Actividades de fortalecimiento institucional.** Financiará las actividades que desarrollará la EBITAN con apoyo de las direcciones de vialidad de ambos países.
- 2.15 **Productos esperados.** Los productos esperados de esta operación son los kilómetros de túnel construidos correspondientes a la primera fase.

III. ASPECTOS TÉCNICOS Y CONOCIMIENTO DEL SECTOR

- 3.1 **Conocimiento del Banco sobre el sector.** El Banco ha financiado múltiples proyectos viales en Argentina. Desde el 2000, ha otorgado préstamos a 25 operaciones de transporte en Argentina por más de US\$2.000 millones. Actualmente ejecuta: (i) el proyecto vial de la Ruta Nacional 19, provincia de Córdoba, parte del corredor bioceánico donde está el TAN; y (ii) la operación del programa de estructuración del TAN. Además, el Banco ha liderado el diseño y ejecución de operaciones de pasos de frontera en Ecuador-Colombia, Guatemala, Nicaragua, Argentina-Chile, Costa Rica y Panamá.

- 3.2 **Modalidad.** La construcción del TAN estará financiada mediante un CCLIP de US\$1.500 millones, que incluye el primer programa de apoyo a la construcción del TAN por un monto de US\$280 millones. Actualmente, Chile y Argentina trabajan conjuntamente en la estructuración y diseño del túnel.
- 3.3 **Esquema de ejecución.** Los prestatarios de la operación serán la República Argentina y la República de Chile. Los organismos ejecutores serán el Ministerio de Transporte de la Nación Argentina por medio de la DNV y la DV del Ministerio de Obras Públicas de Chile, conjuntamente con la EBITAN que será coejecutor. El esquema de ejecución se desarrolla en el PETAN.

IV. RIESGOS AMBIENTALES Y ASPECTOS FIDUCIARIOS

- 4.1 **Salvaguardias ambientales y sociales.** El proyecto se clasifica como categoría “A” debido a su potencial para generar riesgos e impactos ambientales y sociales de magnitud moderada a alta. El proyecto activa las siguientes políticas: Divulgación de Políticas de Información (OP-102); Política de Desastres Naturales (OP-704); Política de Reasentamiento Involuntario (OP-710); Política de Igualdad de Género (OP-761); Política de Pueblos Indígenas (OP-765); y las directrices B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.8, B.9, B.10, B.11 y B.17 de la Política de Medio Ambiente y Cumplimiento de Salvaguardias (OP-703).
- 4.2 El proyecto cuenta con un [Estudio de Impacto Ambiental](#) (EIA) aprobado por la autoridad ambiental de la provincia de San Juan, Argentina. Este EIA no fue sometido al proceso de evaluación de impacto ambiental en Chile debido a cambios normativos y porque las autoridades de transporte prevén que el proceso para obtener autorizaciones y licencias ambientales lo inicie el consorcio ganador de la licitación para la construcción del proyecto, quien ajustará el EIA a los requerimientos de la normativa de Chile.
- 4.3 El EIA requiere mayor información para cumplir los requerimientos del Banco. En particular, en relación a pueblos indígenas, impactos acumulativos e indirectos, impactos potenciales a glaciares, ruido y vibraciones y evaluación del riesgo de desastres naturales. El Banco, en coordinación con EBITAN ha definido el alcance de las actividades y ha contratado a la consultora Environmental Resources Management (ERM) para complementar el EIA, actualizar las medidas de mitigación y monitoreo y el Plan de Gestión Ambiental y Social (PGAS). Se verificará que las actividades de divulgación y consultas públicas sea adecuada para informar sobre el proyecto y los cambios o actualizaciones hechos al EIA y al PGAS, y que presente un mecanismo de reclamos y programas para atender la igualdad de género y los pueblos indígenas (Anexo III).
- 4.4 **Aspectos fiduciarios.** En materia de adquisiciones se utilizarán las Políticas de Adquisición de Bienes y Obras Financiados por el Banco (GN-2349-9) y las Políticas para la Selección de Consultores (GN-2350-9). Como resultado de la evaluación de la capacidad fiduciaria, si fueran requeridas, se definirían acciones de fortalecimiento. En materia de gestión financiera se considerarán los principios y criterios previstos en la Guía de Gestión Financiera para Proyectos Financiados por el Banco (OP-273-6), lo establecido en el II Protocolo

Complementario al Tratado de Maipú de Integración y Cooperación entre la República de Chile y la República de Argentina relativo al TAN, en el cual se enmarca el proyecto, y la legislación de cada país, en lo pertinente. Como resultado del análisis de la legislación aplicable al proyecto y la evaluación de la capacidad institucional del EBITAN, la DNV y la DV, y la experiencia adquirida de la operación CH-L1074, en las próximas misiones se definirán los requisitos y acuerdos fiduciarios para la ejecución.

V. RECURSOS Y CRONOGRAMA DE PREPARACIÓN

- 5.1 El cronograma de aprobación prevé el envío del Borrador de Propuesta de Préstamo a OPC el 6 de septiembre de 2017 y la aprobación por el Directorio Ejecutivo el 18 de octubre de 2017. Los recursos necesarios para la preparación se estiman en US\$198.000: US\$88.000 para misiones y US\$110.000 para consultorías (Anexo V).

CONFIDENCIAL

¹ La información contenida en este Anexo es de carácter deliberativo, y por lo tanto confidencial, de conformidad con la excepción relativa a “Información Deliberativa” contemplada en el párrafo 4.1 (g) de la “Política de Acceso al Información” del Banco (Documento GN-1831-28).



Safeguard Policy Filter Report

Operation Information

Operation		
RG-L1116 Paso de Agua Negra international tunnel		
Environmental and Social Impact Category	High Risk Rating	
A	{Not Set}	
Country	Executing Agency	
REGIONAL	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Transport	BORDER CROSSINGS AND INFRASTRUCTURE, EQUIPMENT FOR BORDER CROSSINGS.	
Team Leader	ESG Lead Specialist	
ESTEBAN DIEZ ROUX	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$0	0.000 %
Assessment Date	Author	
10 Apr 2017	stevenc	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	20 Apr 2017	
QRR (Estimated)	17 Jul 2017	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Potential Safeguard Policy Items

[No potential issues identified]

Safeguard Policy Items Identified

[B.1 Bank Policies \(Access to Information Policy– OP-102\)](#)



Safeguard Policy Filter Report

The Bank will make the relevant project documents available to the public.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation is in a geographical area exposed to [natural hazards](#) ([Type 1 Disaster Risk Scenario](#)). Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The sector of the operation is vulnerable to natural hazards. Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation has the potential to exacerbate risk to human life, property, the environment or cause economic disruption ([Type 2 Disaster Risk Scenario](#)).

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation includes activities related to climate change adaptation, but these are not the primary objective of the operation.

B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation has the potential to affect negatively women or gender equality ([Negative gender impacts may include the following](#)).

B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation will offer opportunities to promote [gender equality](#) or [women's empowerment](#).

B.1 Bank Policies (Indigenous People Policy– OP-765)

The operation has the potential to negatively affect indigenous people (also see [Indigenous Peoples Policy](#)).

B.1 Bank Policies (Indigenous People Policy– OP-765)

The operation will offer opportunities for indigenous people

B.1 Bank Policies (Resettlement Policy– OP-710)

The operation has the potential to disrupt the livelihoods of people living in the project area of influence (not limited to involuntary displacement, see also Resettlement Policy)

B.2 Country Laws and Regulations

The operation is expected to be in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

B.3 Screening and Classification

The operation (including [associated facilities](#)) is screened and classified according to its potential environmental impacts.

B.4 Other Risk Factors



Safeguard Policy Filter Report

There are [associated facilities](#) (see policy definition) related to the operation.

B.4 Other Risk Factors

The borrower/executing agency exhibits weak institutional capacity for managing environmental and social issues.

B.4 Other Risk Factors

The operation may be of high risk due to controversial environmental and associated social issues or liabilities.

B.5 Environmental Assessment Requirements

An environmental assessment is required.

B.6 Consultations

Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation by women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.

B.7 Supervision and Compliance

The Bank is expected to monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.

B.8 Transboundary Impacts

The natural resources of a country(s) not involved in the operation will be affected (including waterways, coastal marine resources, protected areas, regional air shed and/or aquifers).

B.9 Natural Habitats and Cultural Sites

The operation will result in the degradation or conversion of Natural Habitat or Critical Natural Habitat in the project area of influence.

B.10. Hazardous Materials

The operation has the potential to impact the environment and occupational health and safety due to the production, procurement, use, and/or disposal of hazardous material, including organic and inorganic toxic substances, pesticides and persistent organic pollutants (POPs).

B.11. Pollution Prevention and Abatement

The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases).

B.17. Procurement

Suitable safeguard provisions for the procurement of goods and services in Bank financed operations may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.

Recommended Actions



Safeguard Policy Filter Report

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR. The project triggered the Disaster Risk Management policy (OP-704) and this should be reflected in the Project Environmental and Social Strategy. A Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704). Next, please complete a Disaster Risk Classification along with Impact Classification. Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please consult with INE/CCS adaptation group for guidance.

Additional Comments

[No additional comments]



Safeguard Screening Form

Operation Information

Operation		
RG-L1116 Paso de Agua Negra international tunnel		
Environmental and Social Impact Category	High Risk Rating	
A	{Not Set}	
Country	Executing Agency	
REGIONAL	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Transport	BORDER CROSSINGS AND INFRASTRUCTURE, EQUIPMENT FOR BORDER CROSSINGS.	
Team Leader	ESG Lead Specialist	
ESTEBAN DIEZ ROUX	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$0	0.000 %
Assessment Date	Author	
10 Apr 2017	steven	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	20 Apr 2017	
QRR (Estimated)	17 Jul 2017	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Operation Classification Summary



Safeguard Screening Form

Overridden Rating	Overridden Justification
Comments	

Conditions / Recommendations

Category "A" operations require an Environmental Impact Assessment or a Strategic Environmental Assessment (see Environment Policy Guideline: Directive B.5 for EIA and SEA requirements) and at least two consultations with affected parties.

These operations will require an environmental assessment (EA), normally an Environmental Impact Assessment (EIA) for investment operations, or other environmental assessments such as a Strategic Environmental Assessment (SEA) for programs and other financial operations that involve plans and policies. Category "A" operations are considered high safeguard risk. For some high safeguard risk operations that, in the Bank's opinion raise complex and sensitive environmental, social, or health and safety concerns, the borrower should normally establish an advisory panel of experts to provide guidance for the design and/or execution of the operation on issues relevant to the EA process, including health and safety. However, these operations will also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.).

The Project Team must send to the ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports.

Summary of Impacts / Risks and Potential Solutions

Moderate Greenhouse Gas Emissions are predicted.

Greenhouse Gas (GHG) Assessment: The borrower should promote the reduction of project-related greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. The borrower should quantify direct emissions from the facilities owned or controlled within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions should be conducted annually in accordance with internationally recognized methodologies (i.e. IPCC - <http://www.ipcc.ch/>). In addition, the borrower should evaluate technically and financially feasible and cost-effective options for the reduction/offset of emissions that may be achieved during the design and operation of the project. The Sustainable Energy and Climate Change Initiative (SECCI) can help with this task (<http://www.iadb.org/secci/>).



Safeguard Screening Form

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on [ecosystem services](#).

Mitigation measures presented in the Biodiversity Management Plan must be acceptable: The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on [species composition](#).

Mitigation measures presented in the Biodiversity Management Plan must be acceptable: The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on ecological function.

Mitigation measures presented in the Biodiversity Management Plan must be acceptable: The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Generation of solid waste is [moderate](#) in volume, does not include [hazardous materials](#) and follows standards recognized by multilateral development banks.



Safeguard Screening Form

Solid Waste Management: The borrower should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and re-cycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.

Likely to have [minor](#) to [moderate](#) emission or discharges that would negatively affect [ambient environmental conditions](#).

Management of Ambient Environmental Conditions: The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national and/or international standards. The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. The plan should be subject to review by qualified independent experts. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).

Potencial to exclude or discriminate women or men from project benefits based on [gender](#) *NOTE

Incorporation of gender analysis into its social impact and risk assessments: Where the Project or its context present potential for discrimination against women or men based on gender, Project preparation should include an analysis of exclusion or discriminatory factors (specific or as part of overall social assessment) and the Project should include information, dissemination, training and other corrective measures as appropriate aimed at overcoming barriers to afford women or men the same protection and access afforded to other groups and equal access to Project-generated resources and benefits (e.g. credit, employment, public services, etc.). The social impact and risk assessment and associated mitigation framework must address all the factors specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to directly or indirectly adversely and moderately impact the rights of [Indigenous Peoples](#).



Safeguard Screening Form

Mitigation Framework: Impacts are considered moderate if the rights affected do not include land or other fundamental rights or the impacts are not adverse. Consult Indigenous Peoples legislation database at <http://www.iadb.org/Research/legislacionindigena/leyn/index.cfm>. Where project impacts affect the legal rights of indigenous peoples project preparation and implementation should include specific analysis and consultation/good faith negotiations regarding these issues and the Mitigation Framework must address them specifically. The Mitigation Framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to exclude [Indigenous Peoples](#) from Project benefits on discriminatory basis.

Mitigation Framework (specific)-consultation with Indigenous Peoples required: Where the Project or its context present potential for ethnically based discrimination against IPs, Project preparation should include an analysis of discriminatory factors (specific or as part of overall social assessment) and the Project should include information, dissemination, training and other corrective measures as appropriate aimed at overcoming linguistic and other barriers to afford indigenous workers, entrepreneurs, beneficiaries or contractors the same protection and access afforded to other groups and equal access to Project-generated resources and benefits (e.g. credit, employment, public services, etc.). The Mitigation Framework must address all the factors specifically. The Mitigation Framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to introduce [gender](#) differentiated health and safety [risks](#), or to increase the risk of violence, sexual exploitation, human trafficking or sexually transmitted diseases

Incorporation of gender analysis into its social impact and risk assessments: Where project has the potential to introduce gender differentiated health and safety risks, or to increase the risk of violence, sexual exploitation, human trafficking or sexually transmitted diseases, project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to introduce conditions that restrict the participation of women or men based on pregnancy, maternity/paternity, marital status

Incorporation of gender analysis into its social impact and risk assessments: Where project has the potential to introduce conditions that restrict the participation of women or men based on pregnancy, maternity/paternity, marital status, project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to introduce unequal requirements for access to benefits and economic opportunities based on [gender](#)



Safeguard Screening Form

Incorporation of gender analysis into its social impact and risk assessments: Where project impacts will potentially introduce unequal requirements for access to benefits and economic opportunities based on gender, project preparation and implementation should include specific analysis and consultation/agreements regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to introduce unpaid work unevenly between men and women (volunteer work or community participation).

Incorporation of gender analysis into its social impact and risk assessments: Where project has the potential to introduce unpaid work unevenly between men and women (volunteer work or community participation), project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to negatively impact the right to equality between women and men, or the specific rights of women under applicable law

Incorporation of gender analysis into its social impact and risk assessments: Where project impacts affect the rights to equality between women and men, or the specific rights of women under applicable law, project preparation and implementation should include specific analysis and consultation/good faith negotiations regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Project activities will moderately impact [water quality](#), [water quantity](#) and/or [water availability](#).

Water Resources: A targeted Water Resources Assessment should be undertaken, which in addition to undertaking the relevant analyses, must include justification for assigning a moderate risk classification. Project activities (and any associated facilities) will be required to be constructed and operated so as to avoid impacts to water quality, water quantity and/or water availability. Evidence of appropriate stakeholder consultation should also be provided. Monitoring requirements should be included in relevant legal documentation.

Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and [workers](#) but these are [minor](#) to [moderate](#) in nature.

Construction: The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).



Safeguard Screening Form

Project will result in the loss of employment for a [significant numbers of employees](#).

Ensure Adequacy of Retrenchment Plan: Borrower should develop a Retrenchment Plan which clarifies the schedule of cut backs, retrenchment methods and procedures, selection criteria, severance payments and support packages. Retrenchment should not be based on discrimination and must demonstrate how employees will be consulted over retrenchment process. It requires for a plan in the legal documentation (covenants, conditions of disbursement, etc.) and requires regular monitoring reporting and independent review of implementation. require regular reporting and independent review of implementation. Further details available in IFC's Good Practice Note on Retrenchment.

The negative impacts from production, procurement, use and disposal of [hazardous materials](#) (excluding POPs unacceptable under the Stockholm Convention or toxic pesticides) are [moderate](#) to [significant](#) and will comply with relevant national legislation, [IDB requirements on hazardous material](#) and all applicable International Standards.

Hazardous Materials Management Plan: The borrower should document risks relating to the use of hazardous materials and prepare a hazardous material management plan (as part of the ESMP) that indicates how hazardous materials will be managed (and community risks mitigated). The borrower will be responsible for preparing the ESMP, which should include: a management plan that will address identification, labeling, handling, storage, use and disposal of the relevant hazardous materials. The plan might include confirmation from third-party specialists that risks have been adequately assessed and managed. An action plan should be defined and requires regular monitoring, reporting and independent review of implementation; this plan should be included in legal documentation (covenants, conditions of disbursement, etc.).

The operation has potentially [minor](#) transboundary environmental and associated social impacts, such as operations affecting another country's use of waterways, watersheds, coastal marine resources, biological corridors, regional air sheds and aquifers, or transboundary indigenous groups

Environmental/Social Transboundary Impacts: The borrower should do an environmental and social analysis addressing the following issues: (i) notification to the affected country or countries of the critical transboundary impacts; (ii) implementation of an appropriate framework for consultation of affected parties; and (iii) appropriate environmental mitigation and/or monitoring measures, to the Bank's satisfaction. This analysis should be part of a plan (part of the ESMP). Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc.).

The project has or will have [minor](#) negative impacts on [Indigenous Peoples](#).

Mitigation Framework: Include specific mitigation measures as needed in consultation with affected IPs. Consult with Indigenous Peoples specialist. Incorporate measures in legal documentation (covenants, conditions of disbursement, etc.). Include mitigation measures as part of overall environmental and social management plans or provisions.

The project has or will negatively affect [cultural sites](#) and alternatives have not been fully considered and/or affected stakeholders have not demonstrated approval through a documented process of [good faith negotiation](#).



Safeguard Screening Form

Cultural Sites: Impact creates significant risk of non-compliance with IDB policies. Consult with environmental and/or social specialist(s), relevant team members and others before proceeding. Where a project may significantly affect cultural sites, the borrower will proceed only after the completion of good faith negotiation with affected community and documented evidence of these discussions and informed participation of those communities. In addition, any lesser impacts on cultural sites must be appropriately mitigated with the informed participation of the affected communities. In circumstances where activities are located within a legally-protected area or a legally-defined buffer zone (and where cultural sites is threatened), borrowers will, in addition to the requirements for cultural sites cited above: (a) not implement any actions that are contrary to defined national or local cultural sites regulations or the protected area management plan; (b) consult through informed participation with the protected area sponsors and managers, local communities and other key stakeholders; and (c) implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area. If these requirements cannot be met, the project will not comply with this requirement. The legal documentations require monitoring, regular reporting and independent review of implementation. The borrower should have developed an action plan that describes how cultural sites will be protected and what engagement will be undertaken with local communities.

The project includes dangerous and hazardous [working conditions](#) where there could be [significant](#) negative impacts to [workers](#) or communities.

Ensure that the borrower Addresses Occupational Health and Safety: The borrower should provide details of how occupational health and safety issues will be addressed (including those found in the supply chain as appropriate) in a timely and efficient manner as a condition of disbursement and annual audits by third party experts should be considered. This should be addressed using an occupational health and safety management plan.

The project is located in an area prone to [landslides](#) and the likely severity of the impacts to the project is [moderate](#).

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations.

The project is located in an area prone to [earthquakes](#) and the likely severity of impacts to the project is [moderate](#).



Safeguard Screening Form

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general seismic design standards and other related regulations.

The project will mobilize personnel foreign to project zones and the borrower does not have a code of conduct or internal practices/rules prohibits the interaction with the local communities.

Ensure the borrower addresses Health and Community Safety: The borrower will deliver a code of conduct for his employees, contractors and subcontractors including clauses specifying those employees, contractors and subcontractors not to interact and relate with the local communities

The project will or may require [involuntary resettlement](#) and/or economic displacement of a [minor to moderate](#) nature (i.e. it is a [direct](#) impact of the project) and does not affect [indigenous peoples](#) or other vulnerable land based groups.

Develop Resettlement Plan (RP): The borrower should be required to develop a simple RP that could be part of the ESMP and demonstrates the following attributes: (a) successful engagement with affected parties via a process of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.

There are [risks](#) associated with structural elements of the investment (e.g. dams, public buildings), and road transport activities (heavy vehicle movement, transport of [hazardous materials](#), etc.) which could result in [significant](#) health and safety [risks](#) to local community.



Safeguard Screening Form

Address Community Health Risks: When structural elements or components are situated in high-risk locations and their failure may threaten the safety of communities, the borrower should commission experts with relevant and recognized experience to conduct a review as early as possible and throughout the design, operation and decommissioning stages of the investment. Where significant road traffic/transport is likely, the borrower should actively manage risks through appropriate training, engagement with affected communities (including Consultation), and controls and oversight (including of third-party contractors as appropriate). The borrower should design, construct, operate and decommission the structural elements of the investment in accordance with good international industry practice and will give particular consideration to potential exposure to natural hazards, especially where the investment is accessible to members of the affected community or where their failure could result in injury to the community. The borrower should also provide a specific plan related to the identified risk(s) and impact(s) (as part of the ESMP) and monitor and report on this plan. Structural elements must be designed and constructed by qualified and experienced professionals and certified or approved by competent authorities or professionals. Depending on the financial product, commitment and agreed actions should be referenced in appropriate legal documentation (covenants, conditions of disbursement etc.). Annual reports should be subject to review by qualified independent experts.

Transport of [hazardous materials](#) (e.g. fuel) with the potential or perceived potential to significantly affect community health and safety.

Hazardous Materials Management: An independent risk assessment should be commissioned and conclusions discussed with local communities (through a process of Consultation). The borrower should develop a plan to prevent or minimize the potential for community exposure to hazardous materials (as part of the ESMP). Where there is a potential for the community (including workers and their families) to be exposed to hazards, the borrower should exercise special care to avoid or minimize their exposure by modifying, substituting or eliminating the risk. Where hazardous materials are part of existing or proposed infrastructure, the borrower should develop management strategies and controls as well as design and operational systems that reduce risks to acceptable levels (as defined by competent professional). Particular care should be taken in situations where: (a) decommissioning activities are planned/anticipated; (b) transport of hazardous materials through local communities will occur (if this is the responsibility of third parties, the borrower should exercise commercially reasonable efforts to control the safety of deliveries of raw materials and transportation and disposal of wastes); and (c) communities will be at risk from pesticide (or other agrochemicals) (e.g. from aerial drift or water contamination). Regular reporting and independent review of implementation and the plan should be part of the legal documentation (covenants, conditions of disbursement, etc.).

Disaster Risk Summary

Disaster Risk Level

Moderate

Disaster / Recommendations



Safeguard Screening Form

The reports of the Safeguard Screening Form (i.e., of the Safeguards Policy Filter and the Safeguard Classification) constitute the Disaster Risk Profile to be included in the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.

The Borrower prepares a Disaster Risk Management Summary, based on pertinent information, focusing on the specific moderate disaster and climate risks associated with the project and the proposed risk management measures. Operations classified to involve moderate disaster risk do not require a full Disaster Risk Assessment (see Directive A-2 of the DRM Policy OP-704).

The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.

Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options. Please consult the INE/CCS adaptation group for guidance.

Disaster Summary

Details

The project is classified as moderate disaster risk because of the likely impact of at least one of the natural hazards is average.

Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

Environmental and Social Strategy (ESS)	
Operation Name	Construcción del Túnel Internacional Paso de Agua Negra
Operation Number	RG-L1116 y RG-O1655
Operation Details	
IDB Sector	Transport
Type of Operation	CCLIP
Impact Categorization	Cat A
Disaster Risk Rating	High Risk
Borrower	República Argentina y República de Chile
Executing Agency	República Argentina, por medio del Ministerio de Transporte (MT); República de Chile, por medio del Ministerio de Obras Públicas (MOP); y Entidad Binacional Túnel de Agua Negra (EBITAN)
IDB Loan US\$ (and total project cost)	IDB to Argentina US\$130 million IDB to Chile US\$150 million Total US\$280 million Total CCLIP US\$1,500 million
Applicable Policies/Directives	OP-102; OP-704; OP-710; OP-761; OP-765; OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.8, B.9, B.10, B.11, B.17)
Operation Description	
<p>The Agua Negra Tunnel will facilitate the existing road link between the Province of San Juan in Argentina with the Region of Coquimbo in Chile and forms part of the Bioceanic Corridor, whose route joins the Pacific Ocean at the Port of Coquimbo in Chile with the Atlantic Ocean in Porto Alegre in Brazil. The general objective of the project is to improve the cross-border connectivity between Chile and Argentina, thus expanding the region's access to international markets. Currently, the two regions are linked by a winding unpaved road and is inaccessible for extended periods of the winter months.</p> <p>The project will construct two, unidirectional two-lane roads in two separate tunnels under the Andes Mountains connecting the San Juan Province in Argentina with the Coquimbo Region in Chile. The tunnels will be approximately 13.9 km long and 11 meters wide. The tunnels will be constructed using high-tech tunnel boring machines (TBM) and, near their mid-points, the tunnels will be over 1,680 meters below the surface of the mountain. Several ventilation tunnels and evacuation tunnels linking the two main tunnels together will also be constructed. Parking areas and outbuildings such as immigration and customs offices will be constructed near the tunnel entries in each country. Several “buzones” (permanent storage areas for excavated spoil material) will be created in the vicinity of the tunnel entry points. Numerous temporary facilities will also be constructed to facilitate the construction phase including: concrete plant, asphalt plant, potable water treatment plant, residual water treatment plant, industrial water treatment plant, and work camps.</p> <p>Associated facilities, including two, 110 kV transmission lines with fiber optic cables and two substations will be constructed by the Governments of Chile and Argentina but will not be financed by the project. Sections of the existing unpaved road are currently being paved by the Government of Chile but will not be financed by the project. These sections are not necessarily related to the project and would be constructed with or without the Agua Negra Tunnel project.</p>	

Key Potential ESHS Risks and Impacts

Complex construction methodologies of this high-risk Category A project in a high-altitude area of the Andes have the potential to create numerous environmental and social risks and impacts which are detailed below:

An Environmental and Social Impact Assessment (ESIA) has been prepared and a license has been issued by the Province of San Juan in Argentina. The ESIA was not submitted to the environmental licensing process in Chile as the transport authorities in Chile will require the consortium to be awarded with the Engineering, Procurement and Construction (EPC) contract to prepare an EIA following the environmental licensing process in Chile and in accordance with the project development schedule (i.e upon completion of the final design). As such, it is anticipated that an EIA will not be approved in Chile within the next two years, this is, after, than the proposed IDB Board date for the project. This could be viewed as a risk of compliance with B.4 Other Risks.

The existing ESIA need to be complemented to comply with the IDB's environment and social policies. The aspects needing improvement in the ESIA are described below.

Three glaciers have been identified in the project's zone of influence; potential impacts to these glaciers could occur from noise, vibration, or dust caused by blasting activities during tunnel construction. The construction of associated facilities (transmission lines) will cause additional impacts on fragile mountainous ecosystems.

A Disaster Risk Assessment has not been prepared and will be required as the project area has been identified as high risk for landslides and earthquakes.

Cumulative impacts and indirect impacts have not been sufficiently addressed along the road corridor. The socio-economic baseline is weak, particularly relating to the indigenous communities suspected to be in the area and potentially subject to negative impacts related to the project.

Information on public consultation is vague. It is clear one consultation occurred; however, details regarding the content and quality of the public consultation is not provided. Minimally, at least one more round of public consultation will be required and consultations specifically targeting indigenous communities will also likely be required.

The construction of the tunnel will likely lead to increased traffic, dust and noise during construction and operation of the tunnel. As consequence of its operation, the tunnel will boost traffic in a big region (cumulative impacts), especially of heavy-freight trucks, during most part of year. Additionally, the construction (workers camp) and the operation of the international tunnel may increase the economic activities and immigration to this currently low populated rural area.

Specific impacts and risks include:

- Impacts to natural habitats including areas selected for permanent storage of excavation tailings (buzones). These areas could also lead to acid rock drainage, depending on the type of rock excavated and contamination of both surface and ground waters.
- Health and safety risks of workers primarily related to underground excavation, including the use of tunnel boring machines (TBM), blasting activities, rock burst or rock fall, and water pooling in the tunnels.
- Potential contamination of water bodies due to the generation, treatment and release of waste waters including grey water, industrial drilling water, and water seepage into tunnels.
- Community health and safety risks primarily due to increased traffic on existing roads leading to the project area and influx of workers from other areas.
- Potential impacts to archaeological and cultural sites identified in the project area.
- Potential impacts to indigenous communities (Diaguita People and/or other groups) located within the project's extended zone of influence.

- Potential conflicts with communities living close to the new improved roads accessing to the tunnel, due to the increase of heavy-freight traffic.
- Potential conflicts with land mining rights including existing gold and silver claims in Argentina and gold, copper, and iron mines in Chile.

Information Gaps and Strategy for Analysis and Management

An ESIA for the entire project, apart from the two transmission lines has been prepared and an environmental license has been issued by the province of San Juan in Argentina; however, while the document is fairly concise, some gaps exist within the current ESIA. The Bank has commissioned an environmental and social consulting firm to amend the existing ESIA, particularly regarding indirect and cumulative impacts, Socio-Cultural Evaluation and Consultations with Indigenous Peoples, Disaster Risk Assessment, impacts to glaciers in Chile from noise, vibration or dust, resettlement/livelihoods assessment and public consultations with affected and interested parties. For the Chilean side, there are specific procedures for Indigenous Consultations following the regulation D.S. N 66/2013.

The amended ESIA will assess several gaps identified in the original ESIA including:

- The level of public consultation conducted in the communities is not well defined. A Stakeholders Engagement Plan (including an initial Stakeholders Map and Analysis) and meaningful public consultations will be carried out by the respective government entities, with the support of the Bank's E&S consultant. A Grievance Mechanism will be defined and agreed with the stakeholders during the consultation process.
- Socio-economic assessment and identification (through a Socio-Cultural Evaluation) of the indigenous communities located within the project's area of influence and possible impacts to these communities as well as mitigation or compensation measures for these impacts. Consultations (socioculturally appropriate) will occur with these communities and written agreements will be required following the national and the Bank's regulations.
- A Disaster Risk Assessment has not been prepared for the project. The project has been identified as high risk, primarily due to the risk of landslides and earthquakes, and will require a DRA.
- The existing EIA has insufficient detail on indirect environment and social impacts and cumulative impacts during the construction (e.g. expected local impacts of work camp) and construction phases (e.g. regional impacts of the traffic increases). This will be addressed by the consultant. Taking also into account the associated facilities of this project (transmission lines)
- Analysis of potential impacts on temporary/permanent resettlement of houses and/economic activities at the project area or associated facilities.
- Following IDB's regulations is required a Gender Analysis related with this project, with the aim of promoting equal access and prevent gender-based exclusion to the project's benefits.
- The existing EIA does not assess the potential impact of the project to the glaciers located above the tunnels. While impacts to glaciers are not anticipated due to the depth of the tunnels, an assessment of the potential impacts must be conducted.

The project is currently scheduled to be present to the IDB Board before the end of the year. Completion of the EIA update is time sensitive and has been identified as the critical path item. Any delays in the EIA process will likely result in a delay to Board presentation.

The transmission lines will not be financed by the project; however, they will be considered during due diligence as associated facilities. Environmental Assessments will be required for the transmission lines and these will be completed by the respective local authorities. ESG will have little leverage in this process and outcome. ESG will review the environmental assessments and meet with local agencies should any concerns arise. The transmission lines will be monitored during the Bank's supervision activities.

EPC contractor(s) have not yet been selected for the project. Occupational health and safety and community health and safety are most influenced by the EPC contractor and their ESMS and H&S policies and procedures. If these cannot be assessed during due diligence, conditions will be inserted into the ESMR and Loan Agreement LA to ensure appropriate ESHS management of the EPC contractor(s).

Opportunities for IDB Additionality (if any)

ESG has prepared a ToR to hire a consultant to improve the existing EIA and conduct consultations with the affected and interested stakeholders (following IDB's OP-703 for Category "A" projects) and, specifically, socioculturally appropriate consultations with Indigenous Peoples. This project will be an opportunity to enhance local Indigenous Groups' living conditions putting into practice IDB's "development with identity" approach. During the due diligence/analysis, the Bank will seek to improve opportunities for women to have equal access to project benefits and opportunities.

Annex Table: Operation Compliance with IDB Safeguard Policies

See Table below.

Additional Annexes (if any)

See project map and design drawings below.

Table: Operation Compliance with IDB Safeguard Policies

Policies / Directives	Relevant Aspect of Policy / Directive	Is This Policy / Directive Applicable?	Rationale for Applying Policy / Directive Rationale	Actions required during Preparation & Analysis
OP-703 Environment and Safeguards Compliance Policy				
B.2 Country Laws and Regulations	Country laws	Yes	Country laws apply	The project will comply with country laws of Argentina such as environmental licensing requirements. Compliance with Chilean laws must be assessed during due diligence as an ESIA has not yet been prepared in Chile. For Chile, the project will comply with the D.S. N 66/2013 on Indigenous Consultations.
B.3 Screening and Classification	Project screening	Yes	The project has been screened and classified as a Category A project.	N/A
B.4 Other Risk Factors	Natural Disasters	Yes	The project is located in an area prone to natural disasters and has been classified as high risk	A Disaster Risk Assessment must be prepared in conjunction with the ESIA.
B.5 Environmental Assessment and Plans Requirements	ESIA Required	Yes	An ESIA for the Argentinean part of the project has been prepared for the project; however, additional studies must be prepared to complement the ESIA. A new ESIA will be prepared for the Chilean side	ToRs have been prepared to conduct additional studies. A consulting firm must be selected to complete the studies.
B.5 Social Assessment and Plans Requirements	ESIA Required	Yes	An ESIA has been prepared for the project; however, additional studies must be prepared to	ToRs have been prepared to conduct additional studies. A consulting firm must be

			complement the ESIA. A new ESIA will be prepared for the Chilean side.	selected to complete the studies. Indirect and cumulative impacts must be taken into account.
B.6 Consultation	Two consultations required	Yes	A minimum of two consultations with affected and interested parties must occur for a Cat A project.	Consultations are included in the TdR to complete the ESIA and must be completed by the executing agencies with the support of the consulting firm. These consultations will be included into a Stakeholders Engagement Plan (agreed with the executing agencies and IDB) and that will include previous a Stakeholder Map and Analysis, with the aim of ensuring the inclusivity of the participatory process.
B.7 Supervision and Compliance	Monitoring	Yes	The Bank and both Executing Agencies will monitor and supervise the project.	ESG will monitor the project during implementation. Both Executing Agencies must provide qualified staff capable of supervising the project during implementation.
B.8 Transboundary Impacts	Regional Project	Yes	The project includes construction activities in both Argentina and Chile.	Both governments serve as Executing Agencies and will continue to work with the Bank to ensure cooperation.
B.9 Natural Habitats	Natural habitats - glaciers	Yes	The project is located in areas of natural habitats in the high Andes. Glaciers (Critical Natural Habitat) are located within the Indirect Influence Area.	The ESIA will assess the potential impacts to Natural Habitat and Critical Natural Habitat and propose mitigation measures.
B.9 Invasive Species		No	The project will not introduce invasive species.	N/A

B.9 Cultural Sites	Cultural sites	Yes	An Archaeological Study has identified cultural sites within the project area.	Cultural sites identified in the Archaeological Study must be protected as defined in the study and a Chance Find Procedure must be implemented during construction. The Socio-Cultural Evaluation will also collect and analyze the cultural sites identified in the project area by the local Indigenous Groups, making sure that their comments and proposals about them are properly addressed.
B.10 Hazardous Materials	Hazardous materials	Yes	Hazardous materials (explosives, fuels, lubricants, etc.) will be used during project construction.	The ESIA will include an ESMP defining the appropriate procedures to be implemented for the safe use, handling, storage and disposal of hazardous materials.
B.11 Pollution Prevention and Abatement	Pollution Prevention	Yes	The project has the potential to pollute the environment.	The ESIA will include an ESMP with specific measure to prevent pollution.
B.12 Projects Under Construction		No	The project is not under construction.	N/A
B.13 Noninvestment Lending and Flexible Lending Instruments		No	The project will be financed under a CCLIP; however, no other projects are defined under the CCLIP.	The project will be financed under a CCLIP; however, a standard E&S due diligence approach will be applied to the project.
B.14 Multiple Phase and Repeat Loans		No	This is not a multiple phase loan.	N/A
B.15 Co-financing Operations		No	Co-financing is not envisioned.	N/A

B.16 In-Country Systems		No	Country laws will apply but Bank policies will be applied.	N/A
B.17 Procurement	Contracting of services	Yes	Consultants and contractors will be hired locally.	The project must comply with both local regulations and Bank policies regarding procurement of goods and services.
OP-704 Natural Disaster Risk Management Policy				
Disaster Risk Assessment	Natural Disasters	Yes	The project has been identified as high risk, requiring a DRA.	A ToR has been prepared to conduct a DRA.
Disaster Risk Management Plan	Natural Disasters	Yes	A DRMP will be required as part of the DRA.	Based on the findings of the DRA, a DRMP will be required.
OP-710 Operational Policy on Involuntary Resettlement				
Resettlement Minimization	Resettlement	More information required	Resettlement is not anticipated.	The EIA will assess the risk of temporary/ permanent resettlement and/or livelihoods impacts in the project's area, providing solutions and mitigation measures (i.e. RAP, LRP) to comply with IDB's OP-710.
Resettlement Plan Consultations	Resettlement	More information required	Resettlement is not anticipated.	If resettlement is confirmed during the EIA, the Borrower will perform adequate consultations with all affected parties complying with IDB's OP-710.
Impoverishment Risk Analysis	Resettlement	More information required	Affected groups might be present on site and/or in its proximity.	If resettlement is necessary or livelihoods impacts are confirmed during the EIA, the Borrower will perform adequate Impoverishment Risk Analysis (and mitigation measures to address those

				risks) to comply with IDB's OP-710.
Resettlement Plan or Resettlement Framework (Prior to Analysis Mission/Board Approval)	Resettlement	More information required	Resettlement is not anticipated	If resettlement is necessary, the Borrower will develop a specific RAP/LRP for the project.
Livelihood Restoration Program	Resettlement	More information required	The EIAs for both countries should especially analyze risks of temporary/permanent resettlement and negative economic impacts to the activities located at the surroundings of the construction areas.	If resettlement and/or negative economic impacts are assessed, the Borrower will develop a specific RAP and/or LRP. The RAP/LRP compensation and mitigation measures will pay special attention to the most vulnerable groups.
Consent (Indigenous Peoples and other Rural Ethnic Minorities)	Resettlement	More information required	A Socio-Cultural Evaluation will be carried out in order to know if any indigenous people is affected by temporary/permanent resettlement and/or loss of livelihoods.	Indigenous Peoples will not be resettled.
OP-765 Operational Policy on Indigenous Peoples				
Sociocultural Evaluation	Indigenous Peoples	Yes	Required to assess potential direct, indirect and cumulative impacts.	Sociocultural Evaluation for both countries will be conducted in the ESIA.
Good-faith Negotiations	Indigenous Peoples	Yes	Specific consultation required for IP.	Socioculturally appropriate consultations will occur with indigenous communities and written agreements will be required following the national and the Bank's regulations.
Agreement with Affected Indigenous Peoples	Indigenous Peoples	Yes	Written agreements required for IP.	Following indigenous consultations, written

				agreements must be reached with IP communities.
Indigenous Peoples Protection, Compensation, and Development Plan or Framework prior to Board Approval	Indigenous Peoples	More information required	The Socio-Cultural Evaluations in both countries will analyze the severity of the expected adverse impacts of the project to IP (minimal, moderate or significant), clarifying if it will be required an Indigenous Peoples Protection, Compensation, and Development Plan.	With the outcomes of the Socio-Cultural Evaluation and the Indigenous Consultations, it will be defined if the project's impacts on IP are minimal, moderate or significant. Taking that into account, a set of measures or plans will be proposed in order to mitigate the adverse project's impacts on IPs.
Discrimination Issues Assessed and Addressed	Indigenous Peoples	Yes	Discrimination is not anticipated but will be assessed.	To be assessed in the Socio-Cultural Evaluations of the ESIA, and mitigation measures will be applied if required.
Transborder Impacts Addressed	Indigenous Peoples	More information required	Transboundary impacts are not anticipated.	The Socio-Cultural Evaluations will analyze the expected transboundary impacts of the project to local IPs, and mitigation measures will be applied if required.
Impacts on Isolated Indigenous Peoples Addressed	Indigenous Peoples	No	Project area does not include isolated IP.	N/A
OP-761 Operational Policy on Gender Equality in Development				
Unequal Access to Project Benefits/ Compensation Measures		Yes	Required to assess the project's opportunity to promote equal access and prevent gender-based exclusion to the project's benefits.	Gender Analysis will be conducted in the ESIA, and it will contain provisions to secure equal access of men and women to compensations, if needed.

Uneven Introduction of Unpaid Work		More information required	The Gender Analysis will analyze the project's risks for unequal access to the project's paid and unpaid activities.	Gender Analysis will specifically make sure that the project will not include unequal access to the project's paid and unpaid activities.
Increased Risk of Gender-Based Violence, including sexual exploitation, human trafficking and sexually transmitted diseases		Yes	Significant influx of immigrants is anticipated, including the construction of a temporary work camp.	The Gender Analysis, the ESIA and ESMP will assess those risks, introducing measures to minimize them.
Disaggregation of Impact Data by Gender		Yes	The ESIA and the ESMP should include gender-disaggregated impact indicators, to monitor the real project's benefits for women at the local level.	The social baseline of the ESIA and the monitoring activities of the ESMP will include impact data disaggregated by gender.
Consultation of Affected Women	Consultation	Yes	Women must be provided equal opportunity and being encouraged to participate in public consultations.	Women groups will be invited to all the public consultation meetings.
OP-102 Access to Information Policy				
Disclosure of relevant Environmental and Social Assessments ¹ Prior to Analysis Mission, QRR and submission of the operation for Board consideration ²	Information disclosure	Yes	A fit-for-disclosure ESIA must be made public prior to the analysis mission.	The ESIA will be posted to the Borrower's website and the Bank website prior to the analysis mission.
Provisions for Disclosure of Environmental and	Information disclosure	Yes	Any additional ESHS documents relevant to the	The Borrower will make public all new relevant ESHS

¹ Environmental and Social Assessments includeESIAs, ESMPs, RPs, RFs, and ESMFs.

² Please refer to the Protocols for ESHS Documentation and Information Disclosure for more details on the disclosure timing of the different Environmental and Social Assessments.

Social Documents during Project Implementation			project will be made available to the public.	documents that will be developed during the Project's implementation.
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Figure 1. Bioceanic Corridor Map

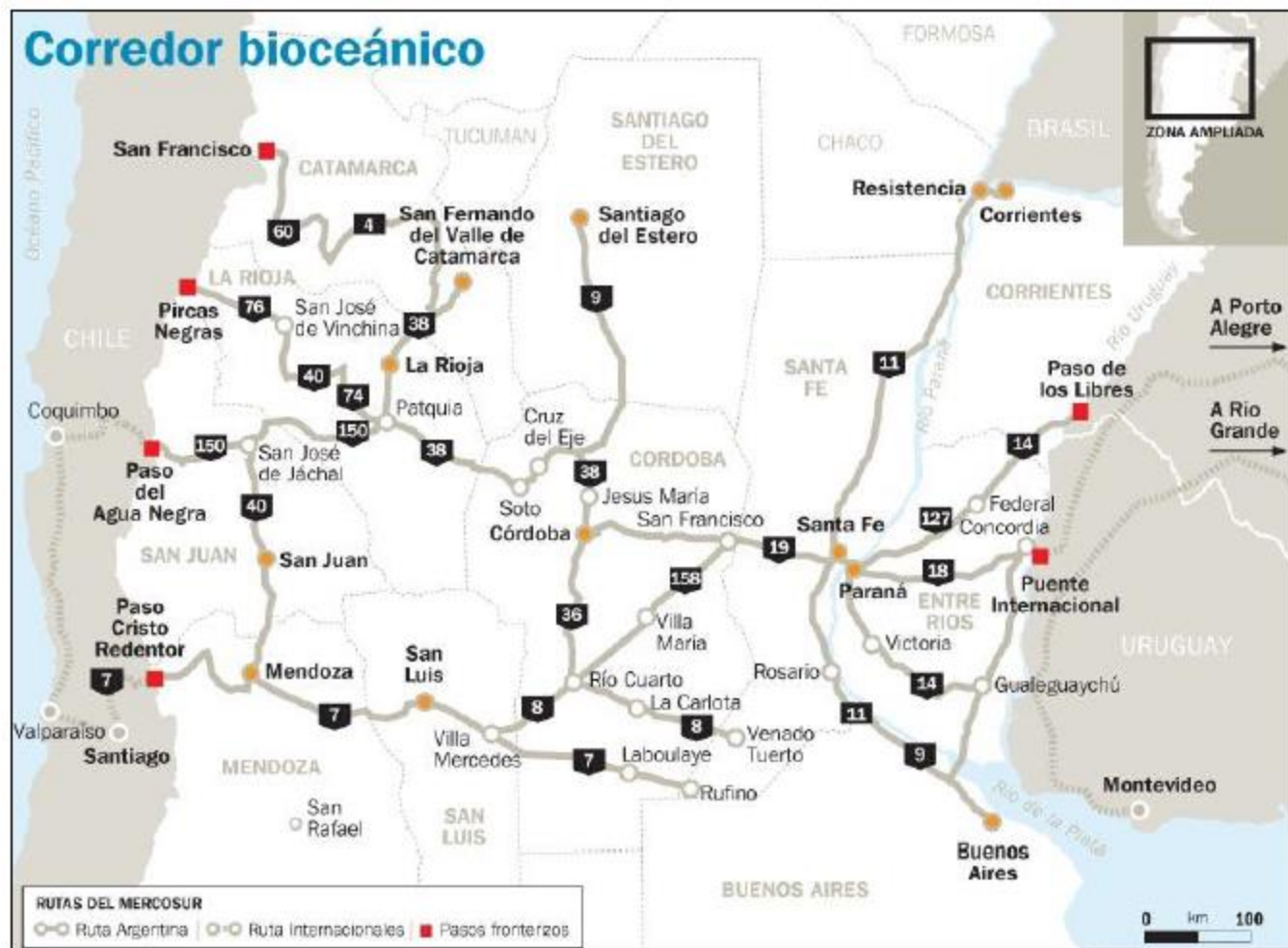


Figure 2. Project Area Map

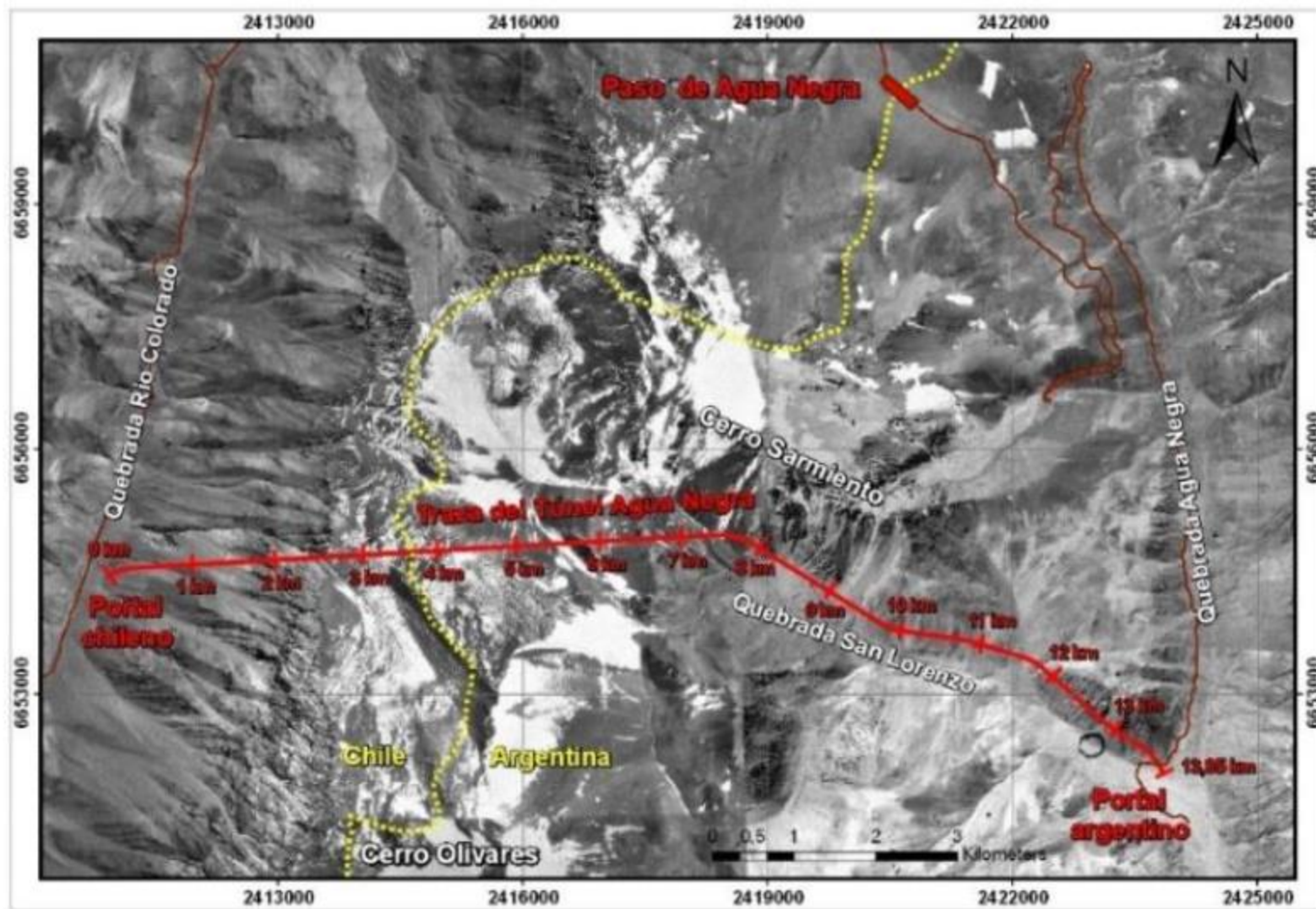


Figure 3. Tunnel Cross-section

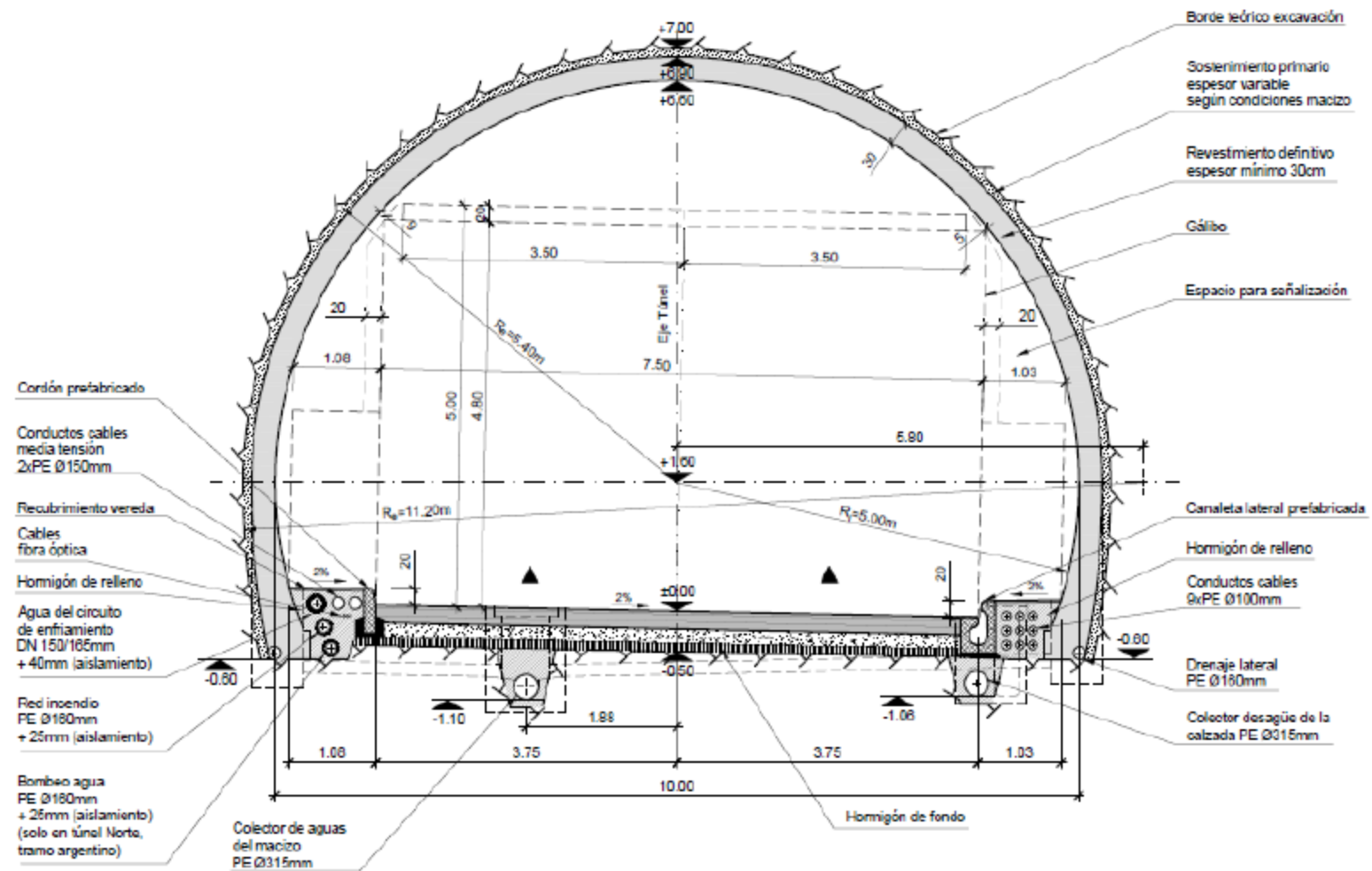
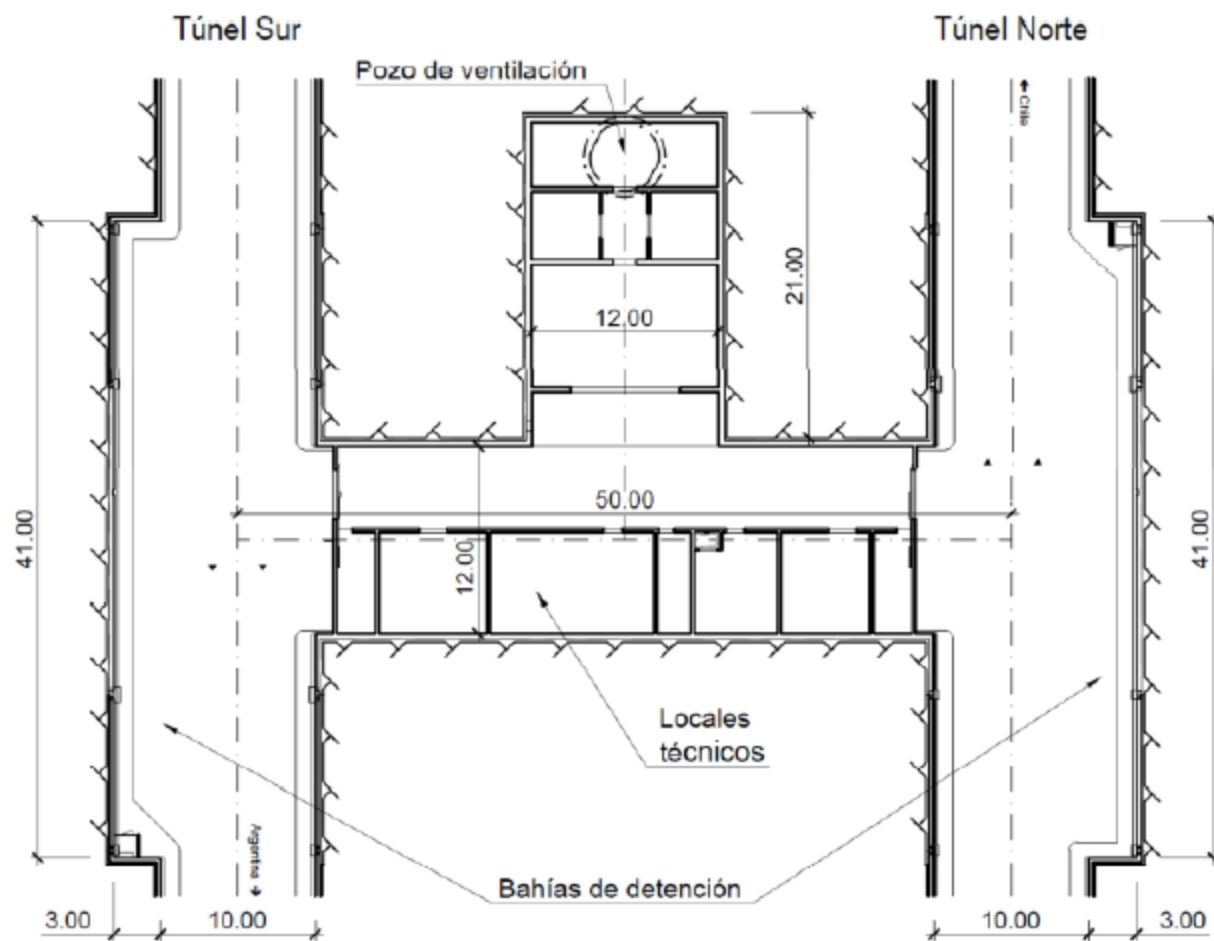


Figure 4. Integrated Tunnel Design



ÍNDICE DE TRABAJO COMPLETADO Y PROPUESTO

Estudios	Descripción	Situación	Referencias electrónicas
Evaluación económica	Consolidación de los estudios de evaluación económica de Chile y Argentina, para poder compartirlo en mayo de 2017.	La Dirección de Vialidad (DV) de Chile y la Dirección Nacional de Vialidad (DNV) de Argentina están trabajando en la evaluación económica	Será incluido en el POD
Evaluación legal e institucional	Apoyo al análisis de la estructura institucional y legal para la ejecución del Programa de Estructuración del Túnel Internacional Paso de Agua Negra (PETAN), mediante la elaboración de los siguientes convenios: (i) financiamiento; (ii) pago; (iii) fortalecimiento de la EBITAN; y (iv) conformación del Comité Ejecutivo de EBITAN.	En proceso	Informe de evaluación pendientes de publicación
Estudio estocástico de costos	Análisis de posibles sobrecostos del proyecto de Túnel de Agua Negra.	En proceso	Será incluido en el POD
Asistencia técnica	Apoyo de asistencia técnica de proyecto del túnel a través de la consultoría realizada por el equipo que ha trabajado con el BID en otras asistencias técnicas relacionadas (RG-T2561, RG-T1264, y RG-T2561).	Contratación de la firma consultora especialista en túneles realizada.	Será incluido en el POD
Asistencia de adquisiciones	Apoyo de asistencia de adquisiciones para documentos de licitación.	Contratación de consultor especialista en adquisiciones de grandes proyectos realizada	Será incluido en el Anexo 3 del POD
Taller de riesgos	Realización de taller de riesgos en donde se consolidan y analizan todos los riesgos con actores involucrados en el desarrollo del proyecto del túnel de Agua Negra. Los participantes del taller son el DV de Chile, la DNV de Argentina, representantes del gobierno de Colombia y el equipo del BID.	El taller está preparado y tendrá lugar en mayo de 2017 en Buenos Aires	Formación de equipos de trabajo

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¹ La información contenida en este Anexo es de carácter deliberativo, y por lo tanto confidencial, de conformidad con la excepción relativa a “Información Deliberativa” contemplada en el párrafo 4.1 (g) de la “Política de Acceso al Información” del Banco (Documento GN-1831-28).