

PUBLIC

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**REGIONAL**

**IIRSA  
ARGENTINA-CHILE CONNECTIVITY STUDY**

**RG-T1230**

**TECHNICAL COOPERATION**

**FEBRUARY 2008**

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## **ELECTRONIC LINKS AND REFERENCES**

Basic socioeconomic data	<a href="http://www.iadb.org/countries/home.cfm?id_country=AR&amp;Language=English">http://www.iadb.org/countries/home.cfm?id_country=AR&amp;Language=English</a> <a href="http://www.iadb.org/countries/home.cfm?id_country=CH&amp;Language=English">http://www.iadb.org/countries/home.cfm?id_country=CH&amp;Language=English</a>
Portfolio of projects approved and in preparation	<a href="http://www.iadb.org/projects/index.cfm?language=English">http://www.iadb.org/projects/index.cfm?language=English</a>
Terms of reference	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=1234283">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=1234283</a>

## **BASIC SOCIOECONOMIC DATA**

For basic socioeconomic data, including public debt information, please refer to the following address:

<http://www.iadb.org/RES/index.cfm?fuseaction=externallinks.countrydata>

**INFORMATION AVAILABLE IN THE VPC/IIRSA FILES**

Portfolio of projects approved and in preparation

Terms of reference

## **ABBREVIATIONS**

FIRII	Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration
IIRSA	Initiative for the Integration of South American Regional Infrastructure
VPC/IIRSA	Vice Presidency for Countries / IIRSA Coordination Office

**IIRSA**  
**ARGENTINA–CHILE CONNECTIVITY STUDY**

**(RG-T1230)**

**I. EXECUTIVE SUMMARY**

<b>Executing agency:</b>	Inter-American Development Bank (IDB)	
<b>Beneficiary:</b>	Regional. Argentina and Chile.	
<b>Sources of financing:</b>	Fund (FIRII):	US\$ 880,000
	Local (Chile):	US\$ 110,000
	Local (Argentina):	<u>US\$ 110,000</u>
	Total:	<b>US\$1,100,000</b>
<b>Objectives:</b>	The general objective of the study is to identify transportation infrastructure projects between Argentina and Chile that in the short- and medium-term will improve overland connectivity between the two countries, as well as operating conditions for international transportation using the border crossings. The study will determine the main strategic outlines of an investment program structure for the coming years.	
<b>Execution timetable:</b>	Execution period:	11 months
	Disbursement period	16 months
<b>Special contractual conditions:</b>	None.	
<b>Exceptions to Bank policies:</b>	None.	
<b>Environmental and social review:</b>	The Environmental and Social Impact Review Secretariat (ESR), formerly the Committee on Environment and Social Impact (CESI), reviewed this operation's technical cooperation profile at its 28 July 2006 meeting.	
<b>Benefits:</b>	The proposed study and resulting investment plans will have a direct impact on reducing transportation times and costs for both passengers and freight, thereby enhancing crossborder trade between Chile and Argentina as well as regional connectivity and integration.	

**Coordination  
with other  
agencies:**

Execution of this technical-cooperation operation will be coordinated with the Fondo Financiero para el Desarrollo de la Cuenca del Plata (FONPLATA) [River Plate Basin Development Fund] and the Andean Development Corporation (CAF) through the Technical Coordination Committee of the Initiative for the Integration of South American Regional Infrastructure (IIRSA).

## **II. FRAME OF REFERENCE AND RATIONALE**

### **A. Background and rationale**

- 2.1 The integrated development of infrastructure is a priority for the region, and Chile and Argentina have recognized this in their ongoing bilateral agenda. The two countries have evaluated and identified priority projects tied to their physical integration and framework policy development using a medium-term indicative land planning methodology agreed upon by the 12 member countries of the Initiative for the Integration of South American Regional Infrastructure (IIRSA). Linkages between the two will lower the logistical costs of transportation and production and promote the development of regional supply chains and binational tourism and integration. Chile and Argentina want to shape their bilateral investment plans around these prospects.
- 2.2 The two countries made the decision to conduct a bilateral connectivity study at the Thirty-fifth Meeting of the Joint Technical Group, held on 22 June 2005 in Santiago, Chile. There, the delegations agreed on the desirability of identifying investment priorities for the upcoming periods, based on technical criteria, that take into account the range of different connection alternatives offered by the border geographic areas as well as the potential and concerns of the respective provinces and regions. The need was confirmed at the November 2005 meeting. Later, the declaration of the Ministers of Chile and Argentina, signed in Santiago on 29 May 2006, restated the intention of conducting such a binational territorial connectivity study.
- 2.3 Agreement has therefore been reached on a binational study to gauge and project future transportation demand, encompassing the range of connectivity options available in the MERCOSUR–Chile context, bearing in mind the various modes of transportation and the development and integration potential of the greater South American subregion.
- 2.4 There are many border crossings between Argentina and Chile: some vital for international trade, and others for regional and binational development. These include: Jama, Sico, Socompa, San Francisco, Pircas Negras, Icalma, Mamuil Malal, Pino Hachado, Carirriñe, Huahum, the Cardenal Antonio Samoré crossing, Integración Austral, Pérez Rosales, Río Manso, Río Puelo (waterway), Futaleufú, Río Encuentro, Agua Negra, Cristo Redentor system, and Pehuenche. The two countries have been investing together in several border crossings and their attendant infrastructure, via the Argentina–Chile Joint Technical Group (Roads Subcommittee).



- 2.5 The principal border crossing between Argentina and Chile is Cristo Redentor, through which 75% of international freight passes, making it the second largest crossing between the 12 IIRSA countries in terms of volume of freight moved.
- 2.6 The Bank is in the process of approving a technical cooperation operation<sup>1</sup> whose main purpose is to explore ways to optimize infrastructure and operations of the Cristo Redentor crossing, and to determine the best control procedure for it, in order to establish a strategic action plan by mutual agreement between the two countries for staged implementation in the short, medium, and long term. This effort, in isolation, will not substantially impact overall connectivity between Chile and Argentina. Therefore, this study seeks to broaden the border crossing study beyond Cristo Redentor, so as to maximize impact on regional trade and integration.

#### **B. The Bank's sector strategy**

- 2.7 The Bank has been supporting IIRSA's development since 2000, when the initiative was created by the 12 South American countries. In March 2006, the Board of Executive Directors approved a continuation of the Bank's support to IIRSA by extending the sunset clause until 2010, when the initiative ends. Border crossings between Argentina and Chile are a key part of IIRSA's project portfolio, so this binational study is clearly a contribution to physical integration between the two countries, and between them and the rest of South America.
- 2.8 The Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII) was created to support preparation activities for integration infrastructure projects, primarily under IIRSA and the Puebla-Panama Plan. Activities eligible for FIRII funding include: (i) prefeasibility and feasibility studies; (ii) project designs; (iii) project feasibility studies (technical, economic, financial, social, and institutional); (iv) social and environmental studies; and (v) strategic environmental evaluations.
- 2.9 Connectivity between Argentina and Chile is a key project for IIRSA, and so is clearly eligible for this source of funding.

#### **C. Bank and other agency involvement in the sector**

- 2.10 The Bank has been supporting a number of activities associated with the improvement of border crossings in South America. This technical cooperation operation is being executed simultaneously with another on optimization of the Cristo Redentor border crossing, and the consultants will share their study findings.

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<sup>1</sup> Operation RG-T1264.

- 2.11 The members of IIRSA's technical coordination body, the Technical Coordination Committee, are the Fondo Financiero para el Desarrollo de la Cuenca del Plata (FONPLATA) [River Plate Basin Development Fund], the Andean Development Corporation (CAF), and the Bank. Accordingly, the findings of this study and all other activities of these institutions are shared at the committee events.

**D. Program strategy**

- 2.12 The study's findings will help to determine the main strategic outlines of an investment program structure for the coming years. They will also provide input for review of the IIRSA project portfolio in the integration and development hubs to which both countries belong.

### **III. THE PROGRAM**

**A. Objectives and description**

- 3.1 The general objective of the study is to identify transportation infrastructure projects between Argentina and Chile that in the short- and medium-term will improve overland connectivity between the two countries, as well as operating conditions for international transportation using the border crossings. The study will determine the main strategic outlines of an investment program structure for the coming years by proposing projects at border crossings already identified as priorities, as well as those whose potential is established in the study.
- 3.2 Among the study's specific objectives are to: (i) identify overland transportation infrastructure projects that enhance the transportation system between Argentina and Chile, moving from a highly concentrated and limited system to one that is decentralized and integrated; (ii) propose projects to eliminate obstacles faced by the region's economies in developing their productive and service activities, when inadequate transportation infrastructure is acknowledged as a key limiting factor; (iii) identify and analyze the interrelationships and effects that improvements to border crossing access routes would have on the operation of alternative and/or complementary modes of transportation, as well as the need for investments to facilitate intermodal transfers; and (iv) provide the means to recategorize border crossings, based on future levels of service as a function of the dominant demand for transportation and development potential on both sides of the crossing.

**B. Components**

- 3.3 The study will have three main components, as described below:
- 3.4 **Component I: Diagnostic assessment of the crossborder transportation system.** Under this component, a thorough description will be made of the current passenger and freight transportation system between Argentina and Chile, as well

as of available infrastructure and the system's weaknesses, both operational and in relation to a lack of adequate infrastructure. The description will also address the organizational structures of international transportation companies as well as infrastructure usage levels for different purposes.

- 3.5 The specific activities under this component will include: (i) a description of transportation demand, identifying flows of goods and people through different border crossings, including origin and destination, composition, and quantity (in terms of both volume and monetary value); (ii) a description of the transportation infrastructure, including the physical and operational characteristics of the transportation network under consideration, and border checkpoints; (iii) a description of the current transportation sector and its growth prospects, gauging the degree of complementarity among the different modes of transportation operating at the border crossings, with a detailed description of the existing business logistics system for strategic economic sectors, and a quantification of current transportation costs and their trends as a function of increased traffic and installed capacity of infrastructure and services; (iv) a diagnostic assessment of the current and future condition of the network under consideration, critically evaluating the transportation system now using the border crossings between the two countries and identifying its weaknesses in terms of connectivity. The underlying causes of these weaknesses will also be identified, including the operational factors and infrastructure limitations.
- 3.6 **Component II: International and regional macroeconomic context.** This component will describe the regional economies within the direct area of influence of the border crossings, as well as the economies that use the border crossings as a path to third markets.
- 3.7 The specific activities under this component will include: (i) a regional/bilateral analysis that describes the current condition of both economies (leading macroeconomic indicators, foreign trade features, price trends projections, major international trade agreements, etc.) and identifies their potential in terms of competitive advantages as well as the level of transportation infrastructure services necessary to amplify those advantages; (ii) an analysis of international market positioning, with a macroeconomic analysis relating the global scenario to those of the two countries, and gauging the impact of such positioning in the global marketplace on Chile's and Argentina's economies, respectively; and (iii) identification and description of all those factors making it possible to quantify future demand and the transportation and social and strategic infrastructure requirements that will be the basis for the investment program to be proposed.
- 3.8 **Component III: Projections.** Based on the findings of components I and II, the following activities will take place: (i) future transportation demand and the demand generated under different macroeconomic scenarios will be projected using specific models, including projections of origin-destination matrices for

freight and passengers; (ii) demand for infrastructure and logistics will be projected, identifying current and future transportation infrastructure requirements; (iii) alternative investment projects and program options that both countries could pursue in the short and medium term will be identified; and (iv) programs and projects will be evaluated, so as to recommend the one yielding the greatest economic and social benefit to the economies of the two countries.

#### **IV. COST AND FINANCING**

##### **A. Cost**

- 4.1 The total cost of the technical cooperation operation will be US\$1,100,000. Of that amount, US\$880,000 will be supplied by the Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII), and the remaining US\$220,000 by the local counterpart, equally divided between Chile and Argentina, as shown below:

**Table 1. Budget for the Study**

<b>Description</b>	<b>Bank</b>	<b>Counterpart (Argentina)</b>	<b>Counterpart (Chile)</b>	<b>Total</b>
Execution of study	845,000	75,000	75,000	995,000
Supervision of study	35,000	35,000	35,000	105,000
<b>TOTAL</b>	<b>880,000</b>	<b>110,000</b>	<b>110,000</b>	<b>1,100,000</b>

##### **B. Source of funding**

- 4.2 This technical-cooperation operation will be funded by FIIRI.

#### **V. PROGRAM EXECUTION**

##### **A. Executing agency**

- 5.1 At the countries' request, the Bank will act as the executing agency for this technical cooperation operation, and therefore will be responsible for hiring the consulting firm in accordance with Bank procurement policies and procedures. The Bank will contract support in each country to supervise the study. To guarantee the countries' active involvement, however, Operating Regulations will be established that call for each country to participate in both the contracting stage and supervision of the study, although any decisions will be made exclusively by the Bank in its role as executing agency. Each country will appoint a delegate for the execution of this technical cooperation operation.

- 5.2 **Technical responsibility** will rest with the Bank's technical units and the beneficiary countries with support from the Bank's Country Offices in Argentina and Chile, and strategic advisory support from the Vice Presidency for Countries / IIRSA Coordination Office (VPC/IIRSA), acting through Hilda María Gómez (VPC/IIRSA) (hildag@iadb.org, tel. (202) 623-1495, fax (202) 623-1428) and/or Jose María Díaz Batanero (VPC/IIRSA) (joseba@iadb.org, tel. (202) 623-1650), who will process and authorize payment requests. Technical responsibility will be shared by those individuals designated by each country to monitor this study.

**B. Execution period and disbursement schedule**

- 5.3 The execution period will be 11 months, and disbursements will be made over a period of 16 months.

**C. Procurement**

- 5.4 The study will be conducted by an independent, specialized consulting firm. The firm will be selected and contracted in accordance with Bank procurement policies and procedures (document GN-2350-7). Each country and the Bank will contract the consultants to support supervision via direct contracting.

## **VI. MONITORING AND EVALUATION**

**A. Monitoring**

- 6.1 The Bank will be responsible for commissioning the study, which will be supervised in accordance with the technical-assistance agreement to be signed by Chile, Argentina, and the Bank.
- 6.2 All stages of the procurement process, as well as the review of reports delivered by the consulting firm, must be approved in advance by the IIRSA national coordinators in each country, who will serve as conduits for the different national agencies participating in the study.

**B. Supervision**

- 6.3 Hilda Maria Gómez (VPC/IIRSA) (hildag@iadb.org, tel. (202) 623-1495, fax (202) 623-1428) will be responsible for monitoring this technical cooperation operation in coordination with the Bank's Country Offices in Argentina and Chile and with the Transport Division (INE/TSP). The Vice Presidency for Countries / IIRSA Coordination Office will process and authorize payment requests.

## **VII. BENEFITS AND RISKS**

### **A. Benefits**

- 7.1 The proposed study and the resulting investment plans will have direct impact on crossborder trade between Chile and Argentina, as well as on regional connectivity and integration.

### **B. Beneficiaries**

- 7.2 Once they have implemented the study's recommendations, both countries taking part in the study will see improvements in their national economies through enhanced regional connectivity, particularly with respect to binational, regional, and international foreign trade flows.
- 7.3 Users of the target transportation network will also be direct beneficiaries of the program, inasmuch as general transportation conditions will improve and border crossings will be run more efficiently as a result of the investments to be identified by the study.

### **C. Risks**

- 7.4 No major problems are anticipated for execution of this technical cooperation operation, given the binational agreement between Argentina and Chile for the study and the subsequent use of its findings to develop a binational investment plan. Nonetheless, as this is a binational study, the need for coordination and cooperation is even greater. To facilitate this task, the study will have support from the IIRSA national coordinators, who will channel all comments and contributions from the different entities in each country.
- 7.5 The Bank, as executing agency, will coordinate efforts between the two countries, thereby helping to integrate all parties into the project.

## **VIII. ENVIRONMENTAL AND SOCIAL CONSIDERATIONS**

- 8.1 This technical cooperation operation has no environmental or social implications, since it involves the performance of studies, and has a "C" classification.
- 8.2 The Environmental and Social Impact Review Secretariat (ESR), formerly the Committee on Environment and Social Impact (CESI), reviewed this operation's technical cooperation profile at its meeting 31-06 on 28 July 2006, and requested that a preliminary identification of the most significant and sensitive social and environmental considerations of the different connectivity options to be analyzed

be included in the terms of reference for the study. This has been added under paragraphs 4.2.2 and 4.3.3 of the final terms of reference.

## **IX. CERTIFICATION OF FUNDS**

I certify that this technical cooperation operation was approved for financing by the Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII) on 7 September 2006, pursuant to a communication of that date signed by Juan Borga (RE2/FSS). I also certify that up to US\$880,000 in resources are available from the FIRII in order to finance the activities described and budgeted in this document.

I have also verified that: (a) the proposed technical cooperation operation does not exceed an accumulated total of US\$1.5 million; (b) the integration initiative of which it is a part has not received more than 60% of the FIRII's resources in a three-year period; and (c) neither of the proposed technical cooperation operation's beneficiary countries has executed more than 30% of all FIRII-funded operations. The reserved funds represented by this certification is valid for a period of 11 calendar months, running from the signature date of this certification. If the project is not approved by the Inter-American Development Bank within that time, the reserved funds will be considered uncommitted, and a new certification must be signed to renew the reserve. The commitment and disbursement of these resources shall be made only in United States dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except that local consultants working in their own borrowing member country shall have their remuneration defined and paid in the currency of that country. No FIRII resources shall be made available to cover amounts greater than the amount certified hereinabove for the implementation of this plan of operations. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the fund currency, resulting in currency exchange rate differences for which the FIRII is not at risk.

The project team will prepare a final report (format attached) within six months after the end of the technical cooperation operation, and deliver a copy to the Vice Presidency for Countries / Grants and Cofinancing Management Unit.

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Margauerite S. Berger, Chief  
Grants and Cofinancing Management Unit  
(VPC/GCM)

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Date



**REGIONAL**

**IIRSA**

**ARGENTINA–CHILE CONNECTIVITY STUDY**  
**(RG-T1230)**

**ITEMIZED BUDGET**

Component	Value (US\$)
<b>Module 1</b>	<b>295,000</b>
Direct cost	245,000
Indirect cost	35,000
Travel and per diem	15,000
<b>Module 2</b>	<b>490,000</b>
Direct cost	435,000
Indirect cost	30,000
Travel and per diem	25,000
<b>Module 3</b>	<b>180,000</b>
Direct cost	150,000
Indirect cost	20,000
Travel and per diem	10,000
<b>Contingencies</b>	<b>30,000</b>
<b>Total study cost</b>	<b>995,000</b>
<b>Supervision</b>	<b>105,000</b>
<b>IDB contribution (80%)</b>	<b>880,000</b>
<b>Counterpart, Argentina (10%)</b>	<b>110,000</b>
<b>Counterpart, Chile (10%)</b>	<b>110,000</b>
<b>TOTAL</b>	<b>1,100,000</b>

## REGIONAL

**IIRSA  
ARGENTINA-CHILE CONNECTIVITY STUDY  
(RG-T1230)**

## PROCUREMENT PLAN

Main program procurements	Procurement method	Source of financing and percentage			Evaluation method	Prequalification (Yes/No)	Estimated dates		Total Cost (US\$)	Status (Pending, in process, awarded, canceled)
		IDB %	Local Argentina %	Local Chile %			Start of process	Completion of contract		
<b>A. Consulting services</b>										
1. Execution of study	ICB	845,000	75,000	85,000	QCBS				1,005,000	
2. Supervision of study	SSS	35,000	35,000	25,000					95,000	
<b>ICB:</b> International competitive bidding <b>NCB:</b> National competitive bidding; <b>SSS:</b> Single-source selection; <b>QCBS:</b> Quality- and cost-based selection.										

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK  
MULTILATERAL INVESTMENT FUND

PROPOSED RESOLUTION

Regional. Nonreimbursable Technical Cooperation ATN/\_\_\_-\_\_\_\_-RG  
IIRSA Connectivity Study Argentina – Chile

The Board of Director

RESOLVES:

1. That the President of the Inter-American Development Bank or such representative as he shall designate is authorized, in the name and on behalf of the Bank, as Administrator of the Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII), to enter into such agreements as may be necessary with the Argentine Republic and the Republic of Chile, and to take such additional measures as may be pertinent for the execution of the project proposal contained in document MIF/AT-\_\_\_ with respect to a technical cooperation for an IIRSA connectivity study Argentina – Chile.
2. That up to the amount of US\$880,000, or its equivalent in other convertible currencies, shall be authorized for the purpose of this resolution, chargeable to the Fund for the Financing of Technical Cooperation for Initiatives for Regional Infrastructure Integration (FIRII).
3. That the above-mentioned sum is to be provided on a nonreimbursable basis.