UNASUR
COSIPLAN

Activity **Report** 2016

South American Infraestructure and Planning Council

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COSIPLAN

Activity **Report** 2016

With the cooperation of the Technical Coordination Committee

IDB

CAF DEVELOPMENT BANK OF LATIN AMERICA

FONPLATA

INTAL Institute for the Integration of Latin America and the Caribbean

Overview

The South American Infrastructure and Planning Council (COSIPLAN) is one of the twelve Ministerial and Sectoral Councils of the Union of South American Nations (UNASUR). Since its creation within the framework of the Third Meeting of the Council of UNASUR Heads of State and Government on January 28, 2009, in the city of Quito, Ecuador, it has been the major forum where political and strategic discussions are held with a view to implementing the integration of South American infrastructure.

COSIPLAN's mission is closely linked to the planning and implementation of its Project Portfolio, which is a set of strategic integration works in the transport, energy, and communications sectors. In addition, planning methodologies are developed and applied for the purpose of building a more realistic view of the complex dynamics in the territory with the support of information technologies.

The Council rests on the coordination of its various bodies around an Annual Work Plan. This Plan, which seeks to fulfill the objectives laid down in the Strategic Action Plan (PAE) covering the decade 2012-2022, has been prepared on the basis of collaboration between the Coordinating Committee and IIRSA Technical Forum. The highest body is the Council of Ministers, responsible for approving the Annual Plan as well as for evaluating its implementation.

COSIPLAN makes this report on the results of its 2016 activities available, following its commitment to transparency and citizen participation. This document presents the institutional and operational framework of the Council, a comprehensive overview of the status of the infrastructure projects and the progress made in terms of planning, exclusive reports on the topics that have shown the most advanced development and that especially reflect the benefits of this integration process, the technological tools developed and used to support the management of COSIPLAN projects and activities, and previously unpublished testimonials from and interviews with prominent officials from the region.

Suggested Reading

This report is designed to be read from beginning to end. However, depending on the reader's interests and level of familiarity with the activities of the Council, we suggest at least three different approaches.

To learn more about COSIPLAN, its structure, operation, objectives, and background, see the sections "The Council" and "The Institutional Framework."

For a general overview of the results achieved this year, see the section "Outcomes 2016."

If the reader is familiar with the work of COSIPLAN and interested in specific topics, the "Integration in Motion" section describes the progress made in the main action areas in which work has been done in 2016.

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The Council

Introduction

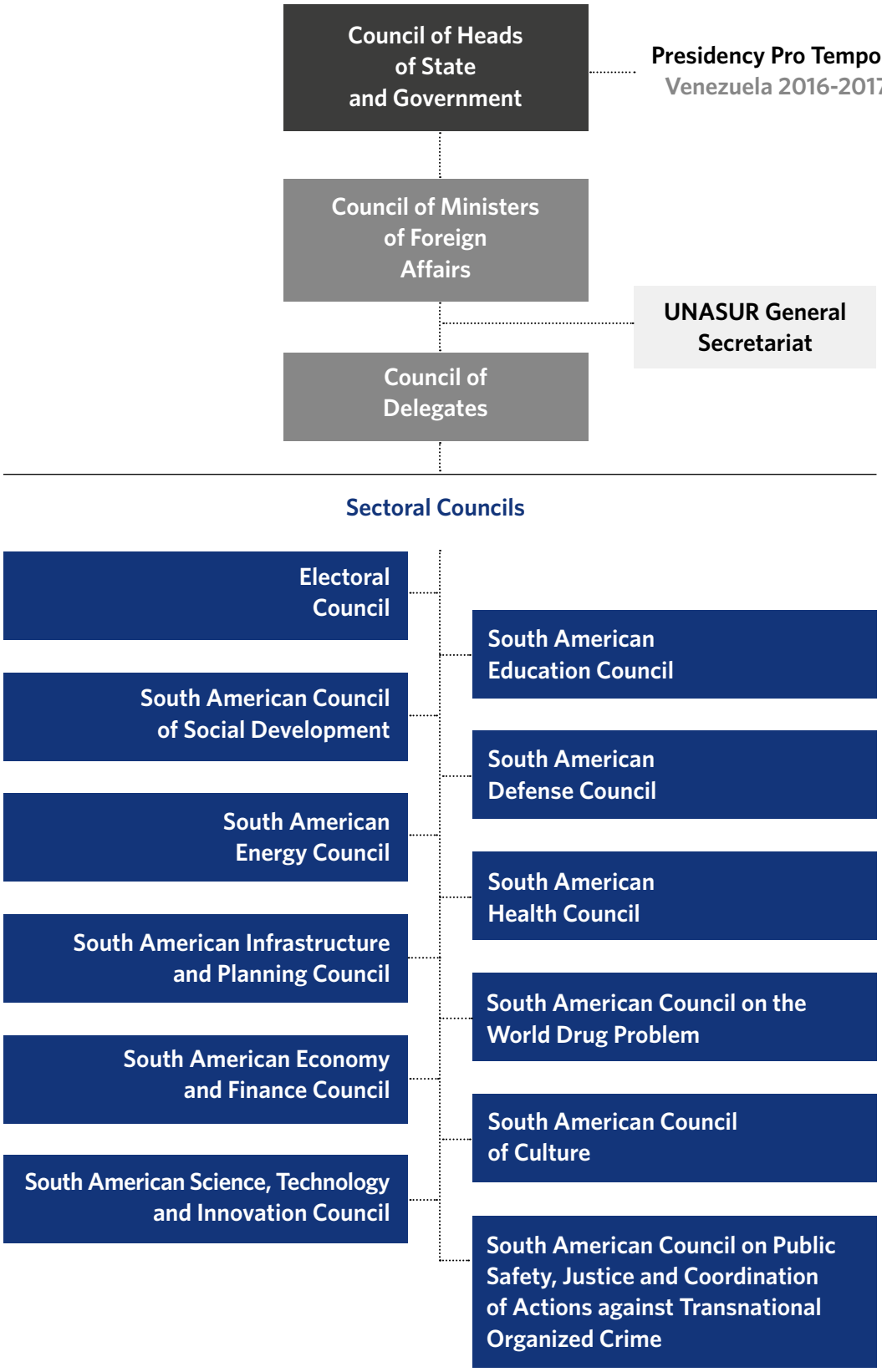
What is COSIPLAN?

The South American Infrastructure and Planning Council (COSIPLAN) is one of the twelve Ministerial and Sectoral Councils of the Union of South American Nations (UNASUR). It was created within the framework of the Third Meeting of the Council of UNASUR Heads of State and Government on January 28, 2009, in the city of Quito, Ecuador.

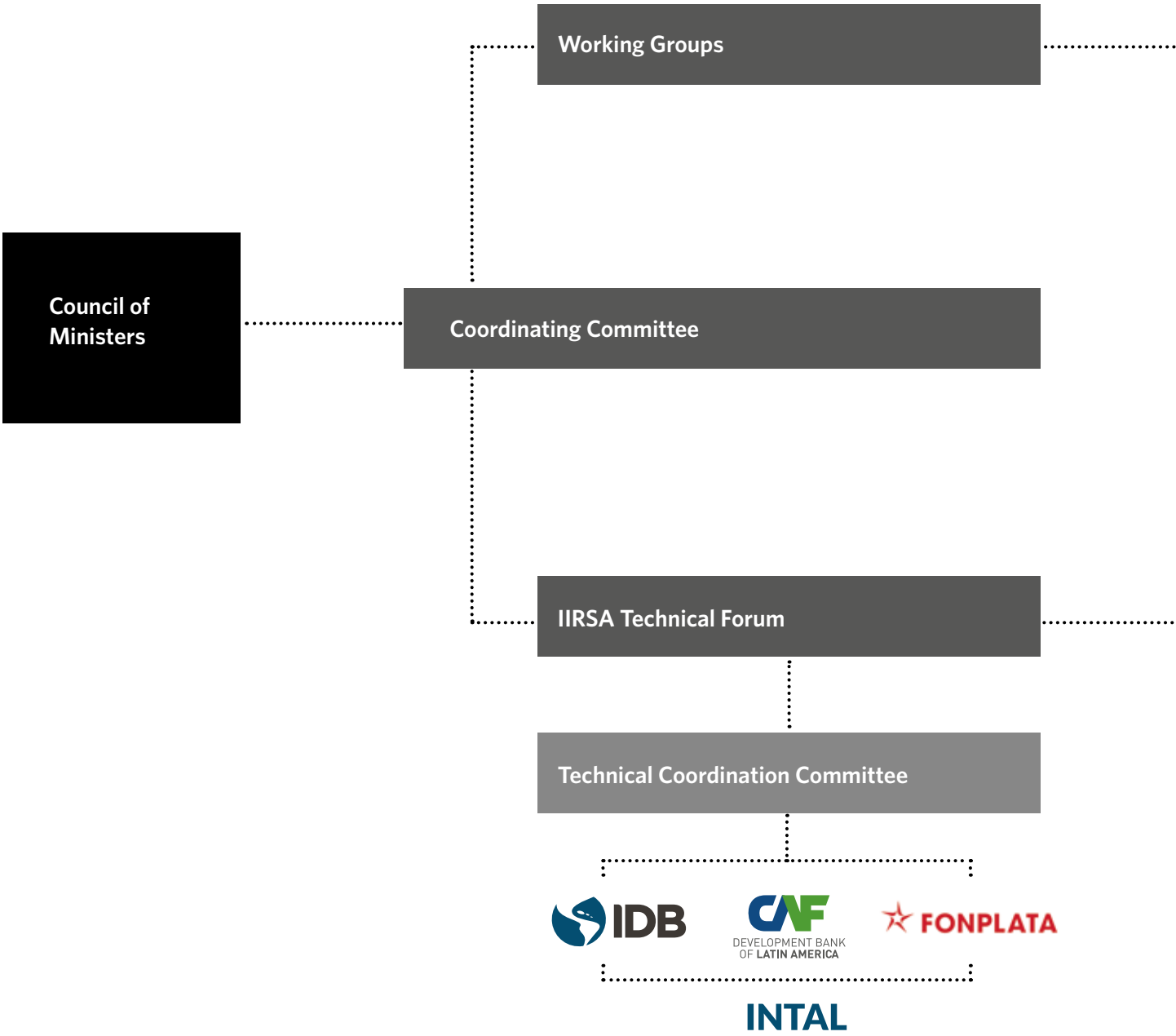
COSIPLAN is the forum where political and strategic discussions are held with a view to implementing the integration of South American infrastructure, while remaining committed to social, economic, and environmental development. It is made up of the twelve countries of the South American continent: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela.

The COSIPLAN Statutes and Regulations were approved by the COSIPLAN Ministers at their First Ordinary Meeting (Buenos Aires, December 2009) and later on ratified at the Fourth Meeting of the UNASUR Council of Heads of State (Georgetown, November 2010). These instruments guide the work undertaken by the Council as they define its principles and objectives and provide it with a structure capable of implementing the actions entrusted to it by the Presidents, including IIRSA as its Technical Forum.

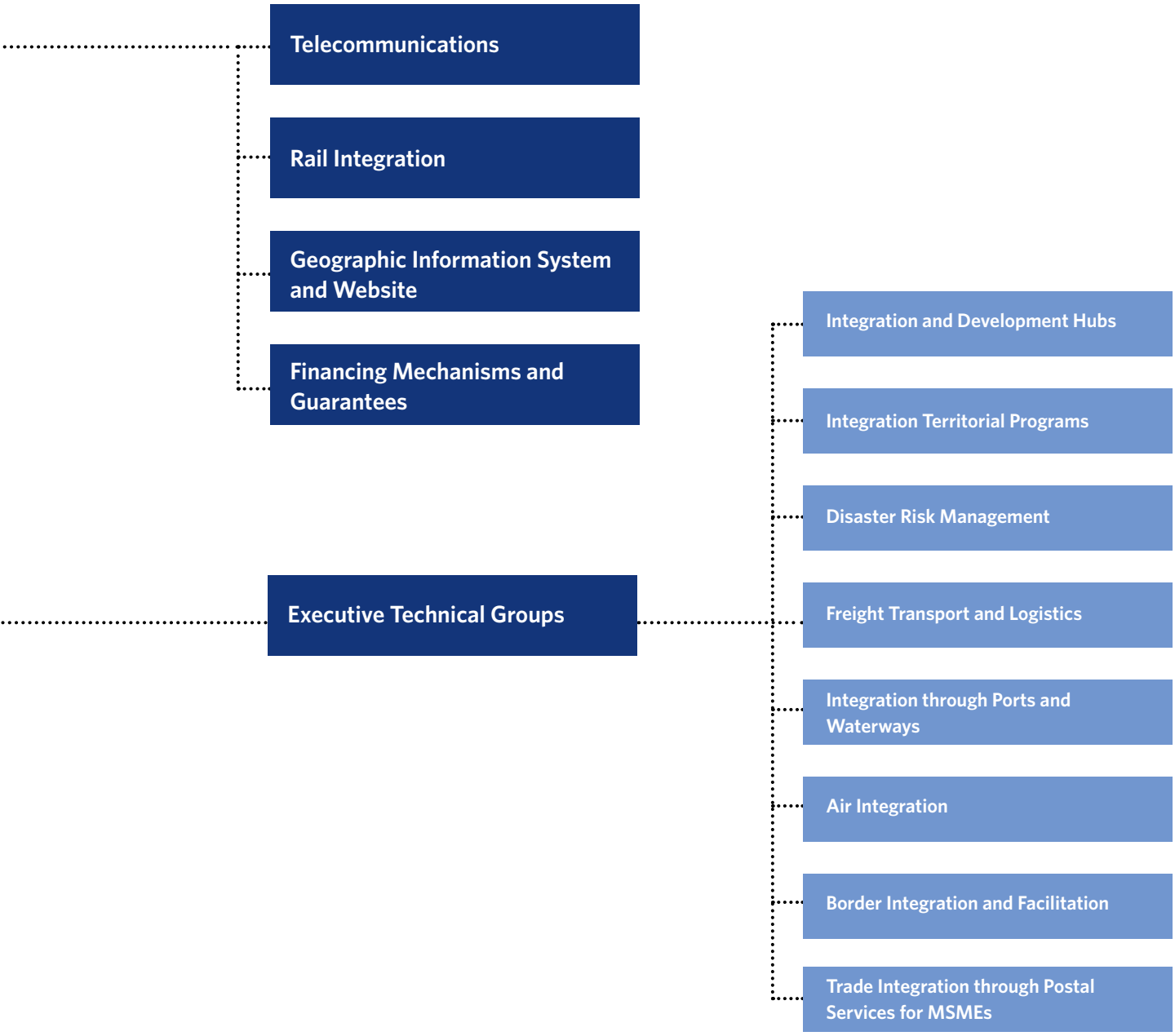
COSIPLAN is governed by the principles of integration and complementarity of the regional infrastructure policies, programs, and projects encouraging territorial balance and cohesion as well as sustainable development in harmony with nature.


Council of Heads of State and Government
Presidency Pro Tempore
Venezuela 2016-2017
Council of Ministers of Foreign Affairs
UNASUR General Secretariat
Council of Delegates
Sectoral Councils
Electoral Council
South American Council of Social Development
South American Energy Council
South American Infrastructure and Planning Council
South American Economy and Finance Council
South American Science, Technology and Innovation Council
South American Education Council
South American Defense Council
South American Health Council
South American Council on the World Drug Problem
South American Council of Culture
South American Council on Public Safety, Justice and Coordination of Actions against Transnational Organized Crime

How Is COSIPLAN Organized?



Articles 5, 6, and 7 of the COSIPLAN Statutes lay down the operational structure of the Council. The following organizational chart presents visually the relationships of the bodies that carry out the activities included in the annual work plan.



How Does COSIPLAN Work?

Its operation rests on the coordination of its various bodies around an Annual Work Plan. This Plan, prepared on the basis of collaboration between the Coordinating Committee, the Working Groups, and IIRSA Technical Forum, seeks to fulfill the objectives laid down in the Strategic Action Plan (PAE) covering the decade 2012-2022. The highest body is the Council of Ministers, responsible for approving the Annual Plan as well as for evaluating its implementation.

Council of Ministers

This Council is made up of Infrastructure and Planning ministers. It meets once a year with the purpose of analyzing the results of the activities carried out and approving the Work Plan for the following year. Since its creation, six Ordinary Meetings of COSIPLAN Ministers have been held.

As laid down in article 7 of the Statutes, the Presidency of the Council is held by the same country holding the UNASUR Presidency Pro Tempore (PPT), except that, upon a proposal of the latter, the Council decides to designate another country by consensus. In the period since April 2016, this role has been held by the Bolivarian Republic of Venezuela. The Vice-Presidency of the Council is held by the country that has previously held the Presidency.

Presidencies Pro Tempore

- **2011**: Federal Republic of Brazil
- **2012:** Republic of Paraguay
- **2012-2013:** Republic of Peru
- **2013-2014:** Republic of Chile
- **2014-2016:** Eastern Republic of Uruguay
- **2016-2017:** Bolivarian Republic of Venezuela

Coordinating Committee

This Committee is the executive branch of the Council. It is a key component to plan and monitor all the actions outlined in the Strategic Action Plan. As it is made up of ministerial delegates from the Member States, it can be certain that all the projects and outcomes not only reflect the sovereign will of the countries but also respond to the needs of all of them.

The Committee, presided over by the country holding the COSIPLAN Presidency Pro Tempore, meets regularly twice a year. The countries' ministerial delegates to the Committee perform their duties in the following institutions:

ARGENTINA

Fernando Álvarez de Celis
Undersecretary of Public Investment Territorial Planning
Ministry of the Interior, Public Works and Housing

Atilio Alimena
National Director of International Territorial Integration Planning
Under-Secretariat of Public Investment Territorial Planning
Ministry of the Interior, Public Works and Housing

BRAZIL

Marcos Adolfo Ribeiro Ferrari
Secretary of Planning and Economic Affairs
Ministry of Planning, Development and Management

Roberto Endrigo Rosa
Director of Cross-Cutting and Territorial Affairs
Ministry of Planning, Development and Management

COLOMBIA

César Augusto Peñaloza
Director of Infrastructure and Sustainable Energy
National Department of Planning

Luis Felipe Lota
Deputy Director of Transport
National Department of Planning

BOLIVIA

Marco Vázquez
Vice-Minister of Telecommunications
Ministry of Public Works, Services and Housing

Gustavo Leandro Pozo Vargas
Director General of Telecommunications
Ministry of Public Works, Services and Housing

CHILE

Rigoberto García González
International Coordinator
Ministry of Public Works

Marcela Ruth Espinoza Nissim
Director of Borders
National Directorate of Borders and Limits
Ministry of Foreign Affairs

ECUADOR

Jorge Alejandro Pinto Aguirre
Advisor to the Office of the Vice-Minister of Transport Infrastructure
Ministry of Transport and Public Works

Marisela Rivera
Coordinator of Strategic International Integration
National Planning and Development Secretariat



GUYANA

Geoffrey Vaughn
Coordinator
Works Services Group
Ministry of Public Works

Patrick Thompson
Chief Transport Planning Officer
Works Services Group
Ministry of Public Works

PERU

Adrián Lazo
Director of Planning
Ministry of Transport and Communications

Vicente Gutiérrez Mendoza
Investment Monitoring Expert
Ministry of Transport and Communications

URUGUAY

Pablo Genta
National Director of Planning and Logistics
Ministry of Transport and Public Works

Renée Fernández
Responsible for the IDB Projects Area
Ministry of Transport and Public Works

PARAGUAY

Luis Añazco Franco
COSIPLAN Institutional Coordinator
Ministry of Public Works and Communications

SURINAME

Soman Santosh Johannes
Permanent Secretary of the Ministry of Public Works
Ministry of Public Works

Mohan Satish Vinod
Public Works Engineer
Ministry of Public Works

VENEZUELA

Elvis Urbina
UNASUR Representative
Ministry of People's Power for Foreign Affairs

Working Groups

The Working Groups (WGs) focus on topics that, after having undergone robust technical development, need to gain momentum at the political level. They are divided into four areas:

- WG on Rail Integration
- WG on Financing Mechanisms and Guarantees
- WG on Telecommunications
- WG on the COSIPLAN Geographic Information System (GIS) and Website

IIRSA Technical Forum

In its first ten years of work (2000-2010), the Initiative for the Integration of Regional Infrastructure in South America (IIRSA) became an essential forum for infrastructure planning and implementation by the twelve South American countries from a shared and regional vision of the opportunities and challenges posed by the subcontinent.

In 2010, IIRSA was incorporated into COSIPLAN as its Technical Forum, while maintaining its original operational structure: the National Coordinations, which are the focal point of each country; the Executive Technical Groups, which address the different topics included in the Work Plan; and the Technical Coordination Committee, a support body.

Executive Technical Groups

The Executive Technical Groups (GTEs) are the technical work level of the Forum. They analyze specific matters related to the Integration and Development Hubs, the Territorial Planning Methodologies, and the Sectoral Integration Processes.

Each GTE is made up of experts and officials from the countries who are concerned with governmental agencies relevant to its work agenda. Each National Coordination is responsible for appointing the delegates to the GTE meetings and leads its national delegation.
The following GTEs are currently operating:

- Portfolio and API by Integration and Development Hub
- Integration Territorial Programs
- Disaster Risk Management
- Freight Transport and Logistics
- Integration through Ports and Waterways
- Air Integration
- Border Integration and Facilitation
- Trade Integration through Postal Services for MSMEs

Technical Coordination Committee

The Technical Coordination Committee (CCT) is comprised of officials from the Inter-American Development Bank, the Development Bank of Latin America, and the Financial Fund for the Development of the Plata Basin. It has a Secretariat with permanent headquarters at the Institute for the Integration of Latin America and the Caribbean in Buenos Aires, Argentina.

The CCT provides technical and financial support to the countries in all areas of the Annual Work Plan, and acts as a process facilitator, a coordinator of joint activities, and the guardian of the Council's institutional reports.

The officials from the three institutions who are actively involved in this work are the following:

Inter-American Development Bank (IDB)

Raúl Rodríguez Molina
Integration Infrastructure Specialist

Patricio Mansilla
Integration Infrastructure Specialist

Financial Fund for the Development of the Plata Basin (FONPLATA)

Denise Obara
Manager of Operations and Countries

Pedro Sosa Pinilla
Advisor to the Executive Presidency (Operations)

Development Bank of Latin America (CAF)

Rolando Terrazas
Advisor to the Infrastructure Vice-Presidency

Jorge Horacio Kogan
Advisor to the Infrastructure Vice-Presidency

Sebastián Abbatemarco
Chief Executive, Project Department, Southern Region

Jesús Suniaga
Infrastructure Chief Executive, Sectoral Analysis and Programming Department

CCT Secretariat – Institute for the Integration of Latin America and the Caribbean (IDB-INTAL)

Gustavo Beliz
INTAL Director

Alejandra Radl
Integration and Trade Specialist

Ignacio Manuel Estévez
Integration and Trade Specialist

Interview

Ernesto Samper Pizano

"COSIPLAN is one of the Sectoral Councils with greater continuity"

The Secretary General of UNASUR takes stock of the work done by COSIPLAN and the support provided during his tenure.

How is the institutional environment in which COSIPLAN operates?

In general, the work of the Sectoral Councils addresses the objectives of the Treaty as well as the Mandates given by the Council of Heads of State and Government. Every year, the Ministers responsible for each sectoral area review and enhance their work program. The General Secretariat, through its Directors and the Representatives of the Ministries of Foreign Affairs, monitors the status of the agenda items and action plans. Furthermore, for two years now, the General Secretariat has been promoting "mainstreaming" seminars and meetings on topics common to two or more Sectoral Councils, such as the first seminar on Mainstreaming Disaster Risk Management, which was held at our headquarters in September 2016.

The organization of Convergence Round Tables with the participation of other sub-regional integration mechanisms —such as the Andean Community, MERCOSUR, ALBA, the Pacific Alliance, and the Amazon Pact— has been another way of promoting cross-sectoral coordination by means of a matrix of issues to be shared or strengthened. Incidentally, the VI Convergence Round Table between UNASUR and these integration mechanisms will take place on November 23.

How do you assess the performance of COSIPLAN in this context?

COSIPLAN, concerned with regional infrastructure issues, is one of the Sectoral Councils that, in practice, has had greater continuity in terms of its consecutive annual meetings in its "tripartite arrangement," i.e. IIRSA Technical Forum, the Coordinating Committee, and the Meeting of Ministers. The first two bodies

provide the contents, annual work proposals and agreements, which are approved by the Ministers on their third day of sessions. This continuity has contributed to the creation of more than 10 thematic working groups (on railways, telecommunications, border integration, trade integration through postal services, among others), which have been able to follow the timetable of the annual meetings scheduled and highly dynamic agendas that meet the actual needs and interests of the UNASUR countries.

What COSIPLAN initiatives would you highlight?

During my tenure as Secretary General, I have seen significant achievements. I would particularly highlight the usefulness of the Common Initiatives Fund (FIC) for supporting specific projects from some of the working groups, such as the project that designed and launched the Geographic Information System (COSIPLAN GIS), which runs on the General Secretariat's computing platform and is coordinated by COSIPLAN-Argentina. A project to harmonize railway legislations in South America, under the coordination of COSIPLAN-Uruguay, is receiving similar support from the FIC.

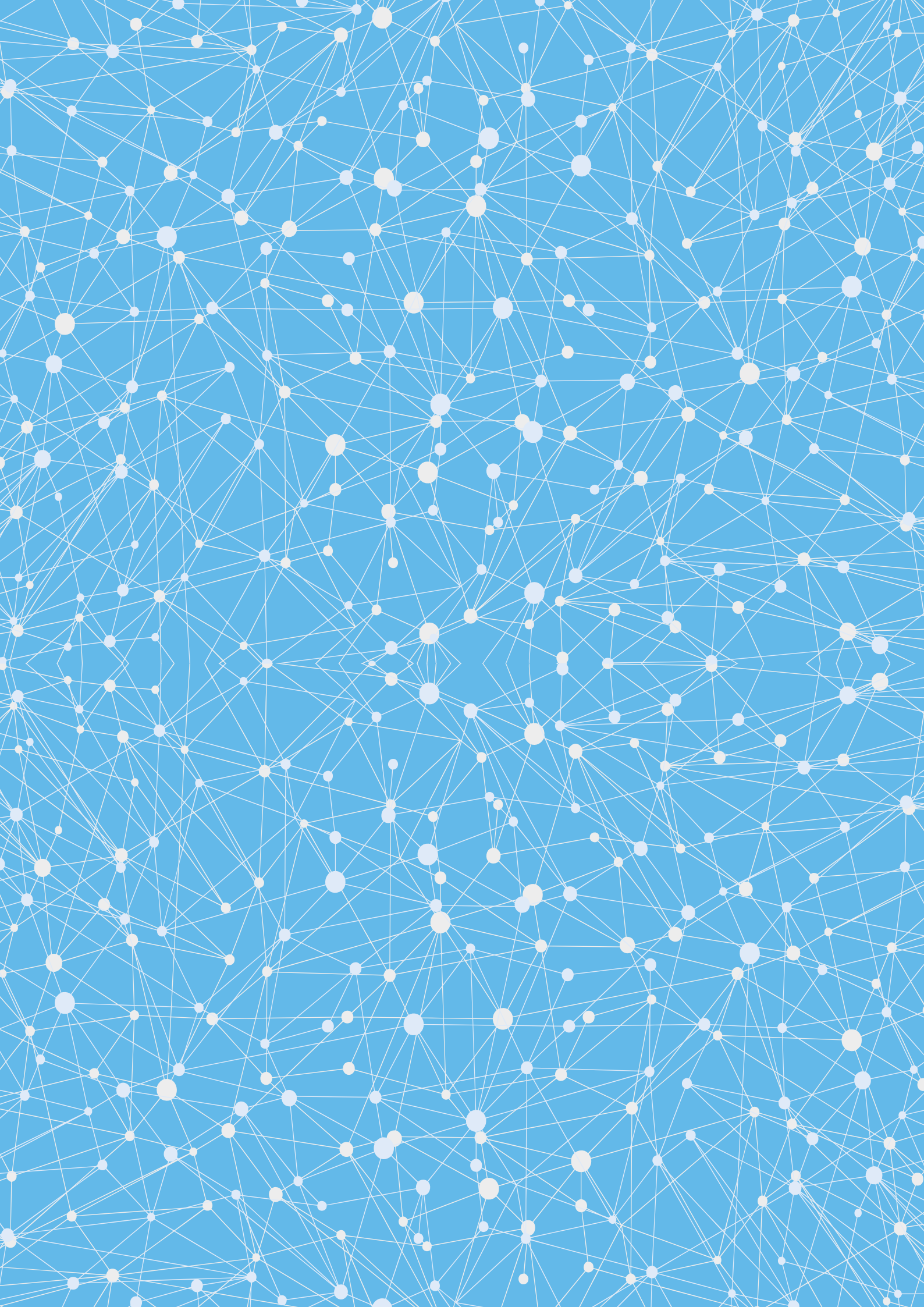
Through COSIPLAN, with the technical support of the IDB, CAF, and FONPLATA, UNASUR has undoubtedly undertaken projects of keen interest for the region. I would like to stress that, thanks to CAF support, funding amounting to US$1.5 million has been received for the design of a South American broadband network that will substantially lower fiber optic services costs. Moreover, also with the support of CAF, we have a consultant to promote multinational projects from the COSIPLAN Prioritized Portfolio, which accounts for 26.2% of the total Portfolio. These projects are the following: Caracas-Bogotá-Quito Road Corridor, the waterways in the Northeastern Access to the Amazon River, Routes Interconnecting Venezuela-Guyana-Suriname, the waterways in the Plata Basin, Foz do Iguaçu-Ciudad del Este-Asunción-Clorinda Road Connection, Paraguay-Argentina-Uruguay Railway Interconnection, Paranaguá-Antofagasta Bioceanic Railway Corridor, and Bolivia's Central Bioceanic Railway Corridor.

In the same spirit of collaboration, the General Secretariat has helped COSIPLAN organize seminars on Value Chains and Infrastructure Projects (2015) and Social Value Chains and Strategies for reducing the impact of the global economic crisis (2016).

In your opinion, what advantages has IIRSA's 10 years of experience brought to the COSIPLAN work?

The existence of IIRSA since 2000 as an initiative by the South American Presidents to encourage physical integration has resulted in a significant collection of information on the regional countries' aspirations regarding the creation of road, waterway, rail, logistics, and energy infrastructure in an individual, bilateral or multinational framework that predated the creation of UNASUR and COSIPLAN. Capitalizing on this historical heritage, in all these years we have continued to work on the design of a Project Portfolio. We have much to thank the IDB and CAF for this initial "push" through which, I would argue, we at COSIPLAN are already prepared to prioritize, define, and execute our own strategic infrastructure projects flying with our own wings.

"We are advancing a major project on South American citizenship intended to facilitate mobility both inside and outside the region as a way of legitimizing our integration process"



Outcomes 2016

Summary of the Activities

Areas of Action

Project Portfolio and API by Integration and Development Hub

http://www.iirsa.org/ejes
http://www.iirsa.org/proyectos

Objective

Maintain a comprehensive follow-up on and update of the information about the projects that make up the COSIPLAN Portfolio and API. The tool supporting this activity is the Project Information System (SIP).

Background

Throughout the last decade, the original structuring of the Portfolio was modified and was subject to successive updates as a result of the territorial planning process undertaken by the countries. The number of projects and the estimated investment grew year after year, except for 2014, when, as a result of a thorough analysis by the countries, projects that had not made any progress since 2008 or before were excluded. In 2015, the number of projects increased again, while it slightly decreased in 2016. A large number of the projects excluded from the Portfolio were Argentine and Brazilian, and their exclusion was due to an in-depth revision of the investment priorities by the new governments of Argentina and Brazil.

Activities

Between May and June 2016, the Executive Technical Groups held meetings through videoconference with the countries involved in each Integration and Development Hub as well as with the COSIPLAN CCT. At these meetings, special emphasis was placed on reviewing projects with inconsistent information, on completing any data fields that were empty or included partial information, and on detailing as accurately as possible the progress and current status of the projects at the pre-execution stage in order to facilitate their implementation. Preparations were made and, subsequently, officials from the twelve countries involved worked on the information about the projects included in the SIP —the data on 85% of these projects is up to date.

At present, the Portfolio includes 581 integration projects amounting to an investment estimated at US$191,420 million, organized into 47 Project Groups and nine Integration and Development Hubs. Active projects, which account for US$163,291 million, are 453. The 10 projects with the greatest estimated investment represent 45% of the total investment for the active projects of the Portfolio. The number of completed projects is 128, and they required a US$28,129 million investment. Between 2015 and 2016, 13 projects were completed.

In December, the sixth edition of the Project Portfolio report, the fifth edition of the Integration Priority Project Agenda progress report, and the second edition of the Activity Report were published.

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PTIs

Integration Territorial Programs

http://www.iirsa.org/pti

Objective

Identify and implement a set of actions complementing the API projects in order to enhance the environmental management of the territory, add production integration and logistics components, harmonize regulatory and legal aspects, and improve the local impact of infrastructure.

Background

Between 2012 and 2013, the conceptual guidelines for the design of Integration Territorial Programs (PTIs) were developed, and they were approved by the COSIPLAN ministers in 2013. In 2014, at the initiative of Argentina and Chile, the design of a PTI associated with the Agua Negra Binational Tunnel began. As a result of this work, this Program was completed, including an Implementation Plan consisting of thirty-one new or "native" actions and sixty-nine actions that were already part of governmental plans or programs.

Activities

During 2016, virtual meetings as well as the first Workshop on the Agua Negra Binational Tunnel PTI Implementation Plan were held with the purpose of specifying the scope of the actions prioritized in this Implementation Plan.

The videoconference held on May 11 marked the beginning of the year's activities in this field and was attended by the Governor of the Province of San Juan and by the Mayor of the Coquimbo Region. The first Workshop took place in Santiago de Chile on August 24 and 25, and was attended by national, regional and provincial officials from Argentina and Chile as well as by representatives of the UNASUR General Secretariat and the COSIPLAN CCT.

These activities went a long way towards collecting information on the actions concerning the different Strategic Areas and Cross-cutting Factors that organize the interventions needed in the PTI's Area of Direct Action to mitigate the negative impacts and make the most of the opportunities resulting from the implementation of the tunnel.

The document entitled "Agua Negra Binational Tunnel Integration Territorial Program" was published in August.

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DRM

Disaster Risk Management

Coordinating Country: Chile
http://www.iirsa.org/grd

Objective

Establish clear procedures to prevent or reduce the effects of natural disasters (earthquakes, floods, landslides, and tsunamis) affecting South American infrastructure, and devise plans for connectivity and public infrastructure recovery on the basis of disaster management methodologies.

Background

Work in this area is conducted under the coordination of Chile, which, between 2014 and 2016, was provided with technical support by the IDB through a Regional Technical Cooperation. The first step was to prepare a Methodological Guide to incorporate Disaster Risk Management into regional infrastructure projects designed and implemented by COSIPLAN. This was done in 2013, and the methodology was approved in 2014 by the Ministers. After determining that southern Peru and northern Chile are exposed to the greatest threat of seismic activity and tsunamis in the region, the methodology was applied as a pilot exercise to Project Group 5 of the Central Interoceanic Hub, with a focus on the south of Peru and the north of Chile, between 2015 and 2016.

Activities

In 2016, the application of the methodology concerned with risk management was continued. The results of this experience were shared at two events.

The first one was a Chile-Peru Bilateral Workshop held on March 8 and 9 at the University of Tarapacá (Arica, Chile). Officials from the Chilean Ministry of Public Works and from the Peruvian Ministry of Transport and Communications as well as infrastructure operators exchanged the results of the study and the lessons learned.

The second event was a meeting of the Executive Technical Group held on June 2 and 3 in the city of Lima, Peru. Delegations from Argentina, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela, as well as representatives from the UNASUR General Secretariat and the COSIPLAN CCT exchanged the results of the application of the methodology as well as experiences in the subject.

The documents entitled "Methodology and Application to Chilean and Peruvian Infrastructure" and "Risk Reduction Measures in Chilean and Peruvian Integration Infrastructure" were published in November.

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Freight Transport and Logistics

Coordinating Country: Peru
http://www.iirsa.org/transporteylogistica

Objective

Encourage freight logistics on a regional scale by supporting public policies that promote a systemic view of transport infrastructure as well as of the movement of goods and their storage in each South American country.

Background

At the Workshop on Freight Transport and Logistics held in 2014, the countries reached a consensus on the importance of addressing this topic in a comprehensive manner. To this effect, they agreed to focus their efforts on the training of officials from the different public sector areas concerned with this subject.

In 2015, the "Training Program in the Making and Management of Freight Transport and Logistics Policies" was developed and implemented, with the support of the IDB. COSIPLAN had an active participation in its design, under the leadership of Peru's National Coordination, held by the Ministry of Transport and Communications of Peru.

Activities

In 2016, two editions of the online course were held, one between May 2 and June 26 and the other one between May 9 and July 3. Sixty officials were certified, to add to the 37 officials that had completed the program in 2015. The participating South American countries were Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay. Taking the three editions into consideration, 60% of the participants were men and 40% were women, while the average age was 40. The course was rated at 9 out of 10, taking into account the content, the tutors, the materials used, and the virtual platform.

The meeting of the Executive Technical Group was held on September 13 and 14 in Bogotá, Colombia. The proposal to establish a Network of Government Experts in Freight Logistics and the Terms of Reference for the Study on Logistics Chains in the MERCOSUR-Chile Hub were presented at this meeting, which was attended by delegations from Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela, as well as by representatives from the UNASUR General Secretariat and the COSIPLAN CCT.

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Rail Integration

Coordinating Country: Uruguay
http://www.iirsa.org/integracionferroviaria

Objective

Foster the integration and complementarity of policies and projects in the rail sector that encourage economic and social development; priority is given to regulatory issues, new infrastructure, and agreements among rail operators.

Background

This Working Group builds upon the activities carried out by Argentina, Brazil, Chile, and Paraguay to design the Paranaguá-Antofagasta Bioceanic Railway Corridor API project. It is divided into two Working Subgroups (WSGs), each of them focusing on one of the following two API projects: the Subgroup on the Paranaguá-Antofagasta Bioceanic Railway Corridor (Argentina-Brazil-Chile-Paraguay), active since 2014; and the Subgroup on the Central Bioceanic Railway Corridor (Bolivia-Brazil-Peru), active since 2015.

Activities

In 2016, resources from the UNASUR Common Initiatives Fund (FIC) were approved to conduct the "Study to provide inputs for developing a strategy to facilitate South American Rail Integration," under the coordination of Uruguay's Ministry of Transport and Public Works.

In order to start the activities concerned, a videoconference meeting held on March 3 established the basis for collecting information. The technical teams of the relevant organizations in each country undertook to submit the national and international/regional rules applied in each state, the characteristics of rail infrastructure and rolling stock, and the operational characteristics of the freight services.

The consulting team that will conduct the study was selected by the countries by consensus. Based on the material gathered, the consultants drafted a first progress report, which was presented at the videoconference meeting held on September 30, during which agreement was also reached as to the future steps required to complete the activities by the end of this year.

First, the Portfolio projects belonging to this subsector will be reviewed, and the countries will be required to provide additional information showing the priority given to such projects in their national plans. Second, based on the analysis of all the information, an action plan will be drafted —including adjustments to regulatory frameworks, new infrastructure, and agreements among rail operators— as a proposed strategy for regional rail integration.

Integration through Ports and Waterways

Coordinating Country: Brazil
http://www.iirsa.org/puertosehidrovias

Objective

Improve the region's competitiveness on the basis of harnessing the potential of the South American waterways, by identifying possible action lines at the regional level to promote the use of the sea and rivers as more economic and efficient modes of transport in terms of the environment.

Background

In 2015, on October 14 and 15, the city of Brasilia, Brazil, hosted the Workshop on South American Integration through Ports and Waterways. During this workshop, the potential of waterways was stressed, as they were regarded as part of a logistics system and considered jointly with other transportation modes. Also, the importance of working on different aspects to promote social and economic development was highlighted.

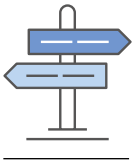
Activities

Throughout this year, work focused on the three API projects related to the improvement of the main waterways in the region. The aim was to support the implementation of projects in this subsector by making progress with pending studies, establishing inter-agency coordination, and identifying technical and political obstacles to the tapping of the potential of sea- and riverways.

On April 25, a videoconference meeting on API Project 3, Northeastern Access to the Amazon River —involving Brazil, Colombia, Ecuador, and Peru—, was held. In addition to reviewing the progress made in the individual projects included, the countries agreed to draft the Terms of Reference for a study on the navigation conditions of the Putumayo river and to identify potential sources of financing to conduct it.

On April 26, a videoconference meeting on API Project 17, Improvement of Navigation Conditions on the Rivers of the Plata Basin —involving Argentina, Bolivia, Brazil, Paraguay, and Uruguay—, was held. The progress made after the resumption of work of the Paraguay-Paraná Waterway Intergovernmental Committee and the reactivation of the Agreement Commission —its technical body— was presented. The countries undertook to continue participating and following up on any technical definitions that would be decided, which will enable either the validation or redefinition of the infrastructure projects included in the Portfolio for the Paraguay-Paraná Waterway Hub.

On May 4, a videoconference meeting on API Project 27, Multimodal Transportation in the Laguna Merín and Lagoa dos Patos System —involving Brazil and Uruguay—, was held. The purpose was to present the conceptual framework for the design of Integration Territorial Programs (PTIs) as well as the results of the Argentina's and Chile's bilateral experience with the Agua Negra Binational Tunnel. The countries stressed the importance of moving forward with the design of a PTI to boost the opportunities for implementing this API project in view of the role that this waterway plays in the improvement of the logistics system competitiveness for the sake of both countries' integration.



Integración y Facilitación Fronteriza

Coordinating Countries: Argentina and Chile
http://www.iirsa.org/integracionfronteriza

Objective

Take actions to turn border regions into spaces for integration and development and to facilitate the movement of goods and people as well as the planning of the territory with consideration of socioeconomic and environmental aspects.

Background

In December 2015, the Guidelines for the Design of a Work Plan on Cross-Border Territorial Integration Planning were approved. Their objective was to lead the work on territorial planning and sectoral processes with a comprehensive vision focused on regional border integration and cross-border movement facilitation plans.

Activities

As a starting point for this work, Argentina and Chile proposed to survey up-to-date information on the circumstances at the border crossings with regard to border control and the population living in the immediate area of influence. On July 25, a videoconference meeting was held to review the progress made in the collection of information and to propose the objectives, content, and methodology of the meeting of the Executive Technical Group.

On August 23, the city of Santiago de Chile hosted the GTE meeting with the objective of analyzing the dimensions of border integration that would be addressed within the framework of COSIPLAN and the criteria for defining the bilateral border regions, as well as of exchanging information about each country's projects in such regions.

The meeting was organized into four round tables:

- **Round Table 1:** Efficiency Standards for the Operation of Border Crossings
- **Round Table 2:** Planning Applied to Border Integration: Localities in the Immediate Area of the Border Crossings
- **Round Table 3:** Elements for a Conceptual Framework Taking into Account the Definitions Concerning the Dimensions of Analysis of Border Integration
- **Round Table 4:** Elements for the Design of Border Integration Plans

The main results of the analysis made were as follows:

- Operational standards for border crossings in terms of infrastructure, technology and communications, fields of work, streamlining of flows, and contingency plans were defined.
- Progress was made in the identification of border populations, the analysis of the situations in the border areas, and the conditions for cross-border complementarity and cooperation, among other topics.
- The guiding principles for a conceptual framework, such as cross-border social integration, the development of infrastructure in border areas, and the use of technologies in control and management were detailed.
- The need for a forward-looking approach and criteria that help delimit integration areas, as well as for carrying out diagnostic studies, was stressed.
- Information collection is expected to be completed so as to supplement the results of the GTE meeting. This will lead to the preparation of a work plan that takes into consideration the different realities of South American borders with the aim of planning and implementing the infrastructure needed for the development of these areas.

Trade Integration through Postal Services for MSMEs

Coordinating Countries: Brazil and Peru
http://www.iirsa.org/integracioncomercial
http://www.iirsa.org/exportafacil

Objective

Contribute to regional integration by encouraging the inclusion of MSMEs in the international market through the implementation of a simplified export and import process through postal services using the logistics platform of designated postal operators.

Background

The use of the postal services platform with the aim of promoting the integration of MSMEs into the international market originates in the "Exports through Postal Services for MSMEs" project, implemented by the Brazilian Ministry of Communications in 1999, known as "Exporta Fácil." COSIPLAN decided to broaden the concept of postal exports to "Trade Integration through Postal Services for MSMEs," with the purpose of covering both incoming and outgoing foreign trade.

With the support of the CCT institutions, the Exporta Fácil program was implemented in Peru, Uruguay, Colombia, and Ecuador. Furthermore, work has begun to implement the project in Argentina, Chile, Bolivia, Paraguay, and Venezuela.

Activities

On August 11 and 12, the city of Montevideo, Uruguay, hosted the Meeting of the Executive Technical Group, which was attended by delegations from Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Panama, Paraguay, Peru, Uruguay, and Venezuela, as well as by representatives from the Postal Union of the Americas, Spain and Portugal (UPAEP), the Universal Postal Union (UPU), the World Customs Organization (WCO), and the COSIPLAN CCT.

The objective of the meeting was to share knowledge and experience concerning trade facilitation processes and to work on the main progress made by the Trade Integration through Postal Services projects in each country and at the regional level, capitalizing on the collective effort and planning the actions to be implemented in the short and medium terms.

In 2016, headway was also made in the implementation of Exporta Fácil in Paraguay, a process that started in 2015 with a visit and a pre-diagnosis document. This activity was supported by a team of officials from the countries that already have the service in place (Brazil, Ecuador, Peru, and Uruguay) through an IDB Regional Technical Cooperation executed by INTAL.

The implementation visit took place in June with the purpose of providing support to Paraguay in the design of the Work Plans for the implementation of Exporta Fácil. In September, Paraguay's Exporta Fácil technical team visited Peru to learn about the experiences of Peruvian institutions in the implementation and operation of the program since its launch in 2007.

Integration in motion
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Telecommunications

Coordinating Country: Paraguay
http://www.iirsa.org/telecomunicaciones

Objective

Promote the intensive use of Information and Communications Technologies (ICTs) with the purpose of overcoming geographic and operational barriers. The main aims are to study and propose alternatives to boost interconnection among different structures and fiber optic networks with the purpose of building the South American Fiber Optic Ring.

Background

The Working Group decided to start conducting studies as required to establish the South American Fiber Optic Ring. In 2014, CAF contributed with a fund of US$1.5 million to carry out these studies, and the Technical Cooperation Agreement with such institution was defined. In 2015, an international public invitation to tender for the feasibility studies, which would extend over 13 months, was launched.

Activities

This year, the countries received the tenders related to the international call bid for the studies concerning the deployment of the South American Connectivity Network for Integration (CAF-UNASUR Agreement).

A videoconference meeting was held on March 28 to exchange opinions on this topic. As of the date of this report, the countries are evaluating the tenders in order to decide the awarding of the contract for the study.

Geographic Information System

Coordinating Country: Argentina
http://www.sig.cosiplan.unasursg.org/

Objective

Contribute to the planning and management of physical integration based on digital information that is standardized at the continental level, both on the main integration infrastructure in place in the region and on the relevant aspects of the territory.

Background

The process to build this system began in 2012. In 2013, the Working Group agreed to the final geographic data standardization and interoperability parameters and started to work on the Feature Catalogue. That same year, assistance from the UNASUR Common Initiatives Fund (FIC) to support the development of the COSIPLAN GIS was approved. In 2014, the documents that make up the regulatory basis for the GIS were approved: the methodology for metadata management, and the ISO standards for entering and administering these metadata.

The GIS was published in November 2015 and currently includes 21 information layers. This work was made possible by a participative methodology that included a technical support team and individual and group work on the part of the countries involved, which took place through videoconferences and on-site workshops.

Activities

In 2016, two events were organized to reach an agreement on the procedural protocol to update and incorporate thematic layers, discuss the thematic layers to be included, and analyze and propose improvement of visualization. A workshop was held on June 28, which was attended by Argentina, Bolivia, Chile, Ecuador, Paraguay, Peru, Uruguay, and Venezuela, and by the head of technology of the UNASUR General Secretariat.

Furthermore, two videoconference meetings were held, one on July 5 and the other one on September 8, both intended to monitor the update by each country of the information of the layers already available. Additionally, progress was made in the definition of the attributes of the new GIS layers.

Integration in motion
Page 100 »

Social Value Chains and Infrastructure Projects

Objective

Promote the consolidation of social value chains to further integrate the region by incorporating sectors that have positive social externalities and can foster economic and productive development with inclusion.

Background

The UNASUR Seminar on Social Value Chains and Infrastructure Projects, organized by COSIPLAN and the UNASUR General Secretariat in October 2015, provided a multisectoral forum for reflection on how infrastructure projects can contribute to productive development, particularly those projects with positive social externalities and a potential for regional integration and that, at the same time, can make a contribution to conceptualizing social value chains to design public policies at UNASUR and in each of its Member States.

Activities

A second seminar entitled "Social Value Chains: An Agenda to Overcome the Crisis" took place on July 14 and 15. Its aim was to strengthen the concept of social value chains, disseminate related public policies at the different UNASUR bodies, and ensure the creation of a space for exchanging ideas in order to formulate joint proposals that would assist the region in overcoming its economic difficulties.

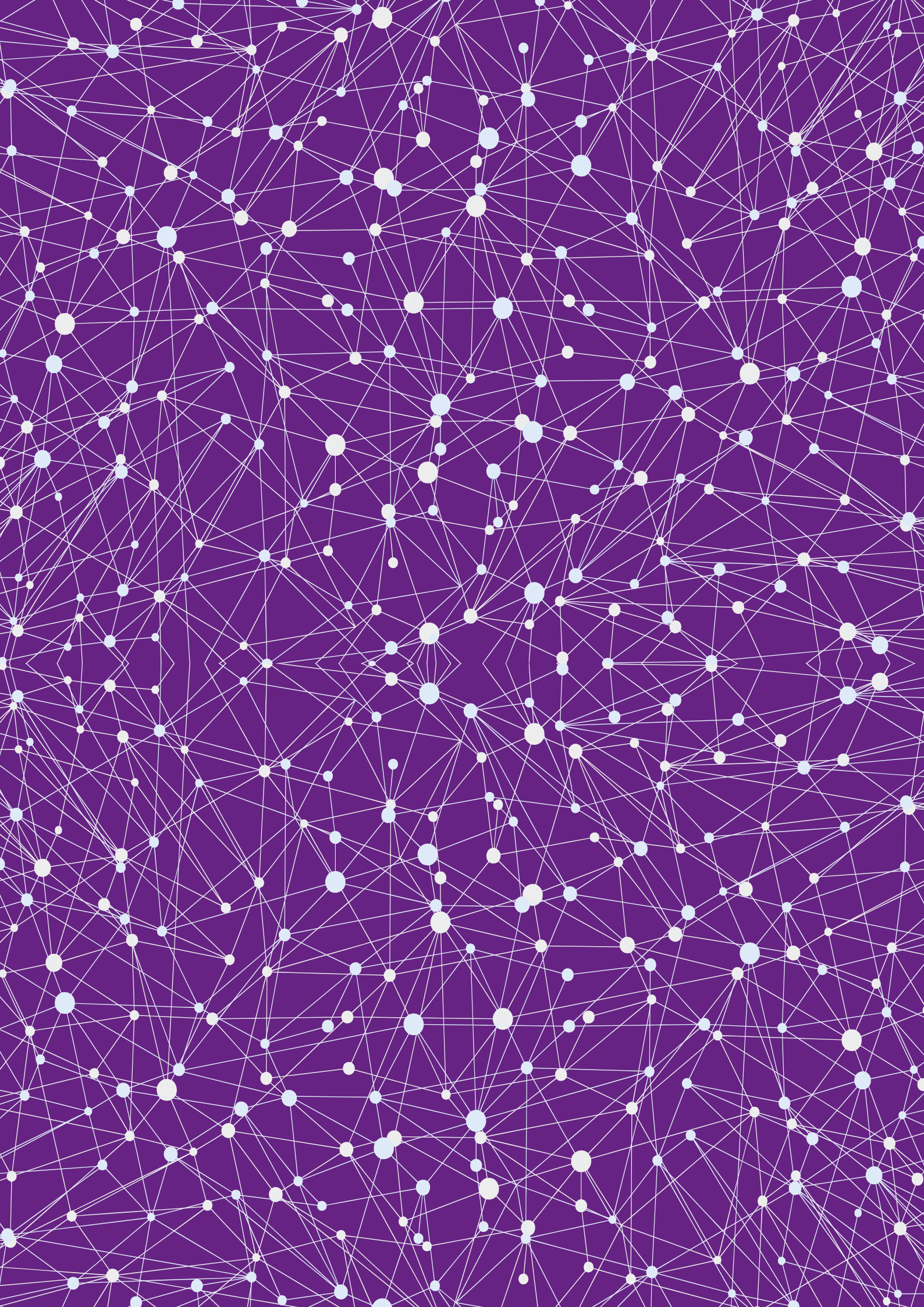
It was attended by COSIPLAN, the South American Council of Economy and Finance; the South American Energy Council; the South American Council of Science, Technology and Innovation; the South American Defense Council, and the South American Health Council.

Studies, proposals, formulations, and actions from the different areas that deal with the regional economy and from other institutions committed to the region's integration process were presented. Additionally, the agendas of the UNASUR sectoral councils related to social value chains were analyzed, and proposals for joint actions associated with public policies concerning social value chains, focused both on infrastructure projects and on the entire economic agenda of UNASUR, were put forward.

Meetings Held

Date	Venue	Activity
March 3	Videoconference	Meeting of the WG on Rail Integration
March 8-9	Arica	Chile-Peru Bilateral Workshop on the Application of the DRM Methodology
March 28	Videoconference	Meeting of the WG on Telecommunications on the CAF-UNASUR Agreement
April 6	Montevideo	XXIX Meeting of IIRSA Technical Forum
April 7	Montevideo	XIV Meeting of the COSIPLAN Coordinating Committee
April 25	Videoconference	Meeting on API Project 3 – Northeastern Access to the Amazon River
April 26	Videoconference	Meeting on API Project 17 – Improvement of the Navigation Conditions on the Rivers of the Plata Basin
May 2-June 26	Virtual Course	Training Program in the Making and Management of Freight Transport and Logistics Policies
May 4	Videoconference	Meeting on API Project 27 – Multimodal Transportation in the Laguna Merín and Lagoa dos Patos System
May 4	Videoconference	Meeting on the Agua Negra Binational Tunnel PTI
May 9-July 3	Virtual Course	Training Program in the Making and Management of Freight Transport and Logistics Policies
May 10	Videoconference	GTE Meeting on the Update of the Project Portfolio and API – Amazon Hub
May 11	Videoconference	Meeting on the Agua Negra Binational Tunnel PTI

Date	Venue	Activity
May 20	Videoconference	GTE Meeting on the Update of the Project Portfolio and API – Central Interoceanic and Peru-Brazil-Bolivia Hubs
May 27	Videoconference	GTE Meeting on the Update of the Project Portfolio and API – MERCOSUR-Chile Hub
June 2-3	Lima	GTE Meeting on Disaster Risk Prevention and Management
June 7	Videoconference	GTE Meeting on the Update of the Project Portfolio and API – Paraguay-Paraná Waterway Hub
June 9	Videoconference	GTE Meeting on the Update of the Project Portfolio and API – Capricorn and Southern Hubs
June 14	Videoconference	GTE Meeting on the Update of the Project Portfolio and API – Andean Hub
June 28	Buenos Aires	Meeting of the WG on the Geographic Information System. Workshop
June 27-July 1	Asunción	Technical Visit for the Implementation of Exporta Fácil in Paraguay
July 5	Videoconference	Meeting of the WG on the Geographic Information System
July 14-15	Quito, UNASUR Headquarters	Seminar on UNASUR Social Value Chains and Infrastructure Projects
July 25	Videoconference	GTE Meeting on Border Integration and Facilitation
August 11-12	Montevideo	GTE Meeting on Trade Integration through Postal Services for MSMEs
August 23	Santiago	GTE Meeting on Border Integration and Facilitation
August 24-25	Santiago	First Workshop on the Agua Negra Binational Tunnel PTI Implementation Plan
September 8	Videoconference	Meeting of the WG on the Geographic Information System
September 12-16	Lima	Visit of Paraguay's Exporta Fácil Technical Team to Peru
September 13-14	Bogotá	GTE Meeting of Freight Transport and Logistics
September 30	Videoconference	Meeting of the WG on Rail Integration
November 22	Videoconference	Meeting of the WG on Telecommunications
November 29	Videoconference	Meeting on the Agua Negra Binational Tunnel PTI Implementation Plan
December 6	Videoconference	Work Plan 2017



Integration in Motion

The COSIPLAN Projects

581

infrastructure projects in the COSIPLAN Information System

www.iirsa.org/proyectos

South America, more Integrated through Infrastructure

One of the main objectives of COSIPLAN is to plan and implement infrastructure projects as a key component to achieve physical integration and the economic and social development of all South American people. The COSIPLAN Project Portfolio is a set of strategic works to promote regional connectivity in the transport, energy, and communications sectors.

US$ 163,291

million estimated investment amount to implement 453 Portfolio projects

US$ 28,129

million invested in 128 completed Portfolio projects

The distinctive feature of this process has been infrastructure planning with a regional perspective. With a focus on the territory, this process is intended to enhance the competitiveness and complementarity of the economies of the region, contribute to reducing regional disparities and social inequality, and improve life expectancy and quality of life in every country and in the region as a whole.

The set-up of the COSIPLAN Portfolio was possible thanks to the development and application of the Indicative Territorial Planning Methodology. This methodology is based on the identification of Integration and Development Hubs, which organize the South American territory and structure the portfolio.

The COSIPLAN Portfolio is updated on a permanent basis. Meetings of the Executive Technical Groups on each Hub are annually organized in order to improve the quality of the information on the projects and adjust its makeup, by including new projects and excluding those that are no longer a priority. One of the indispensable tools for this task is the COSIPLAN Project Information System (SIP).

In 2011, COSIPLAN set up the Integration Priority Project Agenda, which is made up of a subset of Portfolio projects with a high impact on the physical integration and socioeconomic development of the region.

The Project **Portfolio**

191,420.1
Estimated Investment
US$ million

5
Multinational Projects 0,9%

94
Binational Projects 16,1%

482
National Project 83%

Projects by Stage

PROFILING
123
38,229.4

PRE-EXECUTION
152
49,577.4

EXECUTION
178
75,484.8

COMPLETED
128
28,128.6

Projects by Sector

Transport
518
133,958.9

Energy
56
57,419.7

Communications
7
41.5

Projects by Type of Financing

Public
475
117,691

Private
71
35,926

Public-private
35
37,803.1

Projects by Subsector

Transport

Air
24
7,530.4

Road
258
63,476.5

Rail
61
47,921.4

River
76
2,892.9

Sea
38
10,493.7

Multimodal
14
679.3

Border Crossing
47
964.7

Energy

Energy Interconnection
31
10,560.2

Energy Generation
25
46,859.5

Communications

Interconnection in Telecommunications
7
41.5

● Number of Projects ● US$ million

Projects by Country

ARGENTINA
178
48,565.9

BOLIVIA
52
10,578.7

BRAZIL
94
82,413.8

CHILE
74
16,105

COLOMBIA
33
4,743.6

ECUADOR
40
19,609.1

GUYANA
8
911.9

PARAGUAY
66
18,002.6

PERU
72
11,801.7

SURINAME
7
3,831.9

URUGUAY
42
5,445.2

VENEZUELA
20
2,109.5

Projects by Hub

AMA
AMAZON
72
27,023.1

AND
ANDEAN
66
27,995.3

CAP
CAPRICORN
81
16,691.2

DES
SOUTHERN
47
4,506.7

GUY
GUIANESE SHIELD
20
4,581.3

HPP
PARAGUAY - PARANÁ WATERWAY
89
6,325.1

IOC
CENTRAL INTEROCEANIC
63
11,498.5

MCC
MERCOSUR - CHILE
120
60,971.2

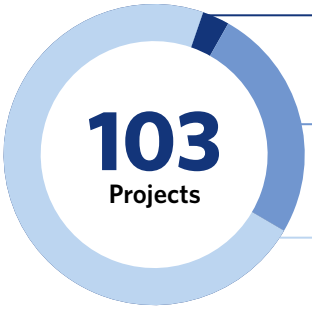
PBB
PERU - BRAZIL - BOLIVIA
24
32,008.4

Integration Priority Project **Agenda**

20,148.6

Estimated Investment

US$ million



3 **Multinational Projects** 2,9%

26 **Binational Projects** 25,2%

74 **National Project** 71,8%

Projects by Stage

PROFILING
18
2,504.8

PRE-EXECUTION
36
8,586.9

EXECUTION
32
7,730.2

COMPLETED
17
1,326.7

Projects by Sector

Transport
100
18,296.6

Energy
3
1,852.0

Projects by Type of Financing

Public
72
15,414.3

Private
19
2,553.8

Public-private
12
2,180.5

Projects by Subsector

Transport

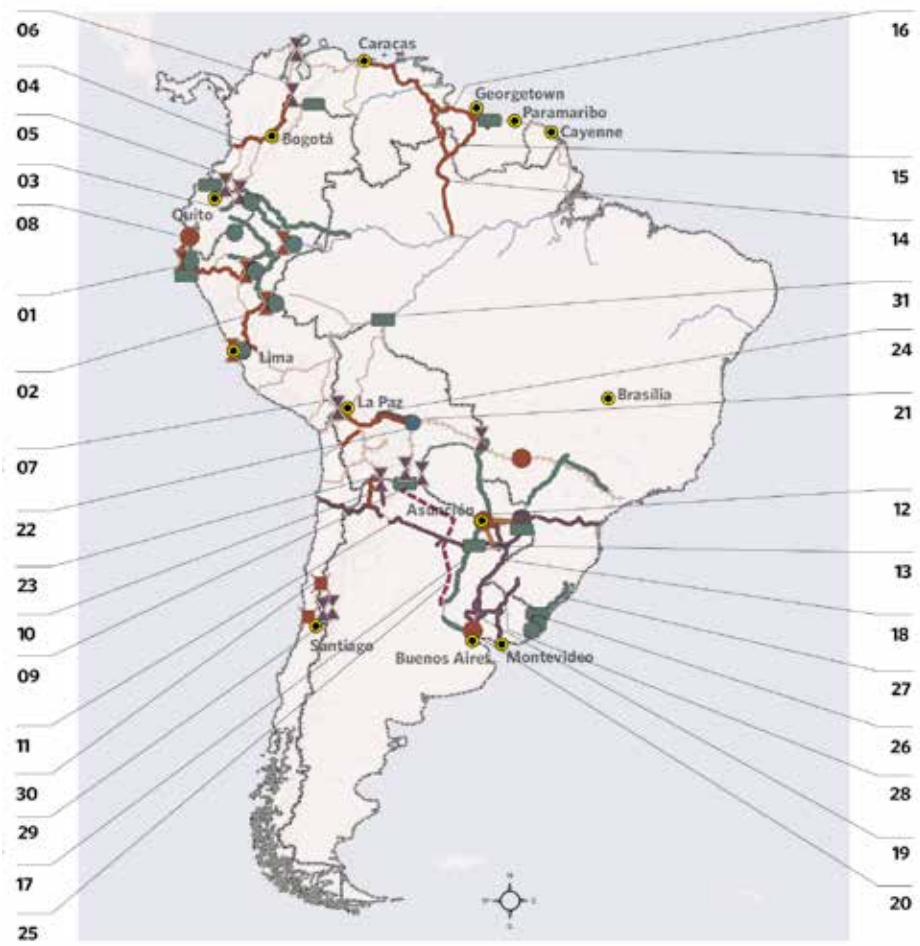
Air	Road	Rail	River	Sea	Multimodal	Border Crossing
1	**32**	**17**	**26**	**4**	**6**	**14**
20.0	9,065.5	5,609.9	1,455.7	1,384.9	165.9	594.7

Energy

Energy Interconnection
3
1,852

● Number of Projects ● US$ million

API Projects



1 Paita - Tarapoto - Yurimaguas Road, Ports, Logistics Centers and Waterways
2 Callao - La Oroya - Pucallpa Road, Ports, Logistics Centers and Waterways
3 Northeastern Access to the Amazon River
4 Caracas - Bogotá - Buenaventura / Quito Road Corridor
5 Colombia - Ecuador Border Interconnection
6 Colombia - Venezuela Border Crossings Connectivity System
7 Desaguadero Binational Border Service Center (CEBAF)
8 Autopista del Sol Expressway: Improvement and Rehabilitation of the Sullana - Aguas Verdes Section (including Tumbes Bypass)
9 Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center
10 Argentina - Bolivia West Connection
11 Paranaguá - Antofagasta Bioceanic Railway Corridor
12 Foz do Iguaçu - Ciudad del Este - Asunción - Clorinda Road Connection
13 Itaipu - Asunción - Yacyretá 500-KV Transmission Line
14 Rehabilitation of the Caracas - Manaus Road
15 Boa Vista - Bonfim - Lethem - Linden - Georgetown Road
16 Routes Interconnecting Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (South Drain - Apura - Zanderij - Moengo - Albina), including Construction of the Bridge over the Corentyne River
17 Improvement of Navigation Conditions on the Rivers of the Plata Basin
18 Paraguay - Argentina - Uruguay Railway Interconnection
19 Rehabilitation of the Chamberlain - Fray Bentos Railway Branch Line
20 Nueva Palmira Beltway and Port Access Roads Network
21 Passenger and Cargo Hub Airport for South America (Viru Viru, Santa Cruz, International Hub Airport)
22 Improvement of Road Connectivity in the Central Interoceanic Hub
23 Infante Rivarola - Cañada Oruro Border Crossing
24 Central Bioceanic Railway Corridor (Bolivian Section)
25 Northeastern Argentina Gas Pipeline
26 Construction of the Jaguarão - Río Branco International Bridge
27 Multimodal Transportation in the Laguna Merín and Lagoa dos Patos System
28 Montevideo - Cacequi Railway Corridor
29 Optimization of the Cristo Redentor Border Crossing System
30 Agua Negra Binational Tunnel
31 Porto Velho - Peruvian Coast Connection

Priority Projects:
Border Crossing, CEBAF
Port
Logistics Center
Airport
Access or Ring Road
Rail
Tunnel
Waterways
Gas Pipeline
Electric
Road
Navigability
Bridge

Legend:
Road Corridor
Rail Corridor
Existing Road
National Capital
Major Waterways
Hydrography

Joint Planning Work is Still Underway

In 2016, online meetings were held for each Integration and Development Hub with the purpose of maintaining a comprehensive follow-up on and update of the information about the projects that make up the COSIPLAN Portfolio and API. Experts and officials from governmental agencies concerned with each country's projects participated in such meetings.

92

technical officials **participated in these activities in 2016.**

At these meetings, the countries' participating delegates discussed project progress, exchanged information about binational works, and planned new connectivity works based on the needs of the region.

In addition, with cooperation from the COSIPLAN Secretariat, the countries have been working already for a number of years on the following:

- Creation and adjustment of the methodology for project analysis (Integration and Development Hubs, Projects Groups, Anchor Projects, the system of stages, etc.);
- Creation, improvement, and interaction of the technological tools supporting project information: Project Information System (SIP), Geographic Information System (GIS), Hub Information System;
- Information quality diagnoses;
- Inclusion of new information fields in the SIP.

As a result of these activities, documents "COSIPLAN Project Portfolio 2016" and "Integration Priority Project Agenda 2016" have been published.

Implementing Works that Integrate South American People

This year, the COSIPLAN Secretariat invited the countries to describe the projects that stand out for their level of progress and their contribution to South American integration in order to disseminate them through this report. Argentina, Chile, Brazil, Paraguay, Peru, and Uruguay accepted the invitation.

Many of these connectivity projects have their origin in high-level commitments —both binational and multinational— that are based on the technical work carried out by the countries of the region in the context of COSIPLAN. Some projects have been completed, others are at the execution stage, and others have already been or are due to be put out to tender in the near future.

Below are the projects highlighted by the countries grouped by type of works, including some of the benefits that they will bring:

- Four rail freight transport projects that help balance out the different modes of transport, improve the competitiveness of products in the region by lowering transport costs, reduce greenhouse gas emissions, and enhance road safety.
- A river port that organizes a multimodal corridor along four countries, including the incorporation of communities not engaged in today's economic and commercial dynamics, and promotes the facilitation of trade between neighboring countries.
- A nuclear power generation project that will increase trade opportunities among the countries of the region and contribute to diversifying the energy matrix through renewable energy sources.
- Three road connectivity projects, two of them binational and the other one multinational in scope. The activities of the countries concerning these works take into account the economic and social development of the regions involved.

Trade facilitation, production integration, and tourism promotion measures, among others, are planned to complement the implementation of the infrastructure projects.

Rehabilitation of the Freight Railway in Northern Argentina

This historical investment in refurbishing tracks and purchasing rolling stock will revitalize the railway and reduce logistics costs for the goods produced or manufactured in Salta, Jujuy, Chaco, Tucumán, Santiago del Estero, and Santa Fe. The volume of cargo carried today is expected to grow four times, while the regional economies will prosper, as they will be connected to the rest of the world through the port in the Paraguay-Paraná waterway.

The Belgrano Cargas railway network runs from its terminal, located in Buenos Aires' Retiro district, to a total of 14 Argentine provinces: Buenos Aires, Santa Fe, Córdoba, San Luis, Mendoza, San Juan, La Rioja, Catamarca, Tucumán, Santiago del Estero, Chaco, Formosa, Salta, and Jujuy.

This railway network reaches two neighboring countries. One of its branch lines connects to Chile at the Socompa border crossing (in Salta), leading to the port of Antofagasta, on the Pacific ocean. There are two alternatives to connect with Bolivia, though none of them is operational: across the town of La Quiaca, in the province of Jujuy, and across Salvador Mazza, a city in the province of Salta.

The operational rehabilitation works to be undertaken involve the refurbishment of 1,593 km of tracks in the next four years, and the incorporation of 1,000 railroad cars and 30 locomotives. Works are being implemented within the framework of the government-driven Belgrano Plan, a series of public policies for the relatively less developed provinces in northern Argentina involving transportation, infrastructure, production, health, employment, housing, and education.

US$ 2,470

billion estimated investment to be spent over 40 months

1.593 km

is the length of rail tacks to be refurbished

The projected investment is US$2,470 million, to be financed mostly by the People's Republic of China through the China Development Bank (CDB) and China Machinery Engineering Corporation (CMEC).

The challenge goes beyond revamping rail infrastructure, providing additional rolling stock, and achieving an optimal operational level. This change in the freight transport matrix should go hand in hand with appropriate policies and investments in the other modes of transport within the framework of the modernization of logistics in the country. Balancing out the share of rail transport aims at reversing the loss of competitiveness as well as the increased consumption of energy involved in road transportation, distances, and the types of goods transported.

In the 1990s, this railway line carried up to 4.5 million tons. In 2015, when the renovation of several sections was already underway, the volume of cargo flows along this line was just over 800 thousand tons. At present, products such as oil, containers, grain and oilseed, wood, manufactures, track material, ores, building material, and general cargo are transported by this line.

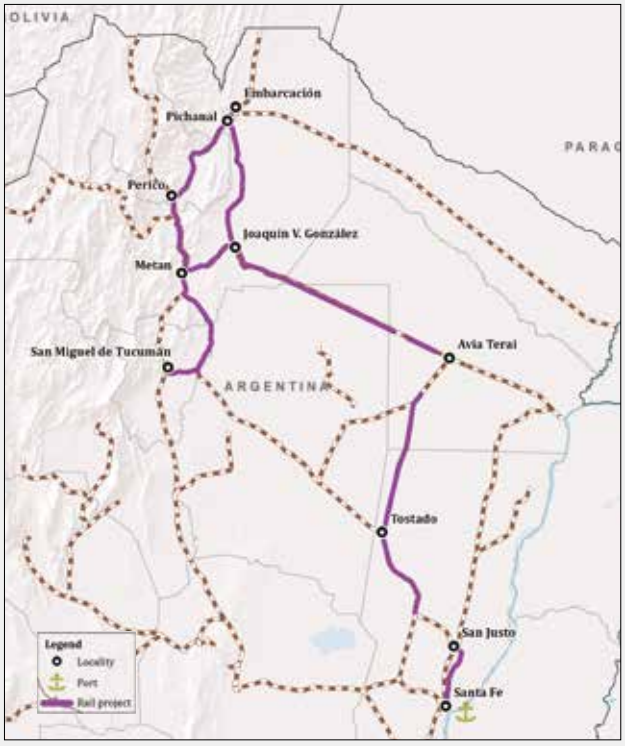
The track refurbishment works will be carried out in three stages, and several of these projects are included in the COSIPLAN Portfolio.

The first stage involves 535 km, of which works along 160 km are already underway, while the tenders for the other stretches have already been awarded. The sections concerned are Santurce-Tostado-Chorotis-Las Breñas; Pampa del Infierno-Los Frentones; and Los Pirpintos-Los Tigres-Taco Pozo, in the provinces of Santa Fe, Chaco, and Santiago del Estero.

The second stage, involving 500 km, was tendered in September de 2016, and its works include the Coronda-Santo Tomé and Laguna Paiva-Naré sections, both in the province of Santa Fe, and the Talavera-Pichanal-Embarcación-Chalicán section, between the provinces of Salta and Jujuy.

The invitation to tender for the last stage —which is 558-km long— is scheduled for the first quarter of 2017, involving the refurbishment of the San Miguel de Tucumán-Metán-Joaquín V. González, and Metán-Chalicán sections, in the province of Tucumán, Salta, and Jujuy. The works will be completed by 2019.

These works are expected to create approximately 23,000 jobs, including direct and indirect employment. Moreover, the project will result in significant logistics movements, including the transportation of more than two million railroad ties, 170 thousand tons of rails, and five million tons of track ballast.



Rail Transportation in Uruguay for the Sake of Regional Logistics

With this series of investments, Uruguay aims at making rail transport an attractive alternative for the regional transportation of cargo. The resulting rail connection network will support the increasing needs in the country derived from growth in agribusiness, its modern port infrastructure, and its progress in the customs facilitation process.

This network comprises three railway lines included in the COSIPLAN Portfolio. The first one links the port of Montevideo with the dry port in the city of Rivera, at the border with Brazil. The second one connects with this trunk line in the town of Piedra Sola, runs west through Algorta to the port of Paysandú, where its turns north up to the city of Salto and Salto Grande Dam, on the Uruguay river at the border with Argentina. The third line stretches from Algorta to the port of Fray Bentos, also located on the Uruguay River.

It is well known that lack of maintenance of tracks affects the speed of trains, thus reducing the competitiveness of this mode of transport and increasing energy consumption. Therefore, the effects of improvements to rail infrastructure are twofold: higher revenues due to a higher carrying capacity, and considerable lower operational costs. If the latter results in a better service and lower fares, this will have an impact on logistics costs. In addition, the diversion of heavy goods traffic from the roads to the railway will lead to significant savings in the rehabilitation of road infrastructure.

The works planned in the three projects will ensure Class 3 tracks according to ALAF (Latin American Railway Association) Standard 5-026, which involves a speed of 40 km/h and a load of 20 tons per axle.

"These projects are part of a complex path in railway development, but we have a set of goals that will reverse the trend in order to put such development in the path of growth."

Víctor Rossi, Minister of Transport and Public Works. Uruguay

+US$ 360

milllon **estimated investment**

887 km

is the length of rail tacks to be refurbished.

Railway between Montevideo and Rivera

The reconditioning of this railway line aims at improving infrastructure along 422 km, from the village of Pintado to the department of Rivera, on the border with Brazil. These works are being executed, and are expected to be completed in April 2017. The total amount involved is US$74.9 million, US$ 50.1 million of which are financed by the MERCOSUR Structural Convergence Fund (FOCEM), while the other US$ 24.8 million are provided by the National Treasury. The works, together with the rehabilitation of the Rivera-Santana do Livramento-Cacequi railway section —which has already been completed in Brazil—, form part of API project Montevideo-Cacequi Railway Corridor.

A 50% reduction in infrastructure maintenance costs, a 75% decrease in travel costs, 20% savings in fuel, and an estimated threefold increase in the tons carried are among the major benefits expected from the project. The products to be transported are fuel, cement, limestone, clinker, rice, barley, and wood.

Piedra Sola-Salto Grande Railway Section

The project consists in the rehabilitation of 327 km of tracks with a US$127.3 million investment, US$83.5 of which are provided by FOCEM, while the other US$43.8 are covered with national funds. The project is at the execution stage and expected to be completed by December 2019.

The products to be carried by this line will be citrus, cement, limestone, rice, barley, and grain. Once the investments are made, expectations include a 75% reduction in maintenance costs, a 33% decrease in travel costs, and a 40% reduction in fuel consumption. As for the volume of cargo to be transported, it is estimated that it will more than double the current one in terms of tons.

Algorta-Fray Bentos Railway Branch Line

The reconditioning of this section, which runs along 141 km, is key to attract cargo from the area with the highest agricultural production in the country to the ports of Fray Bentos and Montevideo. A call for tenders has been issued for its rehabilitation and maintenance for 30 year under an availability payment-based public-private partnership. This public-private proposal by the State Railway Administration (AFE) has been recognized as one of the top five financial projects in Latin America.

Investments are estimated at US$100 million, and the expected completion date is March 2020. The goods that are bound to be carried along this section include both roundwood and processed wood for the construction industry, rice, fertilizers, and soya.

New Yurimaguas Port Terminal

This new port on the Huallaga river in Peru will enable the movement of cargo to the ports on the Peruvian Pacific coast through the Paita-Taropoto-Yurimaguas road, as well as to the Atlantic Brazilian ports through the Amazon river. It will strengthen the economic and social integration of the Peruvian coastal and sierra regions, in addition to facilitating trade with neighboring countries.

The new port terminal is located in the town of Nueva Reforma, on the left side of the Huallaga river, some 20 km downstream from the original port (Paranapura). Its construction, which demanded an investment of US$30.5 million and was completed in July this year, is meant to replace the existing port. Its modern infrastructure can handle passenger as well as bulk cargo and container traffic. Port operations will be carried out under international safety and environmental standards, which will help enhance port services in the area of influence.

These works are part of Peru's Northern Amazonas Intermodal Hub, the purpose of which is to strengthen trade flows and economic integration between the production centers in the Peru's rainforest and in its coastal and sierra regions, in addition to facilitate trade with its neighboring countries Ecuador, Colombia, and Brazil thanks to a reduction in logistics costs. Also to this end, Peru is working on the liberalization of tariff barriers as well as on trade and navigation agreements with such countries.

This project is included in the COSIPLAN Portfolio, in Project Group 3 of the Amazon Hub, and in 2011 it was also incorporated to the Integration Priority Project Agenda (API) as part of structured project Paita-Tarapoto-Yurimaguas Road, Ports, Logistics Centers and Waterways.

This API project seeks to ensure the viability of international transport between Peru and Brazil and its extension to the basins of both the Pacific and Atlantic oceans. The Paita-Yurimaguas road and the Huallaga, Marañón and Amazon waterways are the backbone of this macroregion.

The improvement of navigation conditions on the waterways and the connection of this route network will contribute to the development of northeastern Peru and the border areas. Taking multisectoral measures, mainly associated with productive undertakings and social aspects, will also be necessary.

This multimodal hub will allow the transportation of the phosphates exploited at the Bayóvar mine, located in the Pacific coastal area of the department of Piura, to the agricultural production areas in Brazil,

15,000 m²

is the expanse of the logistics operations area

US$ 30.5

million were invested in the works

120 m

is the length of the dock with two berths plus a berth for passengers

which are currently carried by sea. The trade flows in this direction would also incorporate the transport to the Manaus Industrial Free Trade Zone of production inputs imported from Asian countries. In the opposite direction, products from the Manaus industrial center would gain access to the markets located on the western Pacific coast of South America.

As part of this API project, substantial investments have been made in works that are already completed, such as the New Yurimaguas Port Terminal, the Paita-Tarapoto-Yurimaguas road, and the port of Paita. Continued work on the improvement of navigability of the Huallaga, Marañón, and Ucayali waterways and the development of logistics centers in Yurimaguas, Paita, and Iquitos are planned.

Technical Characteristics of the New Terminal

In 2011, works were granted in concession to the Concesionario Puerto Amazonas S.A. (COPAM) company. The contract comprises the design, financing, construction, operation, and maintenance of the new port for a 30-year period, involving a US$43.73 million investment. The works include the construction of a 66,167-m2 dock and a 253,367-m2 logistics operations area.

The first phase started in May 2014, and involved the construction of a dock with two berths, a berth for passengers, a storage area for general cargo, a roofed storage area for perishable products, and a container storage yard. Furthermore, a mobile crane, a self-propelled wheeled crane, elevators, tractors, and a boat for maintenance works were procured. This phase was completed in July 2016 with an investment of US$30.5 million.

The second-phase construction works will be carried out when the demand exceeds 600,000 metric tons a year or when the dock occupancy rate is higher than 44%. If this happens, the dock will be enlarged to build another berth, a covered storage area, and a container yard.

With the purpose of connecting this logistics center with the Paita-Yurimaguas road, the construction of a 9.4-km approach road to the port was completed in December 2013.

Repowering of the Embalse Nuclear Power Station

With its repowering, this nuclear power plant in Argentina will be operational for an additional 30-year period. The repowering works aims at complementing the growing national demand for electricity, keeping the existing nuclear power capacity, and ensuring the diversity of power sources in the energy matrix, with low-cost production in line with the national policy intended to reduce greenhouse gas emissions.

In the Argentine Republic, the electricity sector is characterized by a supply of primary energy with an important thermal component that involves the consumption of hydrocarbon fuels, particularly natural gas, a resource whose scarcity is growing at both the domestic and global levels, according to the current outlook. This creates the need for policies aimed at diversifying the energy matrix in such a way as to increase the use of renewable or of highly available resources, such as hydraulic, biomass, wind, solar, and nuclear resources.

The Embalse Nuclear Power Station is located in the municipality of Embalse (Calamuchita department, province of Córdoba), about 620 km northwest of the city of Buenos Aires. This power station will supply the provinces of Mendoza, San Juan, San Luis, Córdoba, Entre Ríos, and Santa Fe as well as Greater Buenos Aires, whose total population is over 26 million according to 2014 estimates (COSIPLAN, 2014).

The Embalse Nuclear Power Station is an electricity power plant generating 648 MW that had been operating commercially since 1984, but its lifetime expired in December 2015. The repowering process to extend its lifetime for another 30 years began in 2007 and consists of three stages: (i) life assessment; (ii) basic and detailed engineering, conclusion of contracts with companies, and procurement of machinery and equipment; and (iii) execution of the works, which started in January 2016.

The project is included in the COSIPLAN Portfolio, in Project Group 5 of the MERCOSUR-Chile Hub. Investments are estimated at US$2,149 million, US$240 million of which are covered by a loan granted by CAF that has already been disbursed, while the other

683 MW

a 5% increase in the installed power capacity

US$ 2,149

million estimated investment in the works

US$1,909 are covered by the National Treasury. The latter amount was included in the national budget for 2016. Furthermore, the project is staffed by more than 2,800 people, and is estimated to create an additional 20% of indirect employment.

As a result of the public hearing held in July 2016, the Secretariat of the Environment and Climate Change of the province of Mendoza was authorized to grant the environmental license on July 22. Works are expected to be completed in February 2018, and when the project is finished, the power station will be ready to start a new operating cycle similar to the first one and to generate 5% of additional electricity for the country, i.e. 683 MW.

Works include the conditioning and replacement of the components of the reactor and other systems, the adjustment of the facilities to the new regulatory requirements, and an increase in the electric power generation capacity of the station. The project entails technological developments and systems designed to improve operational safety, as well as the modernization and enhancement of the steam turbine and the thermal cycle.

The lessons learned around the world and the rapid advance of technology ensure that power plants that receive a lifetime extension result in more energy efficiency, safer operation, no greenhouse gas emissions, and operational procedures that make the most of the resources used, thus preserving the environment to the benefit of society.

In this regard, the Embalse Nuclear Power Station will contribute to the substitution of non-renewable hydrocarbon fuels, such as diesel fuel, fuel oil and natural gas, and to the reduction of energy shortages resulting from the alteration of hydrological cycles.

Additionally, this project will strengthen local companies in the nuclear sector and encourage value chains by preserving the technological cluster created in the country, which in turn will promote the participation of the local industry in the supply of equipment and services.

These works will contribute to the specialization of national professionals, technicians, and businesses with a view to building and operating new nuclear power plants, and even to exporting this knowledge to other countries in the region.

Bolivia-Peru Road Integration

The Tacna-La Paz road hub is one of the most important connections between Bolivia and Peru, as it provides a direct and shorter access to the city of Tacna. This connection is part of the undertakings given at presidential summits and bilateral meetings held with the purpose of consolidating integration and provide a major boost to the execution of the works.

In 2010, the presidents of both countries made a bilateral commitment with regard to the paving of a more than 300 km of the road between Tacna (Peru) and La Paz (Bolivia) in order to strengthen the relation between the two countries and for this road to become a major route for bilateral trade and for the movement of people and vehicles towards the Pacific ocean (Ilo Declaration, 2010).

In 2015, at a new presidential summit attended by the ministers of the areas concerned, this commitment was renewed with the understanding that this road corridor contributes to the economic and social development of people living in border areas. To this end, they drew up a plan of actions that would complement the paving of the road, which included the creation of working groups and the organization of specific activities related to the cross-border environment and water resources, security and defense, economic development, social policies, institutional strengthening, and infrastructure for integration and development purposes (Esteves Island Declaration, 2015).

The road runs across the department of Tacna, in Peru, and the department of La Paz, in Bolivia. The area of this territory, inhabited by about three and a half million people, is 150,000 km2, while the GDP of both departments amounts to more than US$10 billion, according to 2014 estimates (COSIPLAN, 2016).

This integration road hub involves two road projects included in the COSIPLAN Portfolio, in Project Group 5 of the Central Interoceanic Hub. In Peru, it joins the city of Tacna with the town of Collpa, at the border with Bolivia, an in the latter country, it connects Milestone IV with the city of La Paz. Both projects have been divided into sections for the purpose of executing the necessary paving works.

In the Peruvian territory, the Tacna-Collpa road comprises four sections. The first one is paved up to the 43.6 marker of the road at the level of the wearing course. The second section works, involving 50.4 km and a US$79 million investment, have been underway since August 2016 and will be completed in February

US$ 340

million estimated investment in the works

305 km

is the length of the road to be paved

"The Tacna-Collpa-La Paz road is on the bilateral agenda to strengthen the historical ties and integration between Peru and Bolivia."

Presidential Summit and First Binational Meeting of Ministers, June 2015

2018. Works along the third, 52.2-km stretch started in September 2016 and will continue up to April 2018, requiring a US$43 million investment. Finally, works along the fourth section, for a US$45 million investment amount, started in February and are expected to be completed in October 2017.

In the Bolivian territory, the La Paz-Milestone IV road also comprises four sections. The first one is already paved up to the railway crossing in Capiri. Works along the second section, which runs for 25.25 km between Capiri and Central Chama, are being done and their completion is estimated for 2017, involving a US$16-million investment financed by CAF. The third stretch —27.44 km between Central Chama and Nazacara— is also being paved, and works will be completed in 2017, requiring an investment amount of US$21 million.

The fourth section, between Nazacara and Milestone IV, was divided into three subsections, and the paving projects for the first two subsections have been awarded. The first one, between Nazacara and San Andrés de Machaca, is 25-km long, and involves a US$32-million, FONPLATA-funded investment, while the second subsection, between San Andrés de Machaca and Santiago de Machaca, is 32.7-km long and involves a US$37 amount financed by the IDB. Finally, the approximately 50-km long Santiago de Machaca-Milestone IV subsection has been put out to tender, and the required investment is estimated at US$66 million.

This connection towards the Peruvian coast is complementary with two other projects included in the COSIPLAN Portfolio. One is the construction and improvement of the Camaná-Matarani-Ilo road, which is being executed, requires an investment estimated at US$438 million, is expected to be completed in April 2017, and will facilitate traffic between the ports of Ilo and Matarani. The other project involves the expansion, improvement, and modernization of the port of Ilo for it to become a state-of-the-art multipurpose terminal. In this regard, a private initiative proposing to undertake the design, construction, operation, maintenance, and management of the terminal is being evaluated. The investment amounts to US$230 million.

A Road Corridor for Integration between the Atlantic and Pacific Oceans

From São Paulo, Brazil, to the Chilean ports of Antofagasta and Mejillones across four countries and over more than 3000 km of roads runs the connection provided for in this project. It reaffirms the presidents' commitment to regional integration, economic and social development, and the competitiveness of regional products, including the participation of the private sector, academia, and local populations.

In December 2015, the presidents of Argentina, Brazil, Chile, and Paraguay, in the context of the Common Market Council, decided to create a Working Group in order to make the road corridor stretching along Campo Grande-Puerto Murtinho (Brazil)-Carmelo Peralta-Mariscal Estigarribia-Pozo Hondo (Paraguay)-Misión La Paz-Tartagal-Jujuy-Salta (Argentina)-Sico-Jama-Antofagasta, Mejillones and Iquique ports (Chile) a reality. This initiative is based on the presidents' commitment to the regional integration process conducted through COSIPLAN-IIRSA activities (Asunción Declaration, 2015).

The purpose of this corridor is to substantially improve physical infrastructure as well as to facilitate cross-border transit and to ease border procedures with the aim of speeding up the movement of people and goods and achieving high logistics efficiency, greater economic competitiveness, and a more effective regional integration. This bioceanic connection is yet another expression of the will to physically draw together the countries of the Pacific Alliance and MERCOSUR to work on joint undertakings that help improve the competitiveness of regional products in the Asian and European markets (Asunción Declaration, 2015).

In 2016, the Working Group met three times. It is made up of representatives of the four countries, from both the national and subnational levels, and of

3,262 km

is the length of the São Paulo-Antofagasta road corridor through Sico border crossing.

3,181 km

is the length of the São Paulo-Antofagasta road corridor through Jama border crossing.

governmental agencies and institutions concerned with the purposes of the corridor.

In May, in Santiago de Chile, the Working Group, in addition to launching other initiatives, commissioned Chile's Catholic University of the North to develop a website specifically about the corridor to gather together the information that is currently scattered across national websites.

In July, the Working Group met again in Campo Grande, Brazil, where it agreed to create a university network with the objective of involving the universities of the region in the analysis of the economic and social impact of the corridor, including local communities. As for the infrastructure of the corridor, presentations were delivered on projects for the development of logistics centers and industrial parks in Salta and Jujuy; on the capacity and quality of the ports of Antofagasta and Mejillones; on the new bridge between Brazil and Paraguay (Puerto Murtinho-Carmelo Peralta); and on the Belgrano Plan targeted to northern Argentina. The Working Group also addressed technical aspects of customs transit, free trade agreements, global value chains, and production chains.

The third meeting, held in October in San Salvador de Jujuy, Argentina, was organized into four workshops:

- **Coordinated Border Management:** Work focused on early and integrated access to information. Among other things, the Working Group promoted the


implementation of the International Customs Transit Computerized System (SINTIA, for its acronym), spectroscopic images of cargo (cargo scanning), a single electronic form, an electronic seal system, a priority channel for cargo, a single and unified immigration and customs procedure, and the harmonization of road safety standards.

- **Infrastructure and Services:** It was recommended that a plan and a schedule be established for infrastructure deemed necessary to interconnect the corridor in such a way as to complete the works by 2021, and a multilateral group was created to monitor the progress of these projects. Furthermore, it was agreed to work towards the complementarity of modes of transport and the development of logistics centers, value chains, and production integration projects.
- **Productive development:** Agreement was reached to draw up a "Map of Productive Actors for the Integration of the Bioceanic Corridor," and to coordinate the actions necessary to create the "Bioceanic Corridor Production Integration Network" involving all the institutional players, both public and private.
- **Universities:** The university network launched in Campo Grande seeks to collect information on social, economic, political, and services-related problems, as well as to build a database to enter such information and publish it on the website about the corridor. The members of the network will be Brazil's Mato Grosso do Sul State University, Chile's Catholic University of the North, and Argentina's National University of Jujuy. Other universities of the region are invited to join the network, and the ministries of education are invited to participate as collaborators.

The Projects Involved in the Corridor

In Brazil. The corridor starts at the port of Santos, in Brazil, on the Atlantic ocean. Two types of works are being carried out in relation to this infrastructure: on the one hand, the avenue surrounding the port, which will result in smoother vehicular traffic and access to the port; on the other hand, dredging works to increase depth from 13 m to 15 m to facilitate access by sea to the port. This project is included in the COSIPLAN Portfolio and will involve an investment estimated at US$344.4 million. The dredging works are expected to be completed this year, and the last section of the avenue surrounding the port will be completed in 2019.

The corridor continues west to Campo Grande along Brazilian roads that are operational. In Campo Grande, progress is being made with the bypass works, which are part of API project Improvement of Road Connectivity in the Central Interoceanic Hub and require an investment of US$12 million.

The road connection stretches from Campo Grande to the town of Porto Murtinho, at the border with Paraguay and on the banks of the Paraguay river. An international bridge and a border crossing between Porto Murtinho, Brazil, and Capitán Carmelo Peralta, Paraguay, are planned to be built. Both countries have agreed to co-finance the project in equal proportions. Last September, a meeting was held at which Brazilian and Paraguayan technical teams selected the most appropriate site for the infrastructure.

In Paraguay. The corridor continues with two road projects that are also included in the COSIPLAN Portfolio. One involves the improvement of the 277-km road that connects Capitán Carmelo Peralta with

Loma Plata with an investment estimated at US$313 million. The opening of tenders for the design and construction works, with an implementation period of 24 months, took place in late October this year. The other project consists in paving the 354.8-km long Cruce Centinela-Mariscal Estigarribia-Pozo Hondo stretch, which will cost approximately US$401 million. The feasibility study, which was given a 240-day period, commenced this year, and the call for tender for the works is expected to be issued in 2017.

A border crossing with facilities in both countries is planned to be implemented close to the bridge over the Picomayo River, between Pozo Hondo, Paraguay, and Misión La Paz, Argentina. This project, also included in the COSIPLAN Portfolio, involves customs, immigration, and phytosanitary control facilities as well as parking lots to facilitate cargo flows and trade.

In Argentina. In the Argentine territory, the corridor continues along National Route No. 54 with the paving of the Misión La Paz-Tartagal section for an investment estimated at US$150 million. Between Tartagal and the city of Salta, the upgrade of National Route No. 34 to four lanes from Libertador General San Martín to the junction with National Route No. 9 has been put out to tender. Both projects are part of the COSIPLAN Portfolio.

When the corridor reaches the border between the provinces of Salta and Jujuy, it splits into two branches. One runs north to Jama border crossing in Jujuy, and the other one runs south to Sico border crossing in Salta, both on the border with Chile. In the first case, the access to Jama border crossing through National Route No. 52 and the Integrated, One-Stop Border Controls at Jama border crossing are operational. In the second case, paving works on National Route No. 51 between Campo Quijano and Sico border crossing, with an investment estimated at US$180 million and planned to be completed in May 2018, are underway. The three projects are part of the COSIPLAN Portfolio.

In Chile. In the Chilean territory, Route 27-CH, linking Jama border crossing and San Pedro de Atacama, is paved along its entire length, i.e. 157 km. Concerning the connection to Sico border crossing, pavement of Sico-Cass-San Pedro de Atacama section along Route 23-CH, involving a US$30 million estimated investment, is included in the COSIPLAN Portfolio.

The project to grant Loa Route under a concession agreement seeks to provide the region of Antofagasta with road infrastructure appropriate to the growth in freight traffic, mainly related to the copper industry. Works will be carried out on Routes 1, 5, 24, and 25; on the approach road to Mejillones; and on the ring road east and west of the city of Calama. Work is currently underway on the terms and conditions of the tender, which is expected to be issued in 2016. The estimated investment amounts to US$280 million. Concession of the 201-km expressway to the company Autopistas de Antofagasta —which is operational and required a US$370-million investment— provides the cities in the region with direct access to each development hub.

In order to broaden the connection options to the ports on the Pacific and reduce the distance from Sico border crossing, the studies for the project to pave the Sico border crossing-Peine-Baquedano section are underway, with an investment estimated at U S$90 million.

The corridor ends in the ports of Antofagasta and Mejillones, which were upgraded and their capacity expanded, as established in three COSIPLAN Portfolio projects, with a total investment of US$218 million.

Agua Negra Binational Tunnel

This tunnel is one of the most important infrastructure projects underway in South America. Its purpose is to enhance the integration of Argentina and Chile, which share the longer binational border in the world, along the Andes, the second highest mountain range on Earth.

The initial kick-start to the project was given in 1996, and its implementation provides a real boost to the bioceanic corridor project, aiming at connecting central Argentina with the Pacific port in the city of Coquimbo, Chile, and the port of Porto Alegre, Brazil, on the Atlantic ocean.

The Agua Negra International Pass is one of the 26 binational border crossings included in the priority joint investment program agreed upon within the framework of the Treaty of Maipú on Integration and Cooperation, which was ratified in 2014. This pass is located on the Argentine-Chilean border at 4,765 m.a.s.l. and serves as a link between the cities of San José de Jáchal (province of San Juan, Argentina) and Vicuña (Coquimbo Region, Chile).

As the current road is not suitable for freight transport and is only passable between the months of November and early April for passenger transport, the international pass remains closed seven months a year. The plan is to build a binational tunnel in order to overcome this difficulty.

The tunnel will lower the maximum height of the pass to 3,620 m.a.s.l. on the Chilean side and to 4,085 m.a.s.l. on the Argentine side. The technical solution, designed by professionals with extensive experience in studies and works associated with long tunnels in the world, comprises two main tunnels housing road surfaces for one-way traffic, thus reducing the distance to 44 km. Both tunnels run semi-parallel, with an approximate length of 13.9km and a ventilation system capable of maintaining environmental health conditions during operations and managing smoke in the case of fire.

The objective of the project is to improve physical connectivity between the two countries, contributing a complementary solution to the Cristo Redentor border crossing system, especially in times of congestion or temporary closure due to winter storms. It should also

13.9 km

is the length of both tunnels, one for each traffic direction.

US$ 1,413

million estimated investment net of tax

help to promote trade, the implementation of bilateral mining projects, and tourism development.

This tunnel is part of Project Group 4 of the MERCOSUR-Chile Hub in the COSIPLAN Portfolio. In 2011, it was included in the Council's Integration Priority Project Agenda (API) because it consolidates a physical connectivity network that is regional in scope. In 2014, Argentina and Chile requested the support of the CCT to design an Integration Territorial Program (PTI) associated with this project, a process that started that same year and was completed in December 2015. Both countries are currently working on the implementation of prioritized actions to enhance the benefits of the tunnel and mitigate its negative impacts.

The Starting Signal Has Been Given

In April 2016, a draft agreement was signed whereby the IDB approved a US$40-million loan to cover the expenses of the pre-qualification of companies, the tendering of the works, and the preparation of the detailed design project, which will be the responsibility of the company selected in the tender process.

The pre-qualification of the companies interested in the construction of the tunnel was launched in October with the signature of an agreement between both countries at a meeting attended, from Argentina, by the Minister of Finance, Mr. Alfonso Prat-Gay; the Minister of Transport, Mr. Guillermo Dietrich; the Governor of San Juan, Mr. Sergio Uñac; and Argentina's Ambassador to Chile, Mr. José Octavio Bordón; and from Chile, by the Minister of Finance, Mr. Rodrigo Valdés; and the Minister of Public Works, Alberto Undurraga.

The Agua Negra Binational Tunnel Body (EBITAN) is expected to select the winning company in the tender in 2017 for it to make progress in the preparation of the detailed design project, which will take approximately one year. The investment in the works is estimated at US$16 billion, and a funding commitment from the IDB has been secured.

"It's about 13.9 kilometers of integration that will lower the height of the Agua Negra pass by a thousand meters, turning this seasonal mountain pass into a tunnel that is open all year round to enable trade between the two countries."

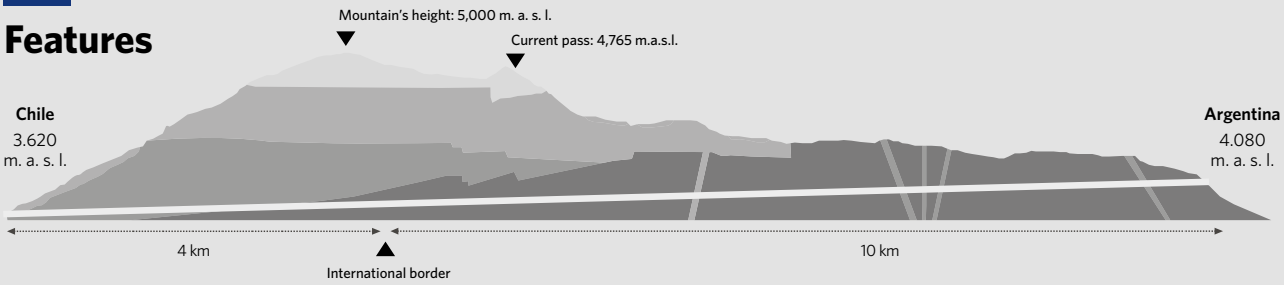
Alberto Undurraga, Minister of Public Works, **Chile**

"At a time when the possibility of building walls is being discussed in some places of the world, we are tearing down the wall and building a tunnel to link two sister nations, knowing that cultural and historical integration calls for physical integration."

Alfonso Prat-Gay, Minister of Finance, **Argentina**

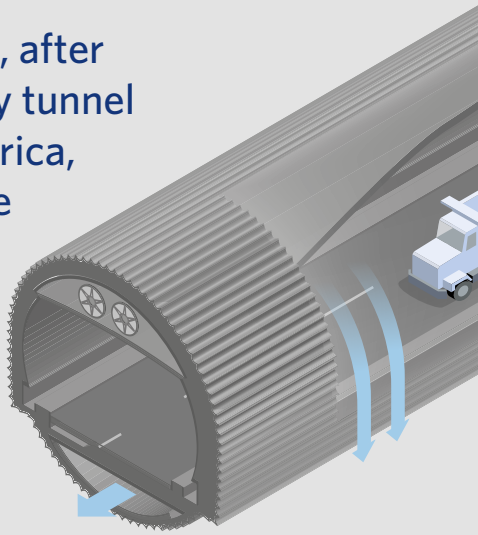
1.

Features



The Longest Tunnel in South America

This will be the second longest tunnel in the Americas, after the 14.7-km long Mount Macdonald Tunnel —a railway tunnel in Canada—, and will rank first in length in South America, over the 9-km long La Línea tunnel in Colombia, whose construction will be completed next year.



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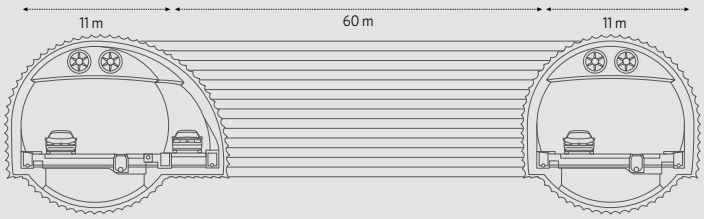


The Project

It involves two tunnels, each of which is 11 m wide and contains a two-lane, one-way expressway, and ventilation and drainage systems. A capacity of 2,000 vehicles per hour is estimated.

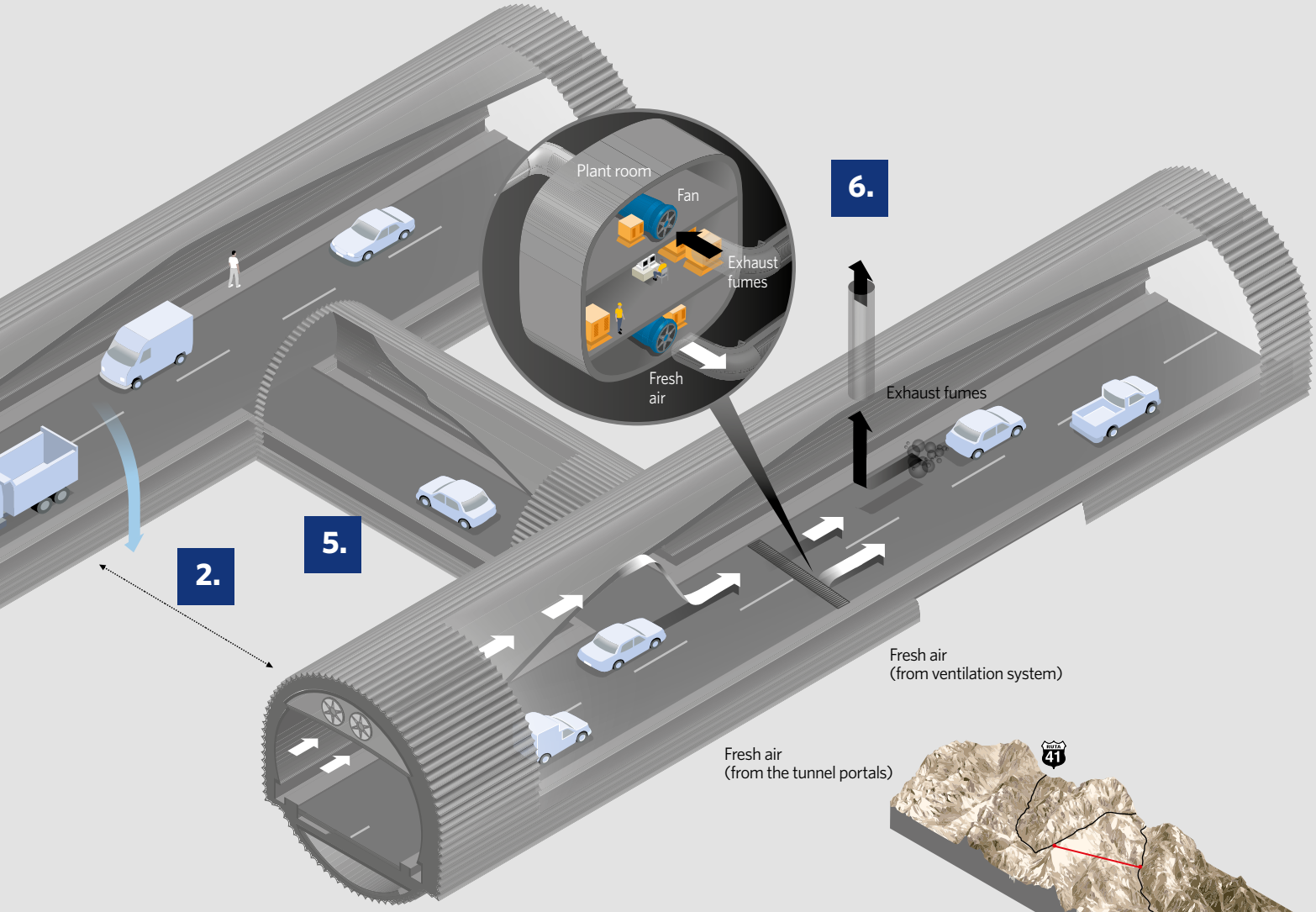
Technical Characteristics of the Tunnel

- Ventilation caverns at both ends
- Fire hydrants along the entire length
- An integrated traffic control center to monitor safety and keep a close watch on key traffic-related aspects, such as sanitary ventilation, lighting, and internal visibility; state-of-the-art automatic incident detection system, surveillance cameras, and communications system.
- Buildings next to the portals with all necessary equipment for firefighters and rescue teams.
- Approach roads with separate carriageways in the area of influence of both portals

1. Two parallel tunnels, one for each direction of travel: a downhill tunnel from Argentina to Chile and an uphill tunnel from Chile to Argentina running along 14.7 km. The Argentine portal is located 4,085 m.a.s.l., while the Chilean portal is at a height of 3,620 m.a.s.l., so that the tunnel has an

45 km

is the total length to be dug —14 km for one direction and 14 km for the opposite one, plus 28 60-m long emergency tunnels connecting both carriageways.



The tunnel runs along the backbone of the Andes mountain range.

average slope of 3.37%.

2. Tunnel separation: Between 40 m and 80 m.

3. Road alignment inside the tunnel with large curve radii.

4. 7.5-m wide carriageways, with pathways for pedestrians and emergency services on each side. The vertical clearance is 4.80 m. Each tunnel has a typical cross section of 70 m2.

5. For emergency cases, interconnection passages for pedestrians located every 250 m as well as for vehicles located every 1,550 m connect the two tunnels all along the way.

6. Sanitary ventilation for normal operation, and a smoke extraction system for fires. A 535-m deep, 4.5-m internal diameter vertical ventilation shaft on the Argentine territory. A 4.75-km long ventilation tunnel with a cross-sectional area of 36 m2 on the Chilean territory.

Source of the infographic:
http://www.diariodecuyo.com.ar/

Integration Territorial Programs

+100

infrastructure, economic, environmental, and social actions to make the most of the tunnel

+70

Argentine and Chilean officials working on the PTI

The First Integration Territorial Program in South America

The Agua Negra Binational Tunnel PTI is the first experience of COSIPLAN with the design of this type of program. It focuses on enhancing the favorable impacts of the construction of the tunnel and on lessening or mitigating the impediments to fully reaping the benefits derived from this infrastructure.

The Integration Territorial Programs (PTIs) were designed as action plans complementing the physical works that gave birth to them. They call for management plans, resource allocation, and clearly defined implementation responsibilities and timeframes.

For this PTI, an Enlarged Work Team —made up of the National Coordinators from both countries and of officials from the Argentine provinces of San Juan and La Rioja and from Chile's Coquimbo

"Today, we must plan for the future and anticipate the consequences of the tunnel, so that it does not have a negative impact but instead promotes long-term sustainable development."

Claudio Ibañez González, Mayor of the Coquimbo Region **Chile**

Region— was established for its design and implementation. The team received the support and technical assistance of INTAL in its role as the CONSIPLAN CCT Secretariat.

The area of action of the PTI was defined taking into account the local and/or regional problems and opportunities in the territory closest to the Tunnel. Since its creation, the Enlarged Work Team has held about twenty work meetings, including workshops and videoconferences, at which economic, cultural, and social and environmental issues have been addressed.

As a result of such meetings, a set of Plans, Programs, and Projects (PPPs) were identified and given priority to form part of the Agua Negra Tunnel PTI. In other words, the tunnel was the determinant in the design of the PTI and also served as a filter in the selection of the PPPs that will help solve the problems identified in the territory.

The Implementation Plan

The Implementation Plan is the result of the prioritization of a subset of Plans, Programs, and Projects included in the PTI. Its execution will run in parallel with the construction of the tunnel, which is estimated to take 10 years. The Implementation Plan is made up of 100 actions:

31

Native Actions

These are new actions that were identified as being relevant and complementary to the tunnel project during the process of designing the PTI.

69

Concurrent Planning Actions

These are actions that are already part of government plans or programs and that were identified as being relevant or complementary to the tunnel project during the process of designing the PTI. Incorporating them into the program adds to their value.

These actions are organized into Strategic Areas and Cross-cutting Factors that allow the territorial dynamics of the PTI action area to be described, taking the implementation of the tunnel into account.

The First Workshop on the Implementation Plan

The First Workshop on the Implementation Plan for the Agua Negra Binational Tunnel Territorial Integration Program (PTI) was held on August 24 and 25, 2016, in Santiago de Chile. The event was attended by approximately 70 high-level officials from Argentina and Chile representing political and technical areas within their national, regional, and provincial governments, as well as by representatives of the COSIPLAN CCT.

Those attending the workshop were divided into working groups that analyzed the actions that make up the plan, which were grouped into five main areas: physical connectivity (including logistics platforms); electrical connectivity and ports; productive and economic development; environmental sustainability; and climate change and associated risks. In addition, the highest

"We have spent two hundred years looking only to the east, finding an outlet to the sea in the port of Buenos Aires. There is no doubt that the tunnel will be a construction towards a significant future."

Sergio Uñac
Governor of San Juan,
Argentina

authorities came together at a political/institutional working table where they defined the follow-up mechanism and agreed on how the work would move forward both at the binational level and between the national and subnational levels within each country.

At this workshop, emphasis was placed on the fact that the critical path towards implementation involves spearheading the native actions and following up on the concurrent planning actions, focusing efforts on the more complex ones, which are the native binational actions.

The results of the work carried out by the Enlarged Work Team in gathering and systematizing information between March and August were presented. Of the total 100 priority actions included in the Implementation Plan, information was available for 77% and only needed to be completed for 23%, which demonstrates how committed the Enlarged Work Team is to this initiative.

The two-day event revolved around collaborative work in order for those present to reach consensus on the scope of the Implementation Plan and to establish who is responsible for gathering information, managing, and following up on each action. In Addition, new initiatives presented by the countries for incorporation into the Implementation Plan were discussed. As of the date of this report, the Enlarged Work Team was consolidating the information on the actions agreed upon.

As a result of the workshop, it was agreed that regular online meetings on each subject area would be held to follow up on the implementation and to establish a dynamic mechanism that involves all those who are responsible for the native binational actions, thus guaranteeing their implementation over the coming years.

Another point of consensus entailed the analysis of alternatives for systematizing the information contained in the project files so as to facilitate the processes of monitoring and following up on the actions. It was also agreed that activities related to executing the Implementation Plan would be included as part of the COSIPLAN Work Plan 2017.

"The PTI and the tunnel are more than an infrastructure project —they open up a myriad of possibilities."

Mirtha Meléndez Rojas,
Regional Ministerial Secretary of Public Works of Coquimbo, **Chile**

ACTIONS/ACTIVITIES NATIVE TO THE ACTION PLAN BY STRATEGIC AREA

Component	Plan/Program/Project	Next Action/Activity	Country
AREA: PHYSICAL CONNECTIVITY			
Improvements to road connectivity	Project to pave and upgrade Route 41-CH	Carry out a comprehensive study to reroute freight traffic and find alternatives for the new route. Section: Border Crossing Facility, Juntas del Toro, and Ports in the Coquimbo Region	CH
		Carry out studies for Route 41-CH bypass project, Quebrada de Talca-Port of Coquimbo	CH
		Draft project for the Las Rojas-Vicuña section (Four-lane road for Route 41-CH)	CH
		Invitation to tender for Section II, El Camarón bridge - La Laguna (Project to pave Route 41-CH between Juntas del Toro and the portal of the tunnel)	CH
Expansion of the electricity and telecommunications networks	Project to extend the fiber optic network from Las Flores to the Binational Tunnel and possibly into Chile	Carry out a feasibility study for the implementation of the fiber optic installation project and cable jetting for the state	CH
	Project for the expansion of cell phone network coverage in the Chilean sector	Move forward with negotiations with (private) telecommunications providers	CH
	Project for supplying energy to telecommunications services in the Chilean sector	Analyze the inclusion of energy provision in the overall electricity project, depending on telecommunications projects	CH
Improvements to physical connectivity services	Project to install service areas and facilities in roads	Develop safety projects in different sectors of the relevant road network	AR-CH
	Project to install logistics platforms	Identify logistics intermodal terminal projects	AR-CH
AREA: TERRITORIAL ENVIRONMENTAL SUSTAINABILITY			
Protection of biodiversity	Binational program for the protection of biodiversity	Analyze and propose joint actions	AR-CH
AREA: DEMOGRAPHIC DYNAMICS (RURAL AND URBAN)			
Internal road structuring in urban areas	Mobility project in Grater San Juan (second and third beltways)	Plan a mobility project in functional terms (land use) that may give way to a services area or nodes	AR
	Project to consolidate the Third Provincial Beltway in San Juan	Carry out a prefeasibility study for the Third Beltway	AR
Ordenamiento territorial	Strategic program for urban center land use planning	Update and implement land use plans	AR
		Develop a regional policy on urban development, Coquimbo Region	CH
AREA: PRODUCTIVE AND ECONOMIC ACTIVITIES			
Mining development	Program to improve access to mine exploitations	Incorporate the information into the geographic mining system	AR
	Non-metal mining plan	Analyze production development opportunities for non-metal mining	AR
	Binational mining complementarity plan	Draft the plan	AR-CH
Industrial development	Industrial development strategic plan	Draft the industrial development strategic plan	AR
	Binational plan for value chain development and complementarity	Draft the binational plan for value chain development	AR-CH

ACCIONES/ACTIVIDADES NATIVAS DEL PLAN DE ACCIÓN POR EJE ESTRATÉGICO

Component	Plan/Program/Project	Next Action/Activity	Country
AREA: PRODUCTIVE AND ECONOMIC ACTIVITIES			
Tourism development	Integrated binational tourism plan	Carry out a study on tourism potential in the areas between the Elqui Valley and the Jáchal Valley	AR-CH
		Carry out a detailed study on tourism potential in Valle Fértil	AR
		Draft the binational master plan for integrated tourist circuits	AR-CH
AREA: RISKS OF NATURAL AND HUMAN ORIGIN			
Risk prevention and mitigation	Integrated risk management program	Draft a binational contingency plan and emergency protocol	AR-CH
Cambio climático	Programa de adaptación al cambio climático de la infraestructura en el AAD	Draft a plan of minor works to reduce losses caused by climate change	AR-CH
		Draw up a map of current and future physical vulnerability to climate change in the primary production, health, and tourism sectors	AR-CH

ACTIONS/ACTIVITIES NATIVE TO THE ACTION PLAN BY CROSS-CUTTING FACTOR

Component	Plan/Program/Project	Next Action/Activity	Country
FACTOR: CAPACITY BUILDING			
Capacity building and training	Binational program for local capacity building	Design the program (tourism, foreign trade, logistics, and local entrepreneurship)	AR-CH
Community development	Program to support the creation of cooperatives and associations	Design a binational program to support the creation of cooperatives (mining, tourism, agriculture, fisheries)	AR-CH
	Binational program to support community development	Carry out a study of support mechanisms and initiatives for community development	AR-CH
FACTOR: DEVELOPMENT AND INNOVATION			
Road information system	Project to create a road information system for the Route 41-CH-National Route No. 150 road network	Design an information system on the condition of the roads, the Tunnel and the Border Crossing including an application to be used by transportation companies and tourists	AR-CH
FACTOR: REGULATORY FRAMEWORK			
Regularization of ownership of water use rights	Program to regularize the ownership of water use rights	Carry out a study to identify precarious ownership of water use rights and regularize them	AR
Complementarity in the use of economic cooperation instruments (FTAs)	Project to analyze and assess shared tariff benefits under a FTA	Evaluate the results of the economic complementarity study concerning the Central Bioceanic Corridor between Coquimbo and Porto Alegre (Catholic University of the North and University of Cuyo)	AR-CH

PTIs, Much More than Infrastructure Projects

The COSIPLAN Strategic Action Plan (PAE) 2012-2022 includes, among other actions, the definition of a methodology for the design of Integration Territorial Programs associated with API projects.

Throughout 2012 and 2013, work was conducted to define the general guidelines for the development of these programs. For this purpose, two API projects were selected as case studies to draft a proposal (Agua Negra Binational Tunnel, and Montevideo-Cacequi Railway Corridor). The technical studies and methodological tools developed within the framework of IIRSA —such as the Production Integration and Logistics Methodology and the Strategic Environmental and Social Evaluation Methodology— were incorporated into these guidelines.

The document entitled "Integration Territorial Programs – PTIs: Conceptual Guidelines for their Design" was analyzed at the Meeting of the Executive Technical Group (GTE) on PTIs held in Buenos Aires in 2013, and was approved by the COSIPLAN Ministers at their IV Ordinary Meeting that same year.

The Ministers included in the Work Plan 2014 the task of applying these guidelines on a pilot basis to some API projects selected by the countries. To move ahead on this subject, due to Argentina's and Chile's concern to deepen bilateral work on integration issues, the two countries requested the support of the COSIPLAN CCT to design a PTI associated with API project Agua Negra Binational Tunnel.

"Without the PTI, it would not be possible to plan and harmonize all the activities defined as native to or concurrent with it."

Atilio Alimena,
National Director of International Territorial Integration Planning,
Argentina

"The project is one of the greatest challenges in overcoming the huge economic barrier of the Andes."

José Miguel Ortega,
Directorate of Roads,
Chile

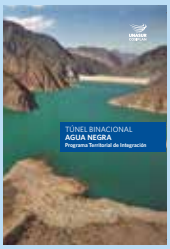
Towards Deep Integration

The Bilateral Relationship

Argentina and Chile have a comprehensive institutional framework for the consolidation of bilateral integration embodied in their 1984 Treaty of Peace and Friendship, ratified in 2010 by the Treaty of Maipú on Integration and Cooperation, as well as complementary agreements and protocols. With the fresh impetus given to this Treaty in 2014, the two countries discussed the Border-Crossing Master Plan and decided to expand the joint investment program from 13 to 26 crossings and set 2030 as the timeline. The goal is to improve territorial connectivity and to consider the suitability of implementing integrated border controls to streamline their operation.

Publication

Agua Negra Binational Tunnel



Available at www.iirsa.org/docptia-guanegra

In 2016, the document describing the design of the Agua Negra Binational Tunnel Integration Territorial Program was published. Its more than one hundred pages recreate the process of developing this first experience at the South American level. Furthermore, photographs, diagrams, tables, and figures illustrate the territory under study, presenting the concepts developed and used in a comprehensive manner.

Disaster Risk Management

Integration in Times of Climate Change

America has suffered direct losses as a result of large-scale disasters in infrastructure amounting to US$16.5 billion in the last three decades. The countries of the region are working jointly within COSIPLAN to manage infrastructure disaster risk by adopting a methodology already applied in the seismic gap between Chile and Peru, with the financial support of the IDB.

"Our institutional capacity is weak, but it is much weaker when faced with the unplanned. Disasters should not be viewed as an inevitable event, but as something that governments and international cooperation should work on".

Sergio Galilea, Undersecretary of Public Works **Chile**

South America is exposed to various natural threats on account of its geological, climatic, and hydrological features. One of the greatest of these threats is posed by the seismic activity that causes earthquakes and tsunamis, particularly on the Pacific coast and in the south of the continent. Floods are another frequent event in South America as a result of climatic anomalies, unplanned urban expansion, and erosion, as well as unsustainable land use. Extreme temperatures and droughts are becoming more pronounced and more common in some parts of the region. Climate change is expected to increase both the likelihood and intensity of these phenomena. One of the causes of droughts and floods in the region's countries is the El Niño Southern Oscillation (ENSO).

COSIPLAN in action

As part of the COSIPLAN-IIRSA Strategic Action Plan (PAE) 2012-2022, in 2013 a Methodological Guide was developed to incorporate Disaster Risk Management (DRM) to regional infrastructure both planned and implemented by IIRSA, which was validated by the Member States at the meeting of the COSIPLAN-IIRSA Executive Technical Group (GTE) held in September 2013 in Santiago de Chile.

A major objective of the Methodology is to have clear procedures to identify critical (or vulnerable) infrastructure as well as measures to reduce the impact of catastrophic events (earthquakes, floods, landslides and tsunamis) affecting South American infrastructure.

A pilot application of the DRM Methodology was carried out with the resources of an IDB Technical Cooperation to Group 5 of the Central Interoceanic Hub, located in the seismic gap in southern Peru and northern Chile. In addition, it was decided that the User's Manual be updated on the basis of the experience gained from the pilot application.

The meeting held in Lima

On June 2 and 3, 2016, the city of Lima, Peru, hosted the Meeting of the Executive Technical Group on Disaster Risk Management within

the framework of the COSIPLAN-IIRSA Work Plan, under the coordination of INTAL. The meeting was attended by delegations from Argentina, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela, as well as by representatives from the UNASUR General Secretariat and the Technical Coordination Committee. It was also attended by representatives of Chilean and Peruvian experts and consultants specialized in these matters.

In addition to presenting the results of the application of the DRM Methodology to Chile and Peru, the meeting also served as an opportunity to share national experiences contributing to regional policies by enhancing the work undertaken in order to face and get ready for various natural threats.

- **Argentina:** Implementation of the hydric emergency (2015-2016) to face the effects of El Niño.
- **Colombia:** Risk management guidelines for the reconstruction of infrastructure, based on the hydric emergency caused by the La Niña phenomenon in 2010.
- **Chile:** The experience of the Ministry of Public Works in the disasters of 2015, especially in relation to the coastal territory and protection infrastructure planning based on the tsunamis and heavy sea that took place that year.
- **Perú:** Prospective and corrective disaster management components developed by the National Center on Disaster Risk Estimation, Prevention and Reduction (CENEPRED)

The views of two centers for the study of these issues in the region were highly significant: Chile's National Center for Research on Integrated Natural Disaster Management (CIGIDEN) and the Peruvian Japanese Center for Seismic Research and Disaster Mitigation (CISMID), in Peru.

Their most relevant contributions were the following:

- There are simulation tools available to predict the effects of a disaster on an urban area. This helps not only measure the damage caused, but also design evacuation and emergency response tools.
- It is necessary to verify that the circulation and evacuation routes chosen to be used in the event of a natural disaster keep their dimension and capacity. This is due to the fact that in the daily use of public space, such routes may become totally or partially obstructed, in which case they would not serve their purpose in an emergency.
- Advances in satellite data collection and classification help assess accurately the damage caused by earthquakes on transportation routes.

Regional Cooperation on Disasters

The UNASUR High-Level Working Group on Comprehensive Disaster Risk Management (GTAN-GIRD) is a permanent forum that seeks to coordinate the different initiatives of the Sectoral Councils on this topic.

The States made the decision to work on the adoption of common mechanisms and protocols that should contribute to the efficient management of humanitarian assistance in cases of disasters, as well as on the adoption of shared policies, strategies and tools related to risk reduction.

Within this framework, COSIPLAN will offer this group its experience in risk management, infrastructure planning and the Geographic Information System as a contribution to the establishment of a strategy to enhance cooperation in the field of disasters.

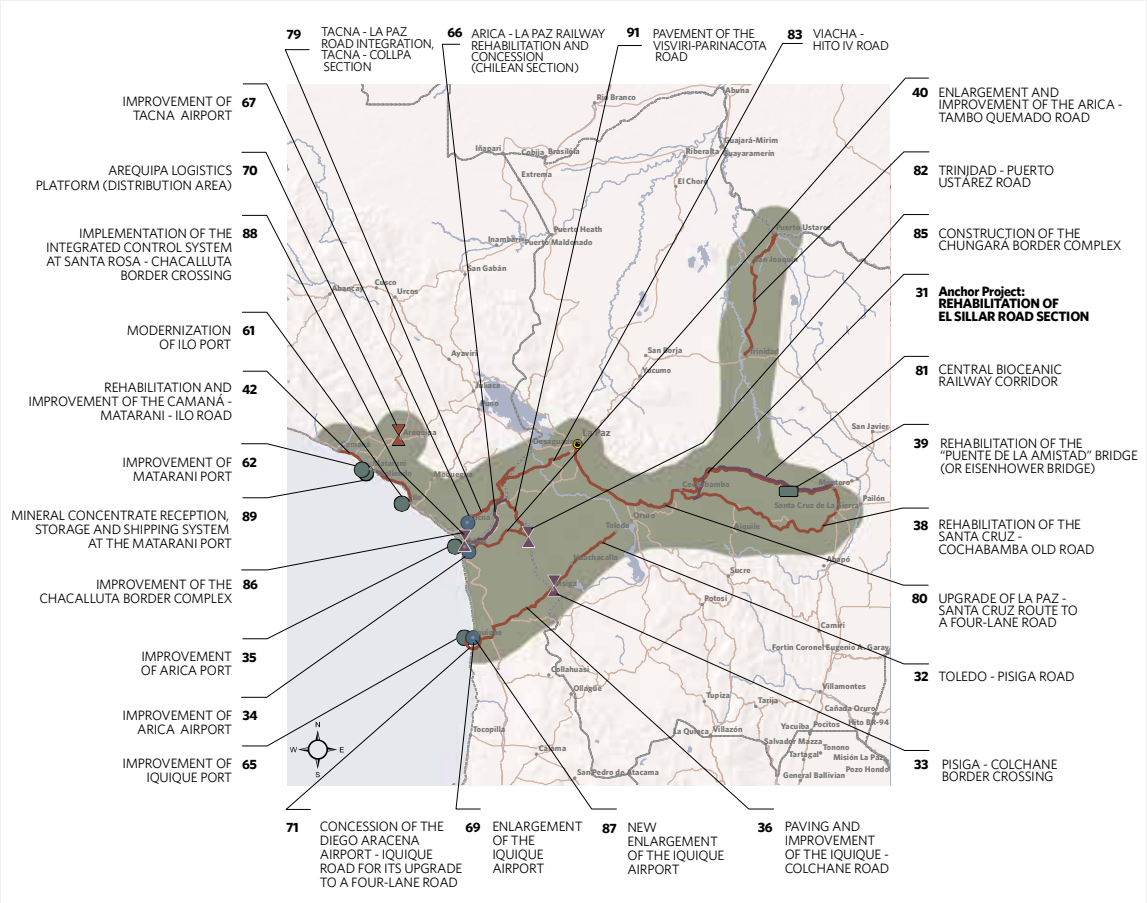
"European aid arrived to assist Ecuador in its recent disaster five days after it had occurred. Venezuelan aid arrived in 12 hours."

William Martínez, Vice-Minister of Risk Management and Civil Protection, **Venezuela**

"There are no universal solutions to problems. Reconstruction requires planning."

Alfredo Martínez, Risk Assistant Manager for the Adaptation Fund, **Colombia**

Group 5. Central Interoceanic Hub



The pilot application
in Chile and Peru

The pilot application began to be implemented in January 2015 and involved the development of activities for phases I and II to be applied to integration infrastructure projects that are part of Project Group 5 of the Central Interoceanic Hub. These are located on the Pacific coast in the south of Peru and north of Chile, an area where there is significant seismic risk.

Five infrastructure projects were selected in Chile and five in Peru, for which the activities described in Phase I were carried out, as well as steps 1 and 2 of Phase II. Two infrastructure projects for each country were then selected as priorities for the application of steps 3 and 4 of Phase II. The actions in Phase III were not part of the pilot exercise, and are instead the responsibility of the relevant institutions in each country.

On March 8 and 9, the University of Tarapacá (Arica, Chile) hosted the Chile-Peru Binational Workshop on Disaster Risk Management. The objective was to share the results of the study as well as the lessons learned from the pilot application. The workshop was attended by representatives of the Chilean Ministry of Public Works and the Peruvian Ministry of Transportation and Communications in addition to infrastructure operators.

Lessons learned from the pilot application

The results and lessons derived from this application were shared in 2016 during the meeting held in Lima and can be summarized in the following five main conclusions:

- Lack of specific information is a limiting factor, imposing the need to create or adjust information in the field so that this methodology can then be used. An alternative is to use methodologies of a deterministic nature, which can be applied at the local level and generate the information needed to fill this gap.
- Infrastructures are increasingly operated by public-private partnerships. This is why concession contracts should incorporate the risk level deemed acceptable by the states, in order to maintain operational conditions in the event of disasters.
- Incorporation of the benefits resulting from risk mitigation into the social and economic assessment of the integration projects is a fundamental component on account of the vulnerability of infrastructure to natural hazards.
- The aim of this methodology is to analyze the territories where the infrastructure projects of the COSIPLAN Portfolio are built. The methodology can be applied to assess different kinds of hazards, countries and infrastructure, including logistic systems.
- The DRM Methodology has attained its objectives. It is important to include it as a tool in the design of Integration Territorial Programs (PTIs), as were the cases with the Production Integration and Logistics (IPrLg) and Strategic Environmental and Social Evaluation (EASE) methodologies.

With the purpose of reporting the work done, the following documents were published in 2016:

Disaster Risk Management in COSIPLAN: Methodology and Application to Chilean and Peruvian Infrastructure

Disaster Risk Management in COSIPLAN: Risk Reduction Measurements in Chilean and Peruvian Integration Infrastructure

"Simple things that are not done or are left undone may cause catastrophic results. We know and are acquainted with what is going on, but our lack of risk prevention culture leads us to do nothing."

Adrián Lazo, COSIPLAN-IIRSA National Coordinator, **Peru**

"The earthquake and the tsunami we faced in 2010 in Chile were a turning point that urged us to work more coordinately so that no infrastructure built turns out to be vulnerable."

Antonia Bordas, National Director of Port Works, **Chile**

Steps in the application

Phase I:

Selection of Priority Infrastructure

This phase focuses on the reasons why a country wishes or needs to carry out a risk analysis for a certain infrastructure project. In terms of this initiative, the "motivation" for carrying out a risk analysis for integration infrastructure is connected to the threat posed by the "seismic silence in the south of Peru and the north of Chile."

The integration infrastructure projects selected by authorities from Peru's Ministry of Transportation and Communications and Chile's Ministry of Public Works were as follows:

Country	Integration Infrastructure Selected for Pilot Application
Chile	Arica Port Iquique Port Iquique Airport Arica Airport Arica-Tambo Quemado Road (11-CH)
Peru	Ilo Port Matarani Port Tacna Airport Southern Pan-American Road, Quilca Turn-off – La Concordia Section Camaná – Matarani – Ilo Road

Phase II:

Risk Analysis for Priority Infrastructure

The following steps were taken for each of the five infrastructure projects chosen by Chile and Peru:

Step 1

Definition of Performance Objectives and Indicators

The performance objectives were defined on the basis of what was put forward in the Methodological Guide and of a review of the legal and regulatory framework in force in each of the countries for the design, construction, and operation of the different infrastructure projects that were contemplated.

The performance objectives that were established for each infrastructure project included several that are listed below:

- Protect the safety of staff and users
- Protect the safety and wellbeing of the community and its assets
- Maintain the reliability of the infrastructure or system
- Reduce economic losses
- Avoid environmental damage

The performance indicators were defined during meetings with the infrastructure operators and through a review of the regulatory framework. This turned out to be a difficult process for the infrastructure operators due to lack of information.

Step 2

Characterization of each Infrastructure Project Components and Hazards

During this step, planimetric and documentary data was gathered for the components of each of the priority infrastructure projects. This data was available centrally from government bodies in each country, universities, and directly from the management of each infrastructure project. Information was also gathered on the hazards that each of the priority components is exposed to.

Once this analysis had been carried out, the two most critical integration infrastructure projects from each country were selected as priority areas where steps 3 and 4 of Phase II would be carried out, as is indicated below:

Country	Integration Infrastructure Selected for Steps 3 and 4 of the Pilot Application
Chile	Arica Port Arica Airport
Peru	Matarani Port Tacna Airport

"Risk management will help reduce logistics costs. It will also enable us to apply national standards in Peru and determine insurance premiums."

Carlos Lozada,
Ministry of Transportation and Communications, **Peru**

Step 3

Defining the Level of Depth in the Risk Analyses for Each Infrastructure Project

The depth of the risk analyses needed for each infrastructure project was defined, and a mixed probabilistic-deterministic method of analysis was prescribed, using the deterministic approach to measure vulnerabilities and the probabilistic approach to analyze hazards and risks.

Step 4

Performance of risk analysis and identification of potential risk reduction measures

Through this pilot application, structural and non-structural vulnerabilities were detected —the latter were present in the majority of cases.

Among the mitigation measures likely to be taken, the following can be mentioned:

Earthquakes:

- Seismic base isolation (isolation of structures, floors or equipment)
- Passive energy dissipation systems (friction dampers, metallic dampers and tuned mass dampers)
- Active and semi-active seismic protection systems
- Carbon fiber
- Wind bracing
- Bracing for equipment
- Bracing of ceilings
- Anchoring

Tsunamis:

According to international experiences, there is no one and the same solution to mitigate the adverse effect of tsunamis; therefore, complementary (structural and non-structural) measures need to be implemented.

Among the main structural measures, the following can be mentioned:

- Retaining walls
- Levees
- Breakwaters
- Relocation to higher ground

Among the main non-structural measures, the following can be mentioned:

- Warning systems
- Evacuation routes and drills
- Awareness and training campaigns for port staff regarding tsunami-related risks.

"The experience gathered in Arica port has enabled us to develop a proposal for southern Chile, which consists in another pilot application to improve this methodology."

Matías Valenzuela, Directorate of Road Transportation, Ministry of Public Works, **Chile**

Freight Transport and Logistics

Regional Logistics to Improve Competitiveness

Modern freight logistics comprises the movement of goods in terms of both space (transport) and time (warehouse and inventories). The exponential growth of the possibility of combining different modes of transport, created by the use of containers and new technologies, has brought logistics to the center of the debate.

The South American countries agree that competitiveness is directly impacted by how well logistics performs. When such impact is positive, it helps integrate national and international markets and allows countries to tap into their local comparative advantages and economies of scale. Instead, when it is negative, it becomes another obstacle that needs to be overcome during the integration process.

Transportation and infrastructure development policies have a substantial

influence on the performance of logistics. The governments of the region are therefore faced with the challenge of designing policies within a common and integrated framework.

Transportation infrastructure associated with logistics comprises six subsectors: road, rail, river, sea, air and border crossings. Among the numerous difficulties that logistics face in South America, the most important ones are the following: transportation modes are poorly integrated, the costs of carrying goods are high (particularly in road transportation), and documentation requirements and control procedures at border crossings are burdensome.

At the initiative of the UNASUR countries and with the support of the IDB, COSIPLAN offers an online training program for logistics sector officials, who will add to a network of experts in logistics. Furthermore, as part of its activities, the Council has launched an initiative to draw up a Strategic Logistics Chain Plan for the MERCOSUR-Chile Hub.

"It is necessary to consolidate a comprehensive logistics system in which the river transportation model should fulfill a major role and contribute to socially responsible and sustainable development."

Rolando Terrazas,
Infrastructure Vice-Presidency, CAF

416

COSIPLAN Portfolio **projects related to all transport modes**

US$ 117,345

million **estimated investment**

The meeting held in Bogotá

On September 13 and 14, 2016, the city of Bogotá, Colombia, hosted the Meeting of the Executive Technical Group on Freight Transport and Logistics, which was attended by representatives of the IDB and CAF, and delegations from the South American countries, including officials certified in the online Course on Design and Management of Freight Transport and Logistics Policies.

The activity focused on five areas:

- The Network of Government Experts
- Observatories on Freight Transport and Logistics in the region
- The Strategic Plan for Logistics Chains in the MERCOSUR-Chile Hub
- COSIPLAN Sectoral Integration Processes related to this matter, namely border integration and facilitation, rail integration, and integration through ports and waterways
- The online course

The two-day meeting combined information-packed presentations with working groups on strategic planning.

Freight logistics in the COSIPLAN sectoral processes

With the purpose of analyzing the coordination of actions related to freight transport and logistics, the progress made in South American Rail Integration, Border Integration and Facilitation, and South American Integration through Ports and Waterways was presented at the meeting.

The "Study to provide inputs for developing a strategy to facilitate South American Rail Integration" is being undertaken with the coordination of Uruguay. Those presenting this study underlined the information-gathering efforts that countries are making and mentioned the importance of making this information available so that other analyses can be carried out in addition

"The issue of freight transport and logistics is crucial for the region since a high percentage of investment in infrastructure is allocated to cargo movement."

Ignacio Estévez,
Integration and Trade Specialist, IDB-INTAL

Projects Related to Logistics

Air	Road	Rail	River	Sea	Multimodal	Border Crossings
18	**202**	**53**	**64**	**30**	**13**	**36**
Projects	**Projects**	**Projects**	**Projects**	**Projects**	**Projects**	**Projects**
US$ 7,362	**US$ 52,260**	**US$ 44,182**	**US$ 2,756**	**US$ 9,488**	**US$ 449**	**US$ 846**
million	million	million	million	million	million	million

to those included in the study.

As for South American Integration through Ports and Waterways, South America features the world's largest river system, 28% of the world's freshwater resources, and 110,000 km of navigable rivers. In this context, there is a potential not yet fully exploited. The need was stressed to move towards a paradigm shift whereby waterways and drainage basins emerge as a means of transportation and communication, integrating inhabitants and territories by creating the conditions for improved economic and social development of their areas of influence.

As regards Border Integration and Facilitation, the COSIPLAN background to this topic and the actions undertaken in 2016 coordinated by Argentina and Chile were presented. The task of collecting up-to-date information on the state of the border crossings and the border conditions through questionnaires sent to the twelve countries is directly related to freight transport and logistics. The current aim is to gather data on matters such as facilities for truck drivers, parking lots for trucks, separate access roads for inspection, logistics centers in the border area, control of refrigerated cargo, and inspection of hazardous cargo.

Online Course

The first **100 officials certified** by COSIPLAN

During the meeting in Bogotá, the training received very positive feedback from the certified course participants, who stressed the quality and usefulness of the contents as well as the experience gained due to the highly demanding nature of the course in terms of workload hours. Among other things, they mentioned the benefits of virtual forums as a means of mutual enrichment, the need to have a synchronous exchange tool that allows participants to meet one another, and the importance of broader dissemination within the government so that national and subnational institutions concerned with freight logistics can participate.

"The objective of the course was to train public officials directly or indirectly involved in the design of freight logistics and transportation public policies."

Carolina Venot,
Logistics Expert, Course Instructor

"Contents were developed following the criteria of the COSIPLAN countries, assessing the training needs of the transport and planning departments."

Joaquim Tres,
Integration and Trade Lead Specialist, IDB

A regional training experience

The online course "Design and Management of Freight Transport and Logistics Policies" was developed by the IDB with the coordination of Peru within the framework of COSIPLAN. INTAL coordinated the drafting of the contents proposal, the technical review of the program, and the invitation to participants, with the aim to train officials from the various public-sector agencies from UNASUR countries that are involved in the drafting, implementation, and evaluation of public policies, plans, programs, and projects in the freight logistics sector.

Between 2015 and 2016, three editions of the course were held. Of 120 people who signed up, 97 officials from 14 Latin American countries were certified. From South America, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, and Uruguay participated in the course. Sixty percent of the participants were men and 40% were women, and the average age was 40. The course was rated at 9 out of 10, taking into account the contents, the tutors, the materials used, and the online platform.

The countries requested that a fourth edition of the course be run in 2017 as part of the COSIPLAN Work Plan, and committed to identifying a wide audience that would include public agencies concerned with this matter at both the national and subnational levels.

"This course was an excellent experience to reflect upon all the logistics systems so as not to address our problems individually."

Marcos de Olivera Pinto,
Ministry of Planning, Budget and Management
Brazil

"We discussed methodologies and theoretical frameworks based on our national realities, which contributed feedback and was a source of ideas for joint projects."

Natalia Teruya,
Transport and Logistics Planning Office,
Peru

A network of government experts to design public policies

The crosscutting nature of the logistics sector demands a multisectoral and multidisciplinary approach. The organizations that take part in COSIPLAN include government bodies related to transportation, infrastructure, and planning, but other players from the areas of trade, production, and customs at both the national and subnational levels need to be engaged. In addition, the involvement of the private sector as a logistics provider and source of freight has also become essential.

The objective of the COSIPLAN Network of Government Freight Logistics Experts (REXLOG) is to advise the Council on decisions and the design of public policies, plans, projects, and regional actions on a continuous basis, thus promoting the development of the national and regional logistics systems. During the meeting, the countries agreed that the structure and operations of the Network would use a flexible work scheme to allow the active participation of all the countries. This is intended to expand the range of institutions involved, facilitate the exchange of lessons learned and good practices, and create a suitable environment for promoting shared solutions in this field.

The technological tool that will be used to provide support to this dialogue and exchange of information among participants is the IDB's Communities of Practice on Integration and Trade. Moreover, it was decided to establish an annual face-to-face meeting of the whole Network to review progress and propose new topics.

The Network will operate on the basis of working subgroups focused on specific topics. Work will start in the first quarter of 2017. During the meeting, the following three topics were prioritized:

- strategic logistics chains
- information collection methodologies and observatories
- harmonization and unification of concepts

Other set of topics identified was: freight transport institutional framework and regulations, logistics and urban impact, information technologies, trade facilitation, and logistics services infrastructure.

Recognizing data deficiencies in the field of freight transport and logistics in the region, the countries defined key indicators on which data needs to be collected at the regional level. The delegations agreed to collect information on the following indicators in the short run:

- cargo volume (tons/month; tons/km) by type
- times: origin-destination and time at the border
- transport (fleet): number of vehicles by type (utilizing the integration corridors)
- foreign trade procedures: number of checks required for a single shipment and number of documents required (for import and export)
- costs (tons/km)
- modal split/interchange

"At INTAL, we believe these kinds of initiatives are fundamental because they train not only human resources but also a network of contacts at the regional sphere, which is precisely what South America needs for its development."

Alejandra Radl,
Integration and Trade Specialist, IDB-INTAL

"To reduce the competitiveness gap between our countries and those in Europe we have to work concertedly on improving logistics."

Katherin Sandoval,
Logistics Execution Technical Unit, **Colombia**

MERCOSUR-Chile Hub

Strategic **logistics chains**

As part of the 2016 Work Plan, the countries of the MERCOSUR-Chile Hub suggested carrying out a study on strategic logistics chains within the Hub. INTAL coordinated the drafting of the initial proposal for the terms of reference for the initiative so as to define its scope and the resources needed to carry it out.

The objective of the study is to design an action plan to enhance the Hub's infrastructure planning based on strategic logistics chains and an insight into its trade and logistics patterns. To conduct a study of this magnitude, it is essential to fulfill the following conditions:

- ensure the commitment of all countries to allocating the resources necessary to meet the schedule of activities
- set up multisectoral national teams with the active involvement of the subnational governments; establish quality public-public and public-private dialogue mechanisms at the national level
- create opportunities for participation to validate the activities at the national and regional levels
- identify a set of quantitative and qualitative criteria for selecting the logistics chains to be analyzed, taking into account that all these chains must involve more than one country
- consolidate a repository for existing information, studies, and documents to facilitate the work preparation stage
- consider the standardization of concepts and methodologies that can subsequently be applied in the other COSIPLAN Hubs, and analyze the possibilities of extending this study to the other Hubs simultaneously

Trade integration through postal services for MSMEs

EXPORTAFÁCIL

www.iirsa.org/exportafacil

Users in the region share their experiences with Exporta Fácil. Learn about their stories, you can be one of them.

Small and Medium-sized Enterprises Connected with the Global Market

Five countries of the region have Exporta Fácil already in place to make exports easier for their MSMEs by reducing logistics costs, improving competitiveness and producing social benefits.

The logistics costs of exporting from South America range between 18% and 35% of the final value of goods, well above the 8% of the countries included in the Organization for Economic Cooperation and Development (OECD). The ones suffering the most from this gap are the micro-, small- and medium-sized enterprises (MSMEs), where this percentage may even be higher than 40% (INTAL, 2016).

Through COSIPLAN, the UNASUR countries are working to close the logistics gap through several strategies, one of which consists in supporting one another to adopt the postal service platform for simplified exports originally implemented by the

"To make further progress in implementing Exporta Fácil, the coordination of different public bodies such as customs, postal services, and ministries associated with industry, production and trade is necessary."

Pablo Genta, National Director of Planning and Logistics, **Uruguay**

Brazilian Ministry of Communications in 1999. The positive results of this project encouraged its replication in Peru (2007), Uruguay (2009), Colombia (2010) and Ecuador (2011). Today, this platform is known in the whole world as Exporta Fácil.

The mechanism to implement the Exporta Fácil platform is coordinated by INTAL, in charge of managing the technical and financial support given by the IDB, CAF and FONPLATA in order to encourage horizontal cooperation in the context of COSIPLAN-IIRSA. In practice, each country having Exporta Fácil in place provides the program with government officials to act as trainers and support the design and implementation stages in the country that has decided to adopt the service.

At the beginning, Brazilian officials served as promoters and technical advisors to Peruvian officials. Once the model was successfully adopted, the Peruvian and Brazilian officials supported Uruguay, Colombia and Ecuador in the development of the project. From the viewpoint of the institutions participating in the project, integrating the network is a way of reciprocating the assistance received from other South American countries to implement the project.

Reasons to Support MSMEs' Exports

Latin America experienced remarkable growth in exports during the 2000s. However, according to the IDB's Trade and Integration Monitor (IDB, 2015), foreign sales in many —particularly South American— countries continue to be highly concentrated in a small group of mostly primary products and in few destinations. The positive phase of the export cycle has weakened since the second half of 2011, narrowing the window for exporting. In this new context of falling international commodity prices and sluggish global demand, the need to diversify in terms of both products and destinations increases.

In light of this situation, it becomes vitally important to implement programs designed to promote and simplify exports such as Exporta Fácil. These initiatives help increase the number of exporters and facilitate the access of firms, mainly MSMEs, to the international markets in a simple, economical and safe manner. The program seeks to facilitate the internationalization of MSMEs, particularly of those located in distant areas, through a simplified import/export process through postal services using the logistics platform of designated postal operators, the network of which covers the entire national territory.

MSMEs face major obstacles when participating in international trade. Their small scale reduces their access to funding and information, makes it hard for them to afford the high fixed costs of establishing and maintaining overseas trade networks, and imposes constraints on management and technological capacity.

On the other hand, MSMEs' exposure to the international market brings with it significant benefits, of course, as it drives growth in productivity, competitiveness, and innovative capacity, and enables employment creation in competitive activities. This is why these benefits and their positive spillover effects on the rest of the production system justify the need to implement specific support policies for this business sector designed to facilitate their access to the international markets.

"After nine years, we have exported products for almost 20 million dollars, and 4,200 firms have made 50,000 deliveries through this tool."

Geraldine Bahamonde,
PROMPERÚ,
Peru

Setp by step

See how simple and fast it is to export now for your products to reach the entire world.

1. You must first have a customer abroad. If you already have one, you can begin to live the Exporta Fácil experience.

2. Start the procedure to ship your products. You must fill out the forms required to export.

3. Check the weight and size of the parcel. Make sure that each box you deliver does not exceed the maximum permitted.

"The results are amazing. In Brazil, small entrepreneurs have exported products for almost three million dollars."

Rose Mary Antunes,
Ministry of Technology, Science, Innovation and Communications,
Brazil

"The idea is that any Ecuadorian citizen can become an exporter. In 2013, we reached a total of 16,000 shipments."

Andrea Cisneros,
Ministry of Industries and Productivity,
Ecuador

4. Verify the value of your product. Check that it is below the maximum value allowed to start the operation.

5. Choose the type of product. Make sure that your product is authorized to leave your country by checking the rules in your country and in the destination country.

6. Take your parcel to the post office after confirming that your product meets the necessary requirements.

7. That's all. Your products begin their journey abroad and your firm will be made known to the world thanks to Exporta Fácil.

Experiences

Alpaca Montoya, a successful case

Nancy learned about Exporta Fácil through advertisements published in some newspapers from the capital city, but got more information when she took an order to an office of Serpost, the Peruvian Post. There, she found out about the various advantages of Exporta Fácil —namely, small packages can be sent, a compensation is received in cases of loss, the system to fill out the forms is plain and simple and can be used from any computer, in addition to the fact that the general sales tax (IGV) refund procedures are very easy to follow. No private courier includes this benefit, as their deliveries do not involve any export document.

Their first sale under this system was to Australia. All the required documents were submitted. Then, Nancy took the big box to Serpost, and it was all very easy. However, the parcel did not appear as "delivered." So, Nancy got in contact with the client, who explained that as the sale was closed at an amount higher than one thousand American dollars, some taxes had to be paid. Thus, she learned that it was necessary to study the regulations in force in the countries of destination to inform the buyer properly.

They are currently exporting to Australia, New Zealand, USA, Canada, the United Kingdom, Finland, Norway, Sweden, Switzerland, Hungary, and France. They have already made one thousand deliveries through Exporta Fácil.

"MSMEs can produce export-quality and highly demanded goods in the international market. Exporta Fácil is a mechanism designed for our businesses to grow and expand."

Nancy Montoya,
Alpaca Montoya S.A.C.
Pueblo Libre, **Peru**
www.tualpaca.com

Other experiences in the use of Exporta Fácil in the region

"A great aspiration is to secure the free circulation of books in as many countries as possible so that the democratization of culture may take place, and to attain this objective processes and the management of shipments must be facilitated, which Exporta Fácil has ensured."

Juan Ángel Peri, Peri Editorial Hemisferio Sur Book Store **Uruguay**

"Each chocolate bar is produced with a different frequency and a different symphony. With Exporta Fácil, it takes a very short time to export unique organic chocolate originating from Ecuador's Amazon region to the world."

Guillermo y Ricardo Gardenia, Koradi, Ecuador

www.koradi.com.ec

"What started as a course on e-commerce became an undertaking in its own right, recognizing the value of Peruvian products and taking them out to the world."

Frank González, Peruvian Products, **Peru**

www.myperuvianproducts.com

"We have customers in Bolivia and Paraguay. This tool enables us to know what the value of the product is at the time of exporting, so that the customer does not have to pay for freight and customs expenses, as they are directly included in the product price."

Hernán Correa, COTRAYDI Co-Operative, **Uruguay**

www.cotraydi.com.uy

"Governments have started to see postal services as partners in the implementation of public policies. Exporta Fácil gives MSMEs the possibility of entering a world unknown to them."

Rose Mary Antunes, Ministry of Technology, Science, Innovation and Communications, **Brazil**

"This governmental program is a source of wealth and employment. UPAEP's role is to advise and support governments."

Roberto Cavanna, UPAEP Secretary General

The meeting held in Montevideo

On August 11 and 12, 2016, the city of Montevideo, Uruguay, hosted the Meeting of the Executive Technical Group on Trade Integration through Postal Services, which was attended by delegations from Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela, from the UNASUR General Secretariat, and from the COSIPLAN CCT. The meeting was also attended by representatives of Mexico, Panama, the IDB, the Latin American Integration Association (ALADI), the World Customs Organization (WCO), the Universal Postal Union (UPU), and the Postal Union of the Americas, Spain and Portugal (UPAEP).

- **Experts from UPU, the WCO, ALADI and the IDB** provided an overview of the global trends for the integration of MSMEs into international trade as well as of trade facilitation through postal logistics using technological tools such as the IDB ConnectAmericas portal.
- **Paraguay** described the progress being made in the Exporta Fácil implementation process, which began in 2015 with the pre-diagnostic visit and document.
- **Chile** presented the developments made in the field of trade integration through postal services together with Colombia, Peru and Mexico within the framework of the Pacific Alliance.
- **Ecuador** presented the results of the monitoring visit made by Brazil, Peru and INTAL in November 2015. Furthermore, it described its new program to promote exports by MSMEs and popular and solidarity economy organizations.
- **Brazil** shared its experience in the creation and operation of the Permanent Postal Service-Customs Committee as a reference for the formal establishment of such Committees in each country having Exporta Fácil in place.
- **An analysis was made of the progress in regional** topics, as included in the Work Plan 2016. In this regard, with the aim of strengthening their commitment to the Work Plan 2017, the delegations signed the "Montevideo Pact." This agreement provides that the COSIPLAN National Coordinations and the high authorities of each institution involved in the system should follow this topic closely and carry out the planned activities focused on five major axes: Exporta-Importa Fácil, the connectivity pilot project, dissemination, coordination with UPU-UPAEP, and actions to monitor the Work Plan.

Lessons learned from horizontal cooperation

• Exporta Fácil is a country-based project. Sometimes, projects or programs that require the involvement of different government institutions are adversely affected because the officials in question cannot move beyond the main interests or goals of the institutions they belong to and represent. Together with a lack of communication, this has a negative impact on the design and implementation of these multisectoral projects.

• Exporta Fácil revolves around synergy between the three levels of government. If during the implementation and subsequent operation of the service the three levels (strategic, tactical and operational) compete rather than cooperate, the project will miss its goal, and this will ultimately have a negative impact on the MSMEs that it aims to help. This cooperative dynamic between the three levels was adopted in all the countries as a basic premise for ensuring the success of the project.

• Exporta Fácil is built on the commitment of countries, institutions and people. The value of the project lies not only in its final outcome, but in the process constructed through these commitments.
Commitment on the part of the countries is reflected, on the one hand, in that those having Exporta Fácil already in place allow their officials to provide technical support to other countries. On the other hand, another fundamental factor is the willingness of the countries to make headway on the implementation of the project with the support of a regional work team.
Institutional commitment is reflected in the support given by each of the different government agencies as they understand the importance of acting as a single team regardless of the ministry or department that officials belong to, and also in the provision of human and financial resources into the future to be able to continue operating the service, once it has been set up.
Personal commitment is embodied by each of the team members who devote their time and creativity to design the plans and the implementation of the service.

• Exporta Fácil is sustainable only if an inter-institutional work team is formally established. Even though individual commitment makes a difference, the turnover of officials within institutions may challenge project continuity. Responsibility within Exporta Fácil is bound to the role of the institution, rather than to one particular person. This is why the formal establishment of each working group at the operational level is encouraged.

Institutional model of Exporta Fácil in Uruguay

Paraguay towards implementing Exporta Fácil

The recent case of Paraguay illustrates the complexities of inter-institutional work and the new approach used to enhance it. Lessons are useful for the institutional areas responsible for promoting exports and encouraging MSMEs' innovation.

The Exporta Fácil team in each country operates on three levels: strategy, tactics and operations. The process begins with a pre-diagnostic visit, during which the essential work on the strategic and tactical levels is carried out. However, when work plans need to be designed, the focus shifts to the operational team, i.e. the people who know the day-to-day operations of the institutions involved and their processes. This does not mean that the other areas will not participate, but rather that their role is closer to the political arena, planning and resource allocation decisions.

The most recent implementation experience was in July 2015, when a pre-diagnostic visit to Paraguay took place. In December that year, the COSIPLAN ministers approved the plan and undertook to support Paraguay in implementing Exporta Fácil. In response to this, Brazil, Ecuador, Peru and Uruguay appointed officials from institutions involved in the project to serve as coaches in Paraguay. The coordination of the team of coaches and the methodology proposed to support the implementation in Paraguay was developed by INTAL and representatives from the Brazilian Ministry of Communications. This process required the effort of ten institutions from five countries in the region.

The first meetings were held online in April and May, and during the week of June 27 through July 1 a follow-up visit to the city of Asunción took place. Working groups were formed for each plan, which brought the operational and tactical teams together with the coaches. The activity started with a review of each plan, and participants shared their experiences of the challenges faced by each of the countries that have implemented Exporta Fácil. At the end of the five-day meeting, each group presented its own plan, and these were then cross-referenced to create a schedule for the entire team.

The Paraguayan team as well as the coaches pointed out that the methodology used turned the experience into a win-win situation. Furthermore, they suggested developing tools and practical exercises to provide support in the future to other countries seeking to implement Exporta Fácil with this online and in-person methodology based on horizontal cooperation.

From **Paraguay** to **Peru** non-stop

The Paraguayan operational team visited Peru from September 12 through 16 within the framework of the design of the Operations Plan to implement the platform. During this activity, Paraguayan officials visited 21 relevant Exporta Fácil actors in Peru, including PROMPERÚ, Serpost, customs offices, export and e-commerce chambers, and MSMEs using the platform. Furthermore, the team had the opportunity of making a follow-up on the process that a parcel delivered by a MSME using Exporta Fácil undergoes.

The agenda of the visit, coordinated by PROMPERÚ, Serpost and the customs administration, was designed by Brazil with the cooperation of INTAL and UPAEP. This activity helped the Paraguayan team gain insight into the system, and strengthened the bonds among the countries of the region having the service in place.

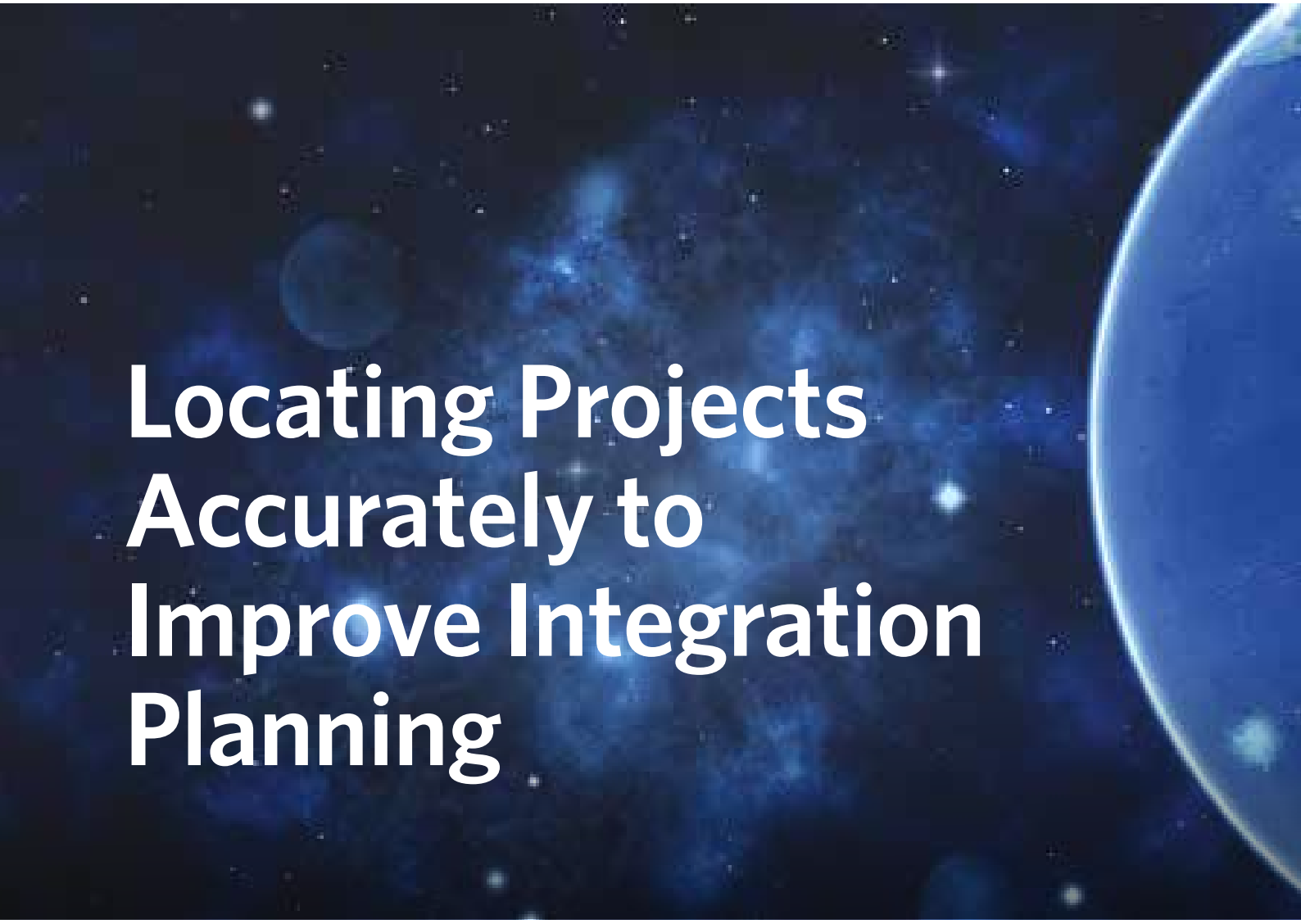
In particular, the delegates in charge of the operational and technological plans had the chance of becoming aware of the types of elements required for Exporta Fácil to be successful, which range from a user-friendly interface, a contingency manual, a clear organization in the postal service facilities, and special marks on Exporta Fácil parcels to the use of a scanner and close work with customs officers.

"We would like to have this pilot project running by November in Paraguay. These kinds of meetings with colleagues from other countries help us become acquainted with other experiences and come up with solutions to all the problems."

Cyntia Raquel Darrosa,
National Directorate of Postal Services,
Paraguay

Geographic Information System

http://www.sig.cosiplan.unasursg.org/



Locating Projects Accurately to Improve Integration Planning

Covering the entire continent of South America, the COSIPLAN Geographic Information System (GIS) is a tool to help guide the territorial planning of physical integration projects. It consolidates official geo-referenced information, and enables geographical analysis at different scales and the generation of thematic maps.

"The challenge is for the COSIPLAN GIS to consolidate its status as a geo-referenced information platform for the entire UNASUR."

Atilio Alimena, National Director of International Territorial Integration Planning, **Argentina**

For the first time ever, the countries of South America have brought together official geospatial information in a single tool that can be downloaded from a public access website and worked on using standard desktop software. The challenge from here on is keeping the information that the tool contains up-to-date while incorporating new thematic layers that are relevant for analyzing the region and planning actions and projects within all UNASUR work areas.

The COSIPLAN GIS is a geo-localized database that may look like a digital cartography tool and will help solve complex problems. The development of this tool required an investment of US$230,185 from the UNASUR Common Initiatives Fund and four years of work from the twelve countries' teams of officials under the coordination of Argentina. It has been available on the Internet since the end of 2015, and is accessible to the general public and free of charge.

21

thematic layers of georeferenced information

The challenge of integrating strategic information

A GIS is a tool that enables users to visualize and manage data so that they can interpret the phenomena and trends taking place in the different territories more precisely than traditional map formats allow. This system uses continental-level geospatial databases with thematic layers grouped by subject matter, and is compatible with the provision of geoservices.

What is the use of the COSIPLAN GIS?

- Identify any infrastructure related to international integration, its main characteristics and current operability levels;
- Gain insight into the geographical scope of the COSIPLAN Portfolio projects and their territorial expression, as well as their areas of influence;
- Represent and analyze trade, transport, energy and communications flows;
- Analyze infrastructure networks, assess their needs, and define alternatives for new developments;
- Communicate and disseminate the results in the form of integrated maps.

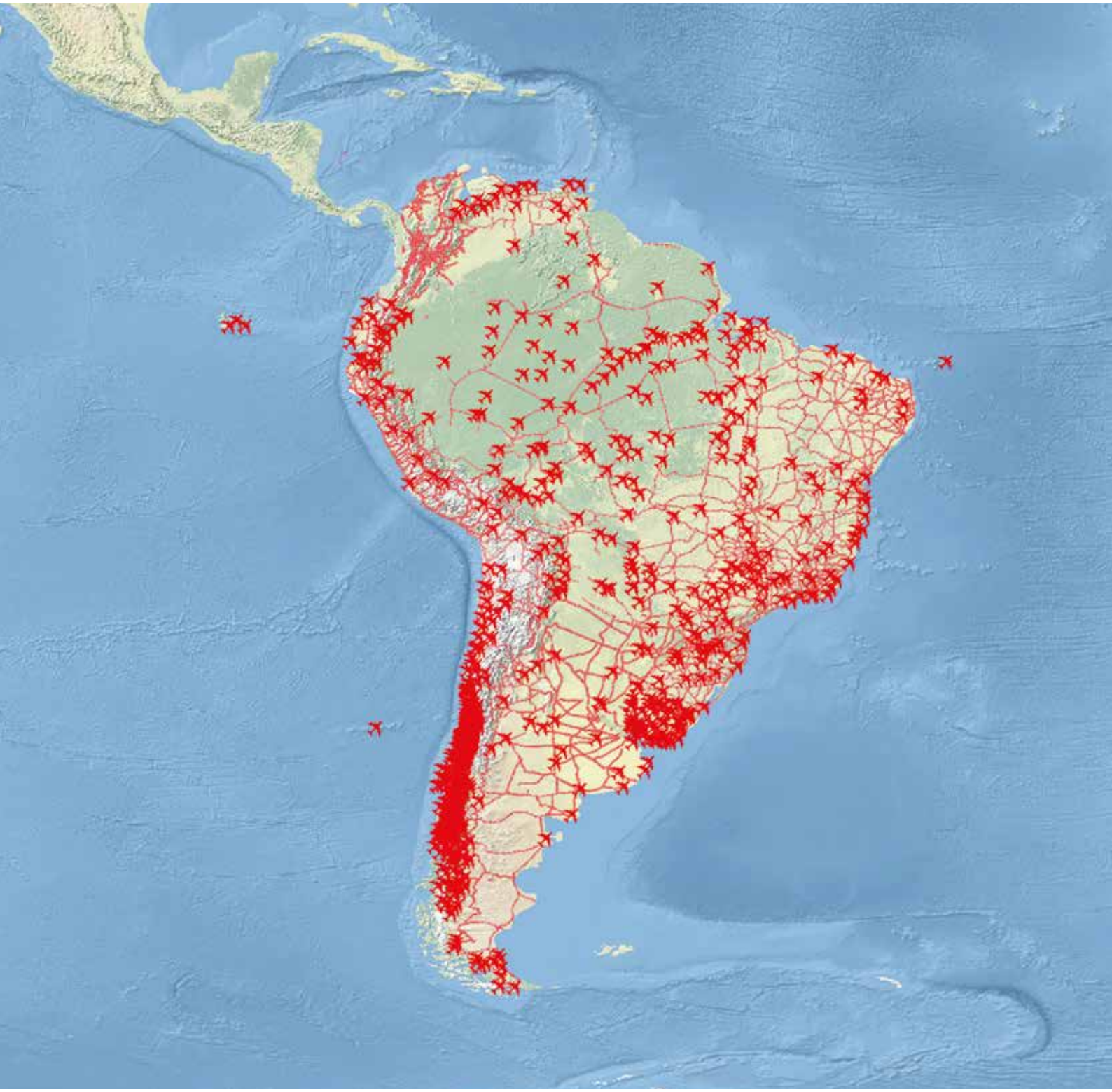
The GIS was launched in November 2015 with the following characteristics:

- A set of 21 initial thematic layers, which are the core of this platform (political divisions; populated centers; border crossings; border controls; road, rail, port and airport infrastructure; natural resources; COSIPLAN Portfolio projects, among others).
- A Content Management System, which provides access to spatial information. During the first stage of development of the GIS, information will be available in SHAPEFILE format and each of the 21 thematic layers will be in a compressed format.
- Metadata, available in PDF format.
- The complete documentation of the COSIPLAN GIS: a Feature Catalogue, a Data Dictionary, Topological Rules, a Metadata Profile, System Documents, and an Operation and User's Guide. The publication of a book on the COSIPLAN GIS.

Thematic layers

No.	Feature	Geometry
1	Projects	Point
2	Projects	Line
3	Built-up Area	Point
4	Built-up Area	Polygon
5	Populated Center	Point
6	Railway Line	Line
7	Railway Station	Point
8	Road (forming part of the road network)	Line
9	Port	Point
10	River	Line
11	River	Polygon
12	Lake	Polygon
13	Conservation Area	Polygon
14	Administrative Boundary	Line
15	Administrative Unit (2nd level)	Line
16	Administrative Unit (2nd level)	Polygon
17	Administrative Sub-Unit (3rd level)	Polygon
18	Border Checks	Point
19	Border Crossing	Point
20	Airport	Point
21	Connections	Point

This work was made possible thanks to a participatory methodology including a technical support team and individual and group work on the part of the countries involved in the form of videoconferences and on-site workshops. To provide support for the implementation of this project, a sum of US$230,185 was assigned from the UNASUR Common Initiatives Fund (FIC), which is administered by Argentina's Under-Secretariat of Territorial Planning, representing the COSIPLAN GIS Working Group.



South American Airports (Source: GIS.)

Collaborative work to consolidate the System

Managing the COSIPLAN GIS is an ongoing task that involves updating information, incorporating new layers, designing new applications and improving the tool. The Working Group on the COSIPLAN GIS, coordinated by Argentina, is responsible for carrying out these tasks in order to maintain the quality, reliability and validity of the contents of the GIS.

During 2016, the following activities were carried out:

- A workshop (June 28) and two videoconferences (July 5 and September 8) to continue with the second phase of the system development and implementation process. These meetings were attended by delegates from the South American countries, and by representatives of the UNASUR Secretary General and INTAL, as well as of the COSIPLAN CCT Secretariat.
- Updating and improving the quality of the geographic information in the GIS on the basis of the document entitled "Procedural Protocol for Updating the Thematic Layers and Developing the COSIPLAN GIS." One of the key factors in the updating methodology is that each country is responsible for managing its own layers.

Main protocol items:

- It establishes a single procedure for data entry purposes.
- The geographic information on the platform will be updated every six months.
- Every country will be the only responsible party in validating the information to be uploaded on to the website.
- The COSIPLAN GIS Technical Coordination will control compliance with technical requirements.
- The publication of the information will be in charge of the UNASUR General Secretariat.

- Seven new thematic layers were added and work is being carried out to include a layer about disaster risk reduction and emergency management.

Capas temáticas

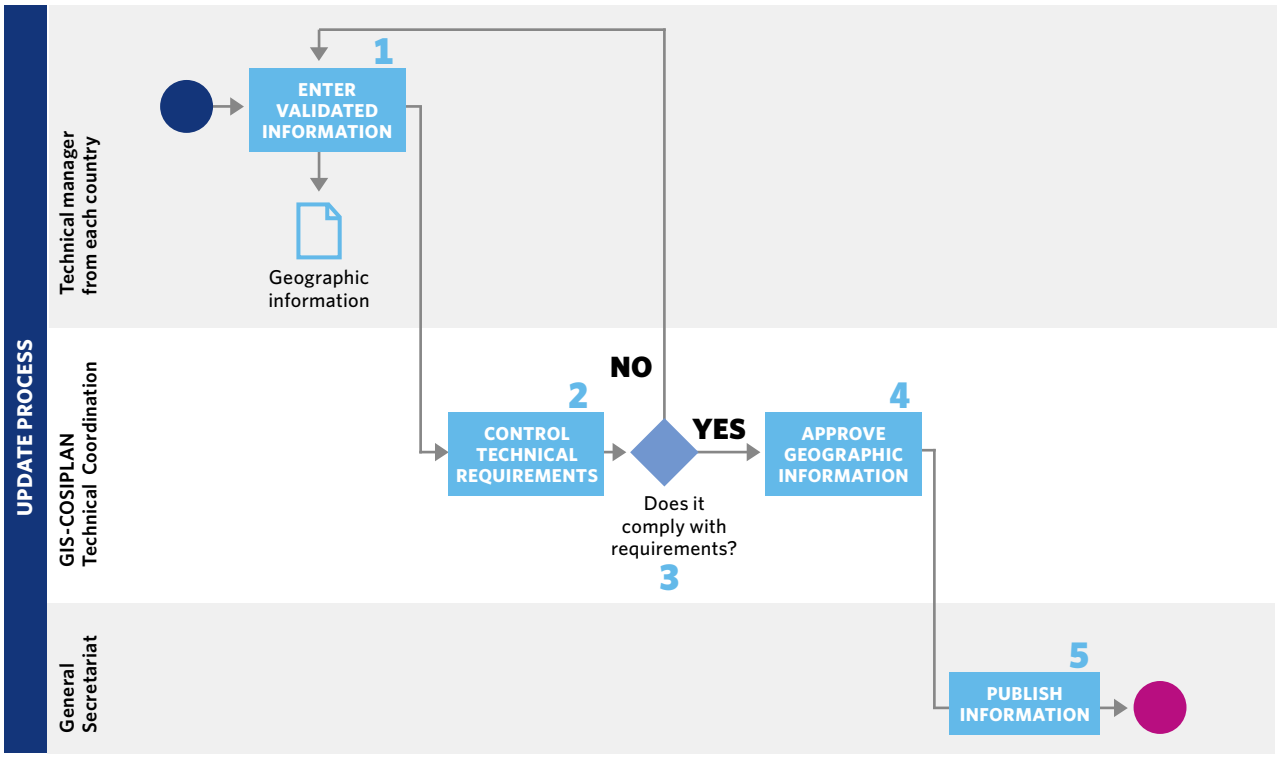
Number	Feature	Code	Geometric representation
1	Free Trade Zone	ZZ004	Point
2	Logistics Center	ZZ005	Point
3	Indigenous Community	ZZ006	Point
4	Indigenous Community	ZZ006	Polygon
5	Optical Fiber	ZZ007	Line
6	Electric Transmission Line	AT030	Line
7	Power Plant	AD10	Point

- The focal points of the National Coordinations were trained online in layer management on the GeoSHAPE platform with the support of the UNASUR General Secretariat.
- Improvements to information visualization and the COSIPLAN GIS website were made.
- The display toolbar was modified: it now opens with a pop-up menu.
- The airport layer uses different colors for international, national and other kinds of airports.
- The option "Sort layers" was updated to "Sort active layers."
- The website now specifies the web browsers recommended for better performance.
- The list of National Coordinators and Technical Managers was updated.
- Contact details were added.

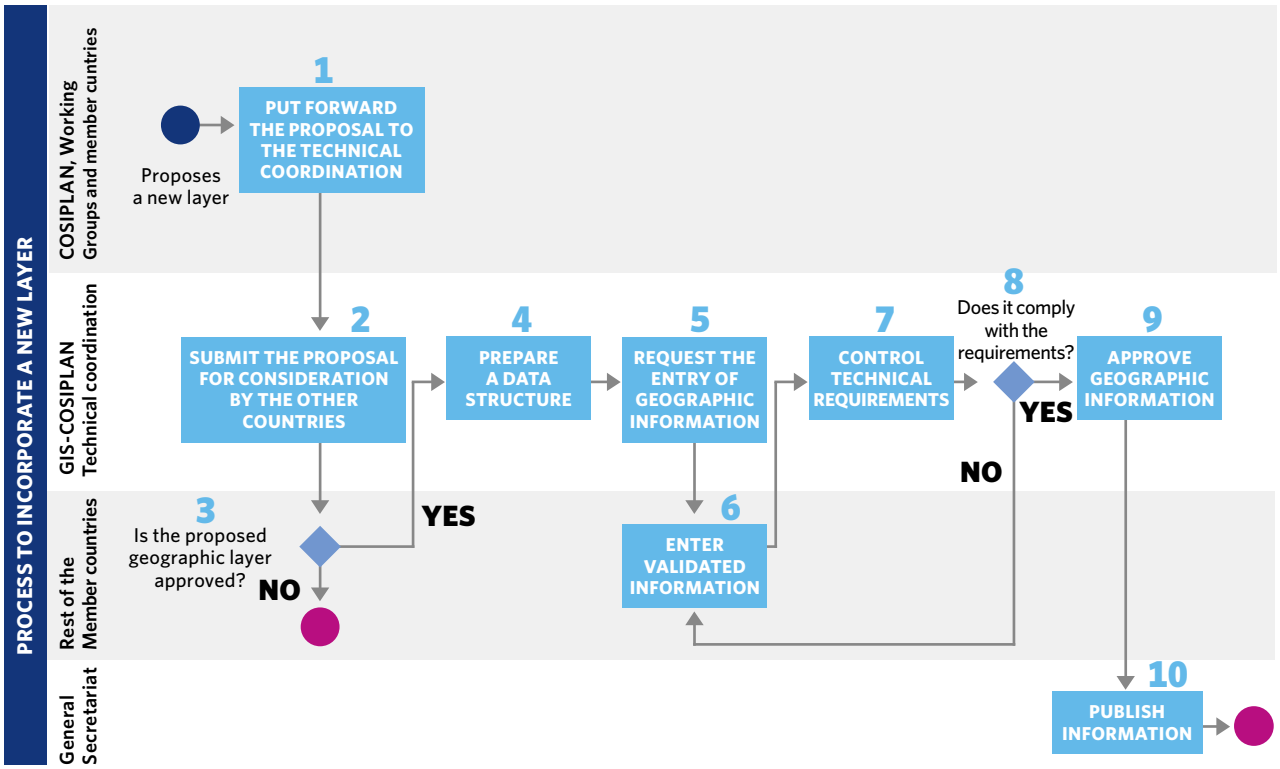
- In order to further disseminate the use of this tool, institutional presentations were organized in the national territory. At the regional level, the tool was presented within the framework of the UNIGIS World Forum, which encourages the exchange of experiences from users of Geo-referencing Systems in Latin America.

Further progress is foreseen, as the dissemination of this tool is crucial for its development and growth.

Update Procedure Flowchart



New Layer Incorporation Flowchart



Source: National Directorate of International Territorial Integration Planning. Ministry of the Interior, Public Works and Housing. Argentine Republic.

The gis development process

The GIS, provided for by COSIPLAN in its Strategic Action Plan (PAE) 2012-2022, is a system engineering product developed with the wide participation of the Council's member countries' officials, who contributed geographic information from official sources as well as their expertise and experience.

In 2012, meetings of the Executive Technical Group on the GIS and Cartography were held with the participation of the National Coordinators, cartographic agencies, and specialists in Geographic Information Systems from the countries. During the meetings, participants agreed on the following:

- The geographic information deemed relevant for the territorial planning of infrastructure, which is one of COSIPLAN objectives.
- The standards to be adopted to enable the standardization and integration of information and produce the first regulatory documents.
- A survey on the availability of geographic information in each country in order to have an indicative diagnosis.
- Finally, on the basis of the results of agreements, the "Technical Guidelines for the Development of a COSIPLAN Geographic Information System" were drafted.

The "Work Plan for the Development of the COSIPLAN GIS" included two phases:

- First Phase (2013-2014): Aimed at completing and structuring the information, and producing the instruments towards its standardization.
- Second Phase (2015-2016): Aimed at standardizing, integrating, and editing the information.

Work plan phases and tasks

	First phase
1	Survey of geographic data available
2	Identification of NEEDS to complete the information
3	Identification of valid methodologies and/or data sources to complete the information
4	Standardization of data
5	Definition of spatial topological relations
	Second phase
6	Editing of geometry
7	Editing of attributes
8	Data integration at the continental level
9	Editing and final processing (joining information layers)
10	Data quality control
11	Preparation of metadata
12	Distribution, publication and update

Geographic Information Systems **in Constant Evolution**

Geographic information systems enable users to process and analyze geographic information in order to draw results that help decision making in the resolution of complex territorial planning and management problems.

Google maps illustrate the widespread increase in the number of users and producers of this kind of information and the rapid pace in which Earth observation, geo-positioning and digital mapping technologies evolve.

The Geographic Information Systems look like digital mapping tools, but they are really databases with geo-localization capabilities (ground coordinate systems) that are an essential part of their structure. As any system, a GIS is made up of a set of components whose features and dimensions will depend on who produces, manages and uses its information.

A particular GIS component is geospatial information, which may be presented in the form of images of the territory (raster model) or with points, lines and polygons (vector model).

The images of the territory may come from sensors placed on satellites, planes or unmanned aircraft systems (drones). This model also shows the images resulting from a specific process that may refer, for example, to the classification of land use, vegetation indexes, a digital model of the field, etc.

Geospatial information carries with it the coordinates values of a land system (longitude and latitude, UTM, Gauss-Krüger, etc.).

Another feature is its capacity to associate thematic attributes with each of its elements (points, arcs, polygons, pixels). This allows the information to be accessed and analyzed on the basis of the thematic contents that characterize the represented feature, along with its location and distribution in the territory.

Once again, the ICTs evolution opens a new chapter: Spatial Data Infrastructure (SDI). This concept refers to the set of technologies, standards and Internet communication protocols enabling access to sets of databases and their metadata, which are independent and interoperable, such access being possible thanks to different Web services (geoservices).

Source: Geographic Information System (COSIPLAN, 2015).

Regulatory and technical aspects

The countries agreed that the creation of the thematic layers of the COSIPLAN GIS would be the outcome of integrating the information from official sources provided by each member country. The "Technical Guidelines for the Development of a COSIPLAN Geographic Information System," adopted at the 3rd Ordinary Meeting of COSIPLAN Ministers (Lima, November 2012), set out the technical aspects that were agreed upon by the countries:

What are the Technical Features of the GIS?

- Scale of reference: 1:250,000 in terms of precision, information density and representational geometry
- Reference System: Geocentric Reference System for the Americas (SIRGAS)
- Data coordinate system: longitude and latitude, in degrees and decimal degrees
- Standards for cataloging feature types and feature concepts based on ISO 19110 and ISO 19126
- Metadata: Latin American Metadata Profile (LAMP) based on ISO/TC211 (Standard 19115)
- Data availability: ESRI Shapefile as the native format, available through transactional online WMS and WFS geoservices

El acceso **a los datos y el uso del SIG**

The core of the COSIPLAN GIS is the set of 21 thematic layers described above. The most useful aspect of these layers is that they can be used intensively by integrating them into other datasets. In addition, spatial analysis processes can be applied to them.

The first steps in using the GIS can be taken from your own computer through specific software that can be used with this type of data, or by accessing the map display on the COSIPLAN GIS website.

What Can Be Done with the GIS?

- Download the thematic layers, metadata, and standards to your computer
- Open and visualize all graphic information and its alphanumeric attributes
- Identify and search for information
- Make queries and select components from one thematic layer in comparison with another
- Customize the graphic display by applying colors and line and polygon patterns to attribute values
- Create tags for place names and thematic values
- Edit all contents
- Focus on specific graphic components to define spatial working units
- Integrate information from the GIS with your geographic databases and online geoservices
- Carry out spatial analysis procedures
- Create maps on different scales, particularly 1:250,000 and below

The management and dissemination of the GIS will be an ongoing activity for the Working Group and will entail the constant analysis of the working methods to ensure its useful life.

Information and Communications Technologies

Information Technologies in the Service of Regional Integration

COSIPLAN has managed to communicate its vision of a better connected and integrated South America through the implementation of different tools based on modern technological platforms. This effort in disseminating COSIPLAN's work is in line with the current need to offer transparent information and promote citizen participation.

Since the creation of IIRSA, the countries have considered the need to make the information on the work being carried out in this regional forum available to the public. The first action in this direction was the creation of a website in 2004, with the purpose of consolidating the documents resulting from the events and activities carried out within IIRSA. The website became not only a fundamental vehicle for the exchange information among the countries participating in the Initiative, but also a major tool for the dissemination of the South American physical integration.

Since 2010, as IIRSA became the COSIPLAN Technical Forum, the countries decided to keep the website active by hosting the information resulting from the COSIPLAN's activities. Thus, this tool was given continuity with a new visual design while its content structure was reorganized to reflect the new institutional framework.

A similar path took the COSIPLAN Project Information System (SIP). The Project Portfolio was launched in 2004, at a time when it was necessary to find a way for the countries' officials to share some basic project data. At first, worksheet files were used, and in 2005, the first version of an online database was developed, the access to which was limited to the officials designated by the countries.

In 2008, the database evolved towards a collaborative platform enabling the online update of projects and more user-friendly queries. One year later, the SIP was made available to the public at the decision of the countries in the region.

Throughout the years, technological advances have allowed the modernization of the website and the SIP. Thus, progress in the physical integration of the region can be properly reflected in terms not only of building infrastructure, but also of gaining better insight into the territories and the sectoral issues that are closely related with connectivity matters.

In line with this, new technological platforms have been developed. One of them involves a website devoted to the Integration and Development Hubs, which contains information on the socioeconomic and environmental characterization of these territories and the Portfolio projects located in them. The second one is a tool that consolidates the advances made in the implementation of Exporta Fácil in South America and shows successful experiences of South American MSMEs using the service to export their products to the world.

In its role as the COSIPLAN CCT Secretariat, INTAL has developed these technological platforms and is in charge of updating their contents and functionalities on a regular basis. In line with these responsibilities, INTAL is committed to continuing the pace of innovation, using new technologies to improve the quality of planning the connection of our continent with a view to further bringing South Americans closer.

Interactive information platforms

Events

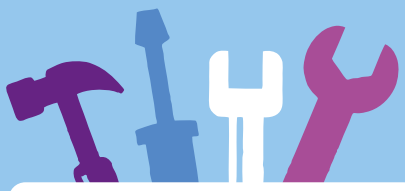
Reports, photographs, interviews, videos and documents related to more than 250 activities carried out since 2000.

iirsa.org/cosiplan

Towards South American physical integration

Documents

More than 2000 presentations, reports, technical documents and publications on the physical integration of South America.



Areas of Work

- Project Portfolio
- Integration Priority Project Agenda
- Planning Methodologies
- Sectoral Integration Processes

PROJECT INFORMATION SYSTEM (SIP)

This system contains the COSIPLAN Portfolio projects in technical files, including geo-referenced maps. Information updated by the countries.

iirsa.org/proyectos

INTEGRATION AND DEVELOPMENT HUBS

This section presents territorial, socio-environmental, economic and infrastructure information on the nine Hubs. It includes the geographic location of the COSIPLAN projects and is linked to the SIP.

iirsa.org/ejes

EXPORTA FÁCIL

This site disseminates the experience of exporting through postal services in order to increase South American MSMEs' trade.

iirsa.org/exportafacil

GEOGRAPHIC INFORMATION SYSTEM

This system enables users to visualize geo-referenced data in thematic layers standardized for South America, including the COSIPLAN projects.

sig.cosiplan.unasursg.org

Institutional

What is COSIPLAN? What are its objectives, action plans, member countries, background, and concepts supporting its work?

UNASUR
COSIPLAN

More Technology to Provide Better Information

In line with the actions included in the Work Plan 2016, the CCT Secretariat has carried out dissemination and communication activities to bring what the Council has achieved closer to society. The main initiatives taken for this purpose are listed below.

66 mil
visits per year

9%
annual increase in visits

+125
documents

The Website

The COSIPLAN website is the main tool to disseminate South America's physical integration. In 2016, shortcuts to the Project Information System, the Geographic Information System, the Integration and Development Hubs section, and the Exporta Fácil site were incorporated into its home page. The content structure of its main page was redesigned in order to reflect the current institutional framework and the activities prioritized in the Work Plan.

This year, twenty meetings were held —11 were face-to-face meetings and nine were videoconferences. The reports of these meetings were uploaded on to the website, together with the documents produced in each case, namely 125 agendas, lists of participants, presentations and studies, the full texts of which can be downloaded.

The Events section now incorporates a tool that helps visualize the photographs of the COSIPLAN activities, while the Documents section includes an application that enables users to read the publications online as if they were printed documents, with no need to download them.

The COSIPLAN website receives about 66,000 visits a year, which grew by 9% this year. The most visited section is the one devoted to the Hubs, accounting for 6.4%, followed by Documents, with 4.5% of the total visits.

68 mil
annual visits

25%
is the annual increase in the number of visits

The Project Information System (SIP)

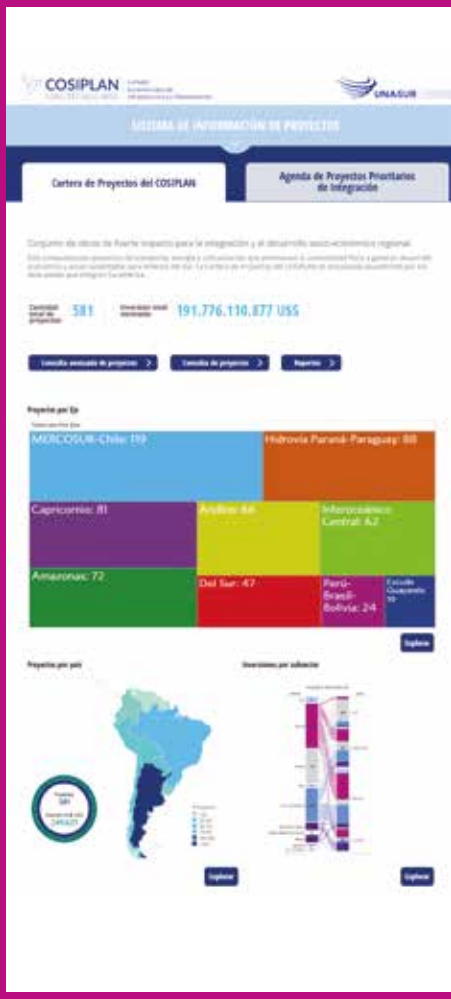
The SIP contains official, high-quality data on the 581 integration projects that make up the COSIPLAN Project Portfolio and the 31 structured projects included in API on an online, open-access platform. This information is updated by South American government officials, who include their contact details in each project file so as users may contact them and learn more about the projects.

In 2016, the SIP home page was redesigned to make it more modern. It now includes dynamic visualizations and infographics of the Portfolio and API projects, so that new users can become easily acquainted with the system and planning concepts.

Furthermore, geo-referenced files were created in Google Earth for each Portfolio and API project, which were in turn included in the project files to help users locate the projects easily.

The number of visits to the SIP increased by 25% from October 2015 to October 2016, exceeding the visits to the website. The countries that make up UNASUR are the ones that most frequently visit the system, the leading country being Peru, followed by Argentina. Spain, the United States of America and Mexico are among the twelve countries producing the greatest number of queries.

The ten projects arousing the greatest interest during 2016 belong mostly to the Amazon Hub, followed by projects included in the MERCOSUR-Chile and the Central Interoceanic Hubs.



The Ten Most Visited Projects

	NAME	HUB	COUNTRY/ COUNTRIES
1	Agua Negra Binational Tunnel	MERCOSUR - Chile	Argentina - Chile
2	Lima - Ricardo Palma Expressway	Amazon	Peru
3	Modernization of El Callao Port (New Container Dock)	Amazon	Peru
4	Improvement of Tingo María - Pucallpa Road	Amazon	Peru
5	IIRSA Center, Section 2: Ricardo Palma - La Oroya - Turn-Off to Cerro De Pasco/La Oroya - Huancayo	Amazon	Peru
6	Railway Project between Los Andes, Chile, and Mendoza, Argentina (Central Trans-oceanic Railway)	MERCOSUR - Chile	Argentina - Chile
7	Central Bioceanic Railway Corridor	Central Interoceanic	Bolivia
8	Construction of New Yurimaguas Port	Amazon	Peru
9	Tacna - La Paz Road Integration, Tacna - Collpa Section	Central Interoceanic	Bolivia - Peru
10	Rehabilitation and Improvement of the Lima - Canta - Unish Road	Amazon	Peru

1,000

visits between August and October

Exporta Fácil

In 2016, a site devoted to Exporta Fácil was implemented. It can be accessed from the COSIPLAN website home page. It was developed to bring users closer to the experience of exporting their products to the world through the use of postal services. Among the various sections included in the platform, the Exporta Fácil simulator "Test Exporta Fácil" enables users to understand how easy it is to export through this service.

The Exporta Fácil site has already received more than 1,000 visits between August and October this year. About 70% of the visitors focused on general information about the platform. Another 20% used the section devoted to simulating the simplified export process. The remaining 10% were interested in the Events and Testimonials sections.

3,421

views of COSIPLAN videos since April 2016

Videos

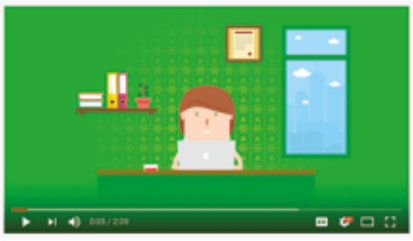
As part of the actions to disseminate the results of the COSIPLAN work, in 2016 some videos began to be shot in relation to the key topics of its Work Plan.

Project Information System

The Value of Transparency in Infrastructure Works

This video presents the objective of the COSIPLAN Project Information System, and the functionalities of this unique technological platform in South America containing official, up-to-date and quality information on integration projects.

About Exporta Facil



Use Exporta Facil

Exporta Facil: Case

Be an Exporter

Within the framework of Exporta Fácil, three animated videos were created with specific objectives. The first one introduces users to what Exporta Fácil entails; the second one is a step-by-step explanation of how to use this tool; and the third video shows a successful case in order to motivate users to export to the region and to the world.

ETG Meeting on Risk and Disaster Prevention and Management in Infrastructure

ETG Meeting on Trade Integration through Postal Services

Meeting on the Agua Negra Binational Tunnel PTI

Course in Freight Transport and Logistics

Exchange of Experiences in Disaster Risk Management

This video summarizes the two-day meeting on Disaster Risk Management held in the city of Lima on June 2 and 3. Furthermore, 30 videos were produced recording the speeches and panels that took place during the event as well as interviews with the lecturers.

Challenges for Trade Integration through Postal Services

This video presents the results of the implementation of Exporta Fácil in the countries of the region as a tool to make it easier for South American MSMEs to sell their products in the international market. In addition, eight videos of interviews were shot within the framework of the meeting on Trade Integration through Postal Services held in the city of Montevideo on August 11 and 12.

100 Actions to Promote the Binational Tunnel

In this video, Argentine and Chilean government officials describe the first experience in the region with the design of an Integration Territorial Program (PTI). Furthermore, 16 videos of interviews were shot in the context of the meeting on the PTI Implementation Plan held in the city of Santiago de Chile on August 24 and 25.

Regional Training in Freight Transport and Logistics

Two videos related to the online course on this topic, already in its third edition, were released. The first one narrates the experience of the officials certified in this training program. The second one describes the objectives, contents, and characteristics of the virtual platform used for the course.

Annual Publications

This year, three technical documents, three annual publications and a set of infographics on the projects were issued, reflecting the progress made by the South American countries in topics specific to the integration of regional infrastructure.

Integration Priority Project **Agenda** 2016

Project **Portfolio** 2016

Activity **Report** 2016

Projects 2016

Technical Documents

Agua Negra Binational Tunnel. Integration Territorial Program

Disaster Risk Management in COSIPLAN: Methodology and Application to Chilean and Peruvian Infrastructure

Disaster Risk Management in COSIPLAN: Risk Reduction Measures in Chilean and Peruvian Integration Infrastructure

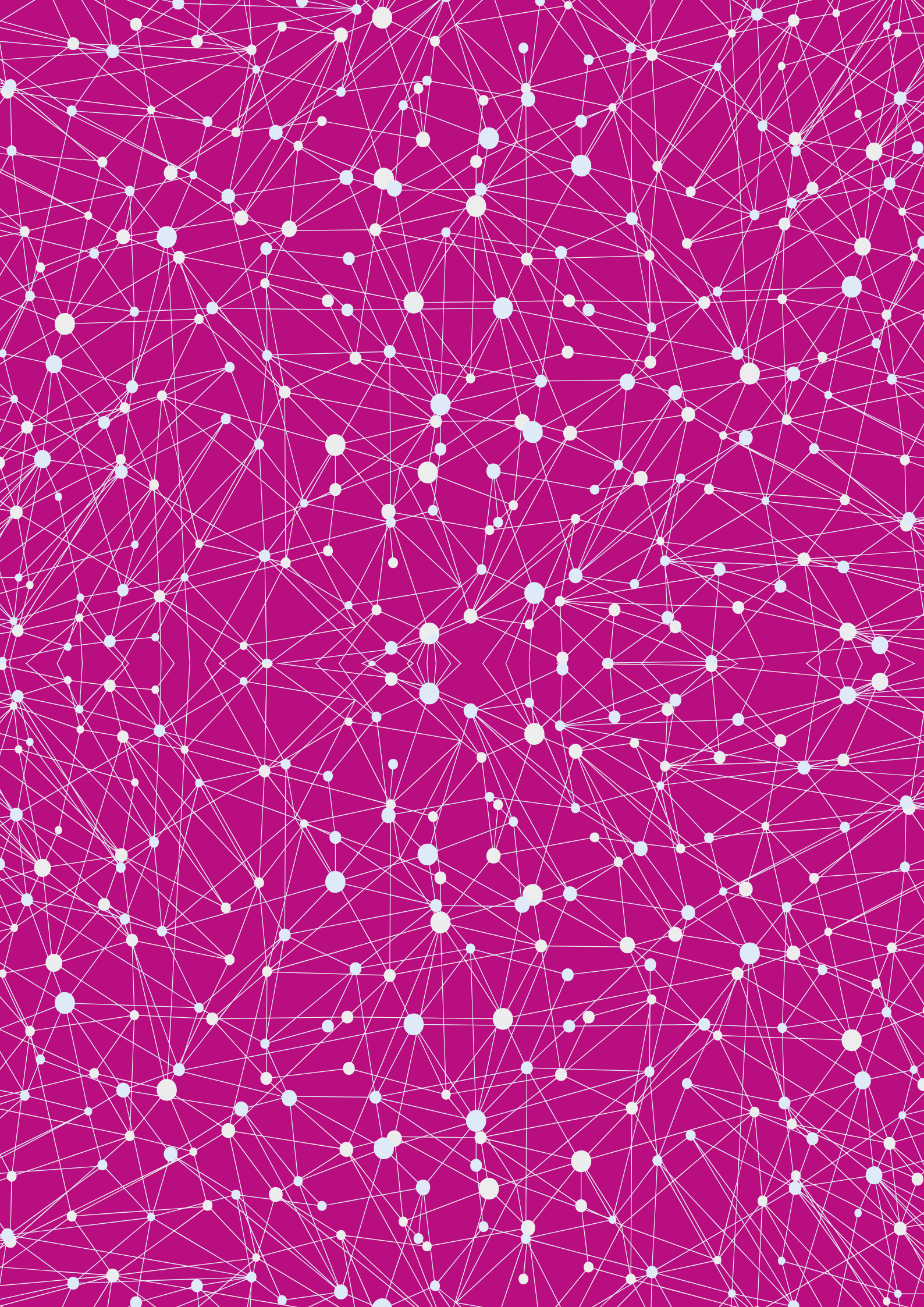
Moreover, other specific graphic material was issued to disseminate the COSIPLAN activities related to the different actions included in the Work Plan.

612

geo-referenced project files

Integration and development hubs

In 2016, this site dedicated to the Integration and Development Hubs saw the improvement of the maps of all the Portfolio and API projects, showing their design and location with more accuracy and incorporating specific iconography according to the subsector to which each project belongs. Additionally, an update was made of the contents related to the socioeconomic and environmental characterization of four of the nine Integration and Development Hubs: the Southern Hub, the Guianese Shield Hub, the Central Interoceanic Hub, and the Peru-Brazil-Bolivia Hub.



The institutional framework

WHAT ARE THE COSIPLAN **OBJECTIVES**?

The general and specific objectives of COSIPLAN are closely linked to the infrastructure-related goals laid down in Article 3, paragraphs d, e, and m, of the UNASUR Constitutive Treaty.

SPECIFIC OBJECTIVES OF UNASUR

relating to infrastructure:

D

Energy integration for the integrated, sustainable use of the region's resources, in a spirit of solidarity...

E

The development of infrastructure for the interconnection of the region and among our peoples, based on sustainable criteria of social and economic development...

M

Industrial and productive integration, focusing especially on small- and medium-sized enterprises, cooperatives, networks and other forms of productive organization...

GENERAL OBJECTIVES

The COSIPLAN Statutes provide for the following:

1. Develop infrastructure for the integration of the region, recognizing and ensuring the continuity of the achievements and progress made by IIRSA by incorporating them into its framework.
2. Foster regional cooperation in planning and infrastructure through strategic alliances among the UNASUR Member States.
3. Promote the compatibility of the regulatory frameworks in place in the UNASUR Member States governing regional infrastructure development and operation.
4. Identify and encourage the execution of integration priority projects, and evaluate alternatives for financing them.

SPECIFIC OBJECTIVES

The COSIPLAN Statutes provide for a set of actions that are included in the Strategic Action Plan (PAE) 2012-2022, as follows:

1. Promote regional connectivity by building infrastructure networks for physical integration purposes, considering sustainable social and economic development criteria, and preserving the environment and the balance of ecosystems.
2. Enhance the capacity and potential of local and regional populations through the development of infrastructure, with the aim of improving their quality of life and life expectancy.
3. Design regional planning strategies for the development of infrastructure.
4. Consolidate the Project Portfolio for the Integration of Regional Infrastructure in South America.
5. Encourage the intensive use of information and communications technologies with a view to overcoming geographical and operational barriers in the region.
6. Stimulate the application of methodologies and the development of sectoral processes and complementary actions in order to facilitate the design, execution and operation of physical integration projects.

WHAT IS ITS **STRATEGIC ACTION PLAN?**

In order to attain the objectives pursued and overcome the obstacles encountered, the first Strategic Action Plan (PAE) for the 2012-2022 period was designed in fulfillment of the Declaration of the South American Presidents at the Sixth Ordinary Meeting of the Council of UNASUR Heads of State and Government.

This Plan was developed on the basis of the UNASUR Constitutive Treaty and the COSIPLAN Statutes and Regulations. Thus, the aim is to implement methodologies and tools in order to execute and complete projects, incorporate social participation mechanisms, address the financing of projects with a high socioeconomic impact on the region, improve monitoring and assessment tools, and make headway with the harmonization of the regulatory and institutional frameworks.

The Plan is the result of a process of discussion and consensuses reached in 2011. It was approved by the Ministers at the Second Ordinary Meeting of COSIPLAN (Brasilia, November 2011), and ratified by the Presidents at the Sixth Meeting of the UNASUR Heads of State (Lima, November 2012).

SOME OF THE HIGHLIGHTS OF THE PAE ARE THE FOLLOWING:

UNASUR

It is based on the UNASUR Constitutive Treaty and the COSIPLAN Statutes and Regulations.

IIRSA

It recognizes the results attained by IIRSA in regional infrastructure integration.

COSIPLAN

For every specific objective of the Council, it institutes a series of actions considering that the PAE will be subject to review five years after its launch.

PT ANUAL

The actions included in the PAE **are executed through the annual Work Plans**, which are approved by the COSIPLAN Ministers.

WHAT IS THE **BACKGROUND** TO ITS CREATION?

South American physical integration has always been a necessity. Discussions over how to create a more effective process focused on overcoming the logistics and physical integration infrastructure obstacles in the region can be traced as far back as more than a decade ago.

THE PATH TOWARDS **THE PHYSICAL INTEGRATION OF SOUTH AMERICA**

The distinctive feature of this process has been infrastructure planning in the transportation, energy and communications sectors with a regional perspective.

With a focus on the territory, the objectives of COSIPLAN are to enhance the competitiveness and the complementariness of the economies of the region, to contribute to reducing regional disparities and social inequality, and to improve life expectancy and quality of life in every country and in the region as a whole.

	IIRSA					
	2000	**2002**	**2003**	**2004**	**2005**	**2006**
Regional planning of South American infrastructure →	IIRSA Action Plan: Integration and Development Hubs and Sectoral Integration Processes	Creation of IIRSA National Coordinations	Application of the Indicative Territorial Planning Methodology	Structuring of the Integration Infrastructure Project Portfolio	Definition of the Strategic Objectives 2006-2010	Identification of new territorial planning methodologies
Physical integration on the South American presidents' agenda →	Creation of IIRSA in Communications, Energy and Transport			Approval of the Implementation Agenda Based on Consensus (AIC) 2005-2010		
The process of building the South American institutional framework →	**I Meeting of South American Presidents** (Brasilia, Brazil)	**II Reunión de Presidentes de América del Sur** (Guayaquil, Ecuador)		**III Meeting of South American Presidents** (Cusco, Peru)	**I Meeting of Heads of State of the Union of South American Nations** (Brasilia, Brazil)	**II Meeting of Heads of State of the Union of South American Nations** (Cochabamba, Bolivia)

The First Summit Meeting of South American Presidents was held in Brasilia (Brazil) in 2000. It started a multi-layered process of integration and cooperation involving the twelve independent South American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela.

This historic event reaffirmed the spirit of understanding and harmony that characterizes relations among South American countries. This was born of the conviction that geographic proximity and shared values demand a common agenda of specific opportunities and challenges, in addition to their discussion in other regional and international forums. It has also imparted a major impulse to the organization of our shared experience in a common South American setting and has demonstrated the continued support to the shaping up of South America as a unique environment of democracy, peace, mutual cooperation, integration, and shared economic and social development.

A concrete outcome of this vision was the creation of the Initiative for the Integration of Regional Infrastructure in South America (IIRSA), which "seeks to encourage the integration and modernization of physical infrastructure under a regional vision of the South American space" (Brasilia Communiqué, 2000).

Since then, thirteen presidential summits have been held, in the course of which UNASUR began to take shape. The meetings of presidents increasingly gained formalization, culminating with the approval of the Constitutive Treaty of the Union of South American Nations on May 23, 2008, in the city of Brasilia, Brazil.

UNASUR was created as a forum for high-level political dialogue and coordination among the twelve countries of the region, and one of its priorities is the development of infrastructure to interconnect South America.

Within this institutional framework, a number of sectoral councils at ministerial level were created to work on different areas, one of which is COSIPLAN, created on January 28, 2009, at the Third Meeting of the UNASUR Council of Heads of State. IIRSA was incorporated into the Council as its Technical Forum to provide support on the planning of regional connectivity infrastructure.

			COSIPLAN				
2008	2009	2010	2011	2012	2013	2014	2015
		Incorporation of IIRSA as the COSIPLAN's Technical Forum	Working Group on Telecommunications	Working Group on Rail Integration. Working Group on Financing Mechanisms and Guarantees	Working Group on the Geographic Information System and Website	Participation of civil society organization in COSIPLAN-IIRSA activities	Launch of the COSIPLAN Geographic Information System
	Creation of the South American Infrastructure and Planning Council (COSIPLAN) within UNASUR	Approval of the COSIPLAN Regulations and Statutes		Approval of the Strategic Action Plan 2012-2022 and of the Integration Priority Project Agenda (API)			
I and II Meetings of the UNASUR Council of Heads of State (Brasilia, Brazil, and Santiago, Chile)	**III Meeting of the UNASUR Council of Heads of State** (Quito, Ecuador)	**IV Meeting of the UNASUR Council of Heads of State** (Georgetown, Guyana)	**V Meeting of the UNASUR Council of Heads of State** (Asunción, Paraguay)	**VI Meeting of the UNASUR Council of Heads of State** (Lima, Peru)	**VII Meeting of the UNASUR Council of Heads of State** (Paramaribo, Suriname)	**VIII Meeting of the UNASUR Council of Heads of State** (Quito, Ecuador)	

WHAT ARE THE **MAIN CONCEPTS** ON WHICH THE COSIPLAN WORK IS BASED?

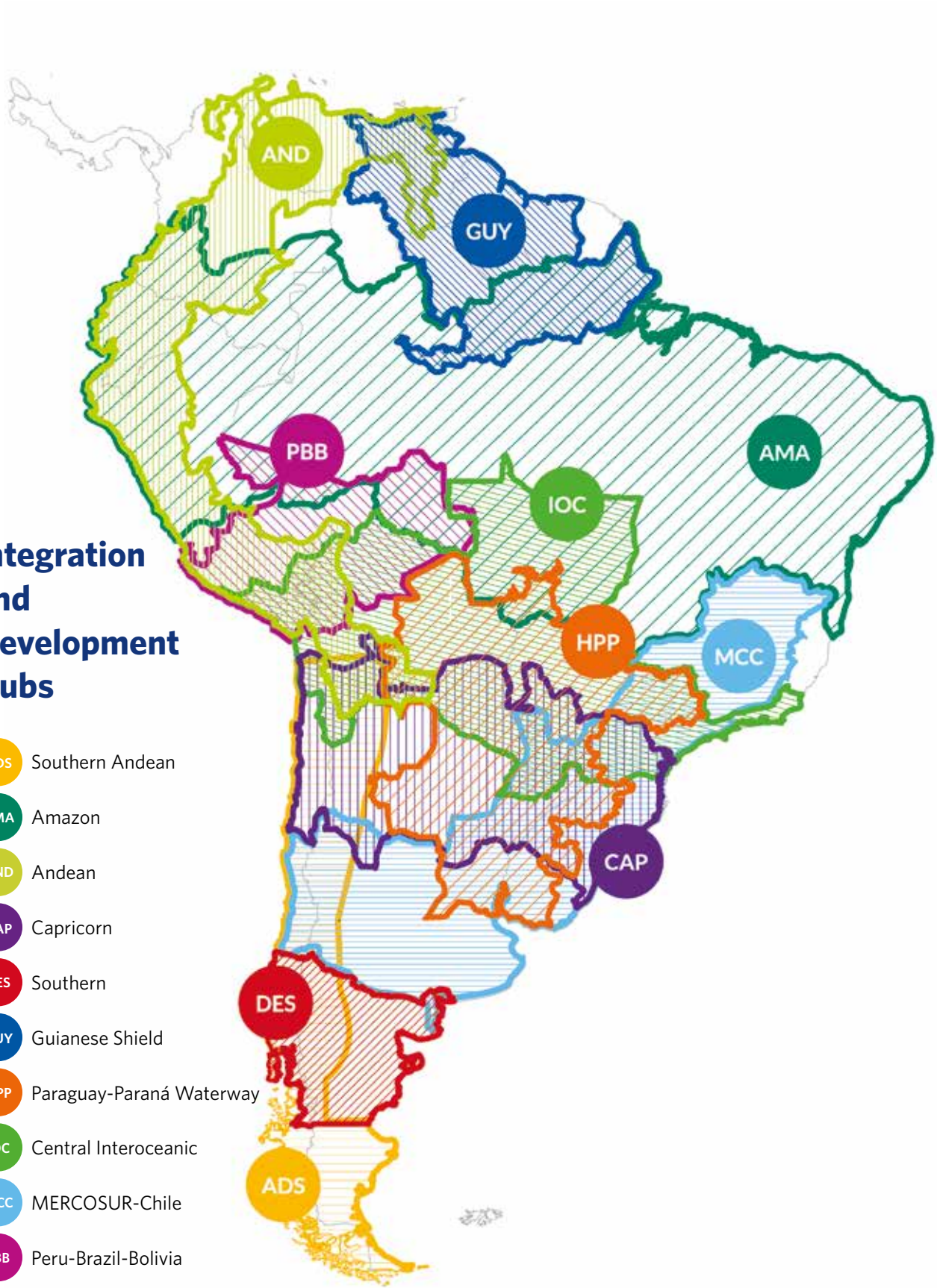
1

The Integration and Development Hubs

Territorial Planning within COSIPLAN is organized around the concept of Integration and Development Hubs. An Integration and Development Hub is a multinational territorial space involving specific natural resources, human settlements, production areas and logistics services. Transportation, energy and communications infrastructure serves as its link, as it facilitates the flow of people, goods and services, and information within this territorial space and from/to the rest of the world.

The Hubs made it possible to identify and agree upon infrastructure projects for integration purposes under a vision that is common to the twelve South American countries within the framework of an indicative territorial planning process. On the basis of the economic, social and environmental characterization of the area of influence of the Hubs, a direct coordination of projects and their respective sites is sought.

Integration and Development Hubs



- ADS Southern Andean
- AMA Amazon
- AND Andean
- CAP Capricorn
- DES Southern
- GUY Guianese Shield
- HPP Paraguay-Paraná Waterway
- IOC Central Interoceanic
- MCC MERCOSUR-Chile
- PBB Peru-Brazil-Bolivia

WHAT ARE THE **MAIN CONCEPTS** ON WHICH THE COSIPLAN WORK IS BASED?

The Integration and Development Hubs

ADS **SOUTHERN ANDEAN**

Argentina
Bolivia
Chile

AND **ANDEAN**

Bolivia
Colombia
Ecuador
Peru
Venezuela

AMA **AMAZON**

Brazil
Colombia
Ecuador
Peru

CAP **CAPRICORN**

Argentina
Bolivia
Brazil
Chile
Paraguay

COUNTRIES

ARGENTINA
ADS
CAP
DES
HPP
MCC

BOLIVIA
ADS
AND
CAP
HPP
IOC
PBB

BRAZIL
AMA
CAP
GUY
HPP
IOC
MCC
PBB

CHILE
ADS
CAP
DES
IOC
MCC

COLOMBIA
AMA
AND

ECUADOR
AMA
AND

DES **SOUTHERN**

Argentina
Chile

IOC **CENTRAL INTEROCEANIC**

Bolivia
Brasil
Chile
Paraguay
Peru

GUY **GUIANESE SHIELD**

Brazil
Guyana
Suriname
Venezuela

MCC **MERCOSUR-CHILE**

Argentina
Brazil
Chile
Paraguay
Uruguay

HPP **PARAGUAY-PARANÁ WATERWAY**

Argentina
Bolivia
Brazil
Paraguay
Uruguay

PBB **PERU-BRAZIL-BOLIVIA**

Bolivia
Brazil
Peru

GUYANA
GUY

PARAGUAY
HPP
IOC
MCC

PERU
AMA
AND
IOC
PBB

SURINAME
GUY

URUGUAY
HPP
MCC

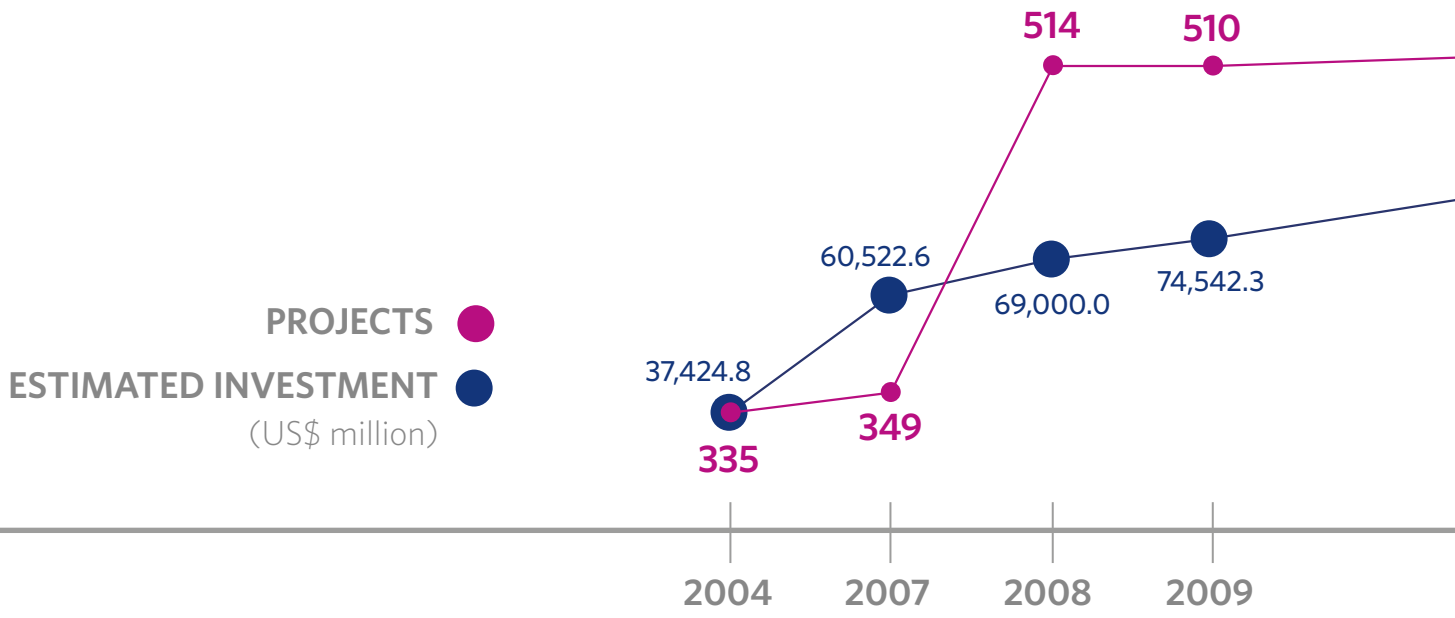
VENEZUELA
AND
GUY

WHAT ARE THE **MAIN CONCEPTS** ON WHICH THE COSIPLAN WORK IS BASED?

2

Indicative Territorial Planning and the Project Portfolio

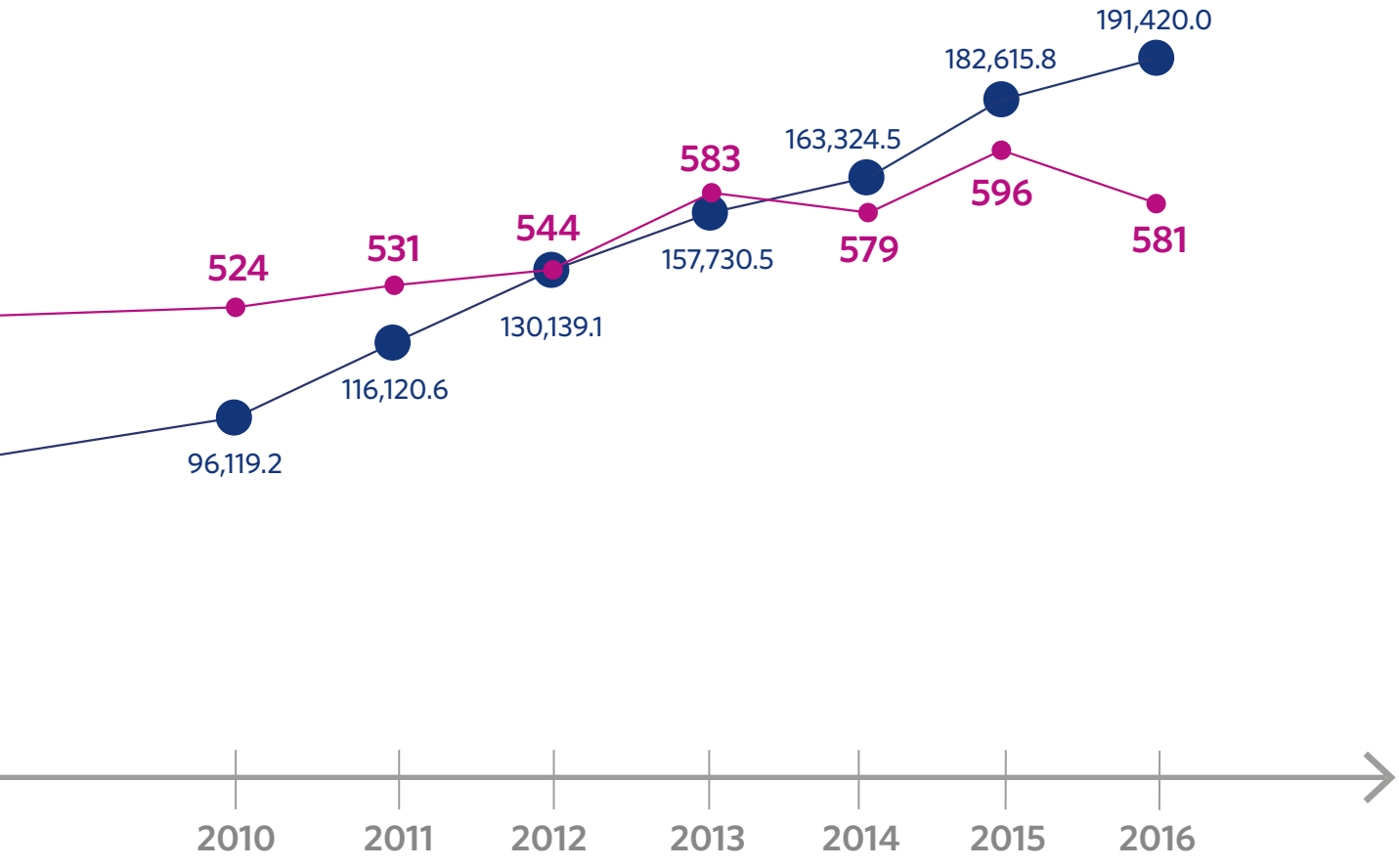
The COSIPLAN Project Portfolio is made up of transport, energy and communications projects that encourage regional connectivity and create sustainable economic and social development in South America. The structuring of this Portfolio was possible thanks to the development and application of the Indicative Territorial Planning Methodology, which is based on the identification of Integration and Development Hubs.



The original structuring of the Project Portfolio took place in 2004 and was subject to successive updates as a result of improvements in the territorial planning process. In 2004, a portfolio made up of 335 infrastructure projects organized into 40 Project Groups and accounting for an investment estimated at US$37,424.8 million was defined.

In 2016, the COSIPLAN Project Portfolio is made up of 581 projects, organized into 47 Project Groups, amounting to an estimated investment of US$191,420 million.

The Project Information System (SIP) is a tool designed to support integration infrastructure planning and analysis, containing official and high-quality data on all the Portfolio and API projects in an online, free access platform on the Internet. Its update is under the responsibility of officials from the countries involved in the physical integration projects.



WHAT ARE THE **MAIN CONCEPTS** ON WHICH THE COSIPLAN WORK IS BASED?

3

The territorial planning methodologies

Their objective is to strengthen and enrich a sustainable integration infrastructure planning process with the purpose of enhancing the benefits derived from the works and reducing their undesired impact. They contribute to characterizing the territories under analysis from the point of view of the environment, their socioeconomic aspects, production integration, logistics, and disaster risk management. The results obtained also reflect the local actors' know-how about the area of influence of the projects, which is shared through the participatory consultation process in place.

Integration Territorial Programs

The aim of these programs is to identify and implement a set of actions complementing the API projects in order to leverage their impact on the development of the territories involved, taking into account economic, social and environmental aspects.

Strategic Environmental and Social Evaluation Methodology

Its purpose is to identify any complementary action that might enhance —from a social, environmental and cultural point of view— the positive effects of projects and minimize their negative impact. Its unit of analysis is the area of influence of the Portfolio Project Groups or of the API projects.

Production Integration and Logistics Methodology

Its objective is to assess the potential for production integration and for the development of logistics in the area of influence of a Project Group or of an API project. It helps articulate a set of actions within the framework of a logic of interdependent relations in order to leverage the impact of infrastructure implementation on the development of these activities.

Methodology for the Incorporation of Disaster Risk Management

This methodology seeks to prevent or reduce the effects of natural disasters (earthquakes, tsunamis, floods, and volcanic eruptions) affecting South American infrastructure, and to devise plans for connectivity and public infrastructure recovery.

WHAT ARE THE **MAIN CONCEPTS** ON WHICH THE COSIPLAN WORK IS BASED?

4

The Sectoral Integration Processes

The purpose of the sectoral integration processes is to identify the regulatory and institutional objects that hinder the development and operation of basic infrastructure in South America, and to propose actions to overcome such obstacles. The different sectoral processes and their objectives are presented below.

Freight Transport and Logistics

To encourage freight logistics on the regional scale by supporting public policies that promote a systemic view of transport infrastructure and of the movement and storage of goods in each of the South American countries.

Rail Integration

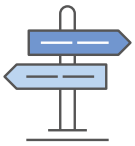
To encourage the integration and complementarity of policies and projects in the rail sector that boost economic and social development. Priority is given to regulatory issues, new infrastructure and agreements among rail operators.

Integration through Ports and Waterways

To improve regional competitiveness by tapping into the potential of South American waterways, identifying courses of action at the regional level to promote the use of sea and river transportation, known to be cheaper and more environmentally efficient transport modes.

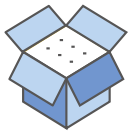
Air Integration

To promote connectivity among the economies of the region through cargo and passenger air transportation.



Border Integration and Facilitation

To develop actions intended to turn border regions into spaces for integration and development so as to facilitate the movement of goods and people and territorial planning with consideration of socioeconomic and environmental aspects.



Trade Integration through Postal Services for MSMEs

Contribute to regional integration through the promotion of the integration of MSMEs into the international market by implementing a simplified export and import system using the postal logistics platform of a postal operator designated to this end.

Telecommunications

To promote the intensive use of Information and Communications Technologies (ICTs) with the purpose of overcoming geographic and operational barriers, mainly to study and propose alternatives to boost interconnection among different structures and fiber optic networks and the construction of the South American Fiber Optic Ring.

Geographic Information System

To guide physical integration planning and management based on continental-level, standardized digital information on major integration infrastructures available in the region as well as on the relevant aspects of the territory.

Financing Mechanisms and Guarantees

To identify financial solutions for the efficient execution of the COSIPLAN Portfolio and API projects.

CONTRIBUTIONS OF CIVIL SOCIETY

Citizen participation and pluralism are the foundations for South American integration and union according to the UNASUR Constitutive Treaty and the experience of COSIPLAN, which interacts with civil society organizations through its different bodies.

The Strategic Action Plan (PAE) 2012-2022 includes among its actions to define mechanisms for social participation and active contribution by the communities involved in the COSIPLAN activities. In this regard, the Ministers' commitment to work on these topics is renewed every year in the Work Plans.

In addition to the consultation processes and the participation of local stakeholders during the application of planning methodologies, civil society organizations are increasingly participating as observers in COSIPLAN meetings. Some of them are the Latin American Cooperation of Advanced Networks (RedCLARA, Uruguay); Law, Environment and Natural Resources (DAR, Peru); the Environment and Society Association (Colombia); the Uruguayan Federation of Road Workers (FUTRAVI, Uruguay); the South American Confederation of Road Workers; and the Regional Coalition for Transparency and Participation.

In 2016, with the purpose of measuring the impact and potential of SIP, the Regional Coalition for Transparency and Participation prepared a report entitled

"Contributions of Civil Society: Evaluation of Transparency in the COSIPLAN Project Information System (SIP)."

Two representatives of the Coalition, Vanessa Torres from the Environment and Society Association (Colombia), and Esteban Valle Riestra, a member of Law, Environment and Natural Resources (Peru), were interviewed. Their views are transcribed below.

The report "Contributions of Civil Society" states that since 2007 COSIPLAN has been improving substantially in terms of the transparency of its actions. What are the reasons accounting for this statement?

Advances have enabled citizens to access tools such as the SIP and the GIS, in addition to documents, reports and minutes, giving them the possibility of getting acquainted with and monitoring the progress of the projects, supplement—and sometimes even modify— information locally supplied, preventing conflicts and mitigating impacts. The fact that civil society can take part as an observer in regional decision-making forums is also significant, as this ensures not only participation but also transparency and access to information. In short, this experience is a positive example that should be replicated in other UNASUR Councils, even though there is still so much to do. The challenge is to strengthen the participation of civil society in these forums, as well as to ensure its active involvement in the design of the different COSIPLAN methodologies. So far, inclusion in this forum has been erratic.

The same report states that the countries in the region should improve the way in which the SIP is updated. Could you summarize what it is about and what solutions are proposed?

The Technical Secretariat of COSIPLAN (IDB-INTAL) has identified problems in the project file update process, errors in the data entered, and deficiencies in terms of internal cohesion. This affects the accuracy and quality of information, preventing the tool from being used to its fullest potential. Based on this context, we propose the following:

1. This tool could be improved if the countries were much more committed to the update of the project files that make up the system, by performing this task on a regular basis, over and above obligations related to the annual meetings.
2. A solution could be to appoint officials from public institutions specialized in the management of infrastructure projects as the ones in charge of project data updates and to guarantee the stability of their public employment over time. Designations should be standardized to ensure that all officials responsible for this task have first-hand access to the information requested.
3. Finally, the IDB-INTAL in its role as the COSIPLAN Technical Secretariat should be given more power, i.e. to empower the Secretariat to ask the designated officials and institutions to correct and enlarge the information supplied by the countries and to demand compliance with the deadlines for project file updates.

How did you get to participate in the meetings?

As a Coalition, we started to create spaces for dialogue with UNASUR and COSIPLAN officials through meetings with the PPT, which was held by Uruguay at the time. In 2015, we attended the last three meetings of the COSIPLAN Technical Forum as observers and had the chance of addressing representatives from all the countries to express our critical stance on the development vision held by the regional body.

How do you assess the participation of development banks?

The involvement of the IDB, CAF and FONPLATA, in addition to the incentive given to tools such as the SIP, is quite positive, as it shows their willingness to promote the rights to transparency and access to information.

About the Regional Coalition

The Coalition was created in 2013 by five civil society organizations from different countries in the region (Bolivia, Brazil, Colombia, Ecuador and Peru). It is concerned with the promotion of transparency and citizen participation at national and subnational government levels, in different regional integration forums such as UNASUR, and in multilateral financial agencies with a view to strengthening sustainable development and regional governance.

For more information, visit **www.coalicionregional.net**

SIXTEEN YEARS MANAGING INTEGRATION

The representatives of the Technical Coordination Committee examined the role of the development banks in their support to the physical integration process in South America since 2000 with the creation of IIRSA and its continuity into COSIPLAN, under the purview of UNASUR.

Patricio Mansilla

IDB, Inter-American Development Bank
Integration Infrastructure Specialist

Rolando Terrazas

CAF, Development Bank of Latin America
Advisor to the Infrastructure Vice-Presidency

Pedro Sosa Pinilla

FONPLATA, Financial Fund for the Development of the Plata Basin
Advisor to the Executive Presidency, Operations

Gustavo Beliz

IDB-INTAL, Institute for the Integration of Latin America and the Caribbean
INTAL Director

Thanks to the encouragement given by former president of the Federal Republic of Brazil Mr. Fernando Henrique Cardozo, the South American presidents decided, by the late 1990s, to re-launch the integration processes in the region. Gathered in Brazil in August 2000, they resolved to promote the articulation of the infrastructure available in their countries, thus giving birth to the Initiative for the Integration of Regional Infrastructure in South America (IIRSA).

In what context do development banks start supporting the physical integration process in South America?

CAF DEVELOPMENT BANK OF LATIN AMERICA

Acquainted with the studies, research work and proposals generated over the years by the IDB, CAF and FONPLATA on the need and potential for the physical integration of the continent, the presidents of the region decided to commit these three institutions to contributing their knowledge, technology, advice and financial support to the attainment of IIRSA objectives. In full response to the mandate conferred to them, the financial institutions created the Technical Coordination Committee (CCT), which would explore different alternatives and analyze the best actions to take in order to meet the challenge ahead.

How was the CCT contribution to the countries coordinated? What is the role of INTAL?

CAF DEVELOPMENT BANK OF LATIN AMERICA

To facilitate coordination tasks, the CCT institutions decided to create the "CCT Secretariat," which would operate at facilities granted to that effect by the Institute for the Integration of Latin America and the Caribbean (INTAL), an IDB unit based in the city of Buenos Aires. The Secretariat was staffed with technical and administrative personnel.

Four years later, for practical reasons and also because of the outstanding contribution traditionally made by INTAL to research on and dissemination of integration issues in Latin America and to leading IIRSA, the three institutions entrusted the INTAL Director with the permanent responsibility of serving as the CCT Secretary, overriding the criterion of alternating such position among the institutions, as had been adopted so far.

IDB

In its role as the CCT Secretariat, INTAL gives technical, administrative and financial advice on the projects included in the COSIPLAN-IIRSA Work Plan in a systematic, professional and very efficient manner. It is staffed with highly qualified human resources having vast experience in infrastructure for integration purposes, and has gained great credibility among the South American countries to encourage regional integration. Over the 16 years since the creation of IIRSA, the Secretariat has helped create a virtual and actual center for convergence, and most importantly a very caring one.

FONPLATA

INTAL fulfills the role of the CCT Secretariat very professionally, and it is flexible enough to carry out its tasks involving different agencies from the twelve countries. It stands out for its efficient performance.

INTAL

The trust placed by the CCT institutions in INTAL as a coordinator of the contributions made by the banks to this integration process represents both a recognition and a huge responsibility. INTAL assumes this task with the commitment of ensuring the implementation of the annual work plan jointly with the countries and coordinating the contributions of the three CCT institutions.

Its proximity to the countries of the region and its history as an institution concerned with trade integration processes in Latin America and the Caribbean makes INTAL a strategic ally for the banks as well as for the countries in the road towards building South American connectivity.

What lessons learned from the banks' cooperation in this field would you mention?

CAF DEVELOPMENT BANK OF LATIN AMERICA

Their performance as CCT members has shown not only that working together is possible, but that in doing so advantage can be taken —for the sake of the South American countries— of the specific areas in which each entity specializes as well as of the synergies resulting from the differences and complementariness of the institutions.

There is a common element or interest that binds the three institutions together: their support to the development and integration of the region. Based on such matching interests, it was possible to reach conceptual and operational points of convergence in support of this process. Debates within the CCT are characterized by a highly technical and conceptual content, and during them its members always seek the best solutions to the problems posed, regardless of the project financing operation that each institution may be analyzing.

INTAL

By 2000, when IIRSA was created, the particular interests and specializations of the three institutions made it difficult to reach certain agreements. The role played by INTAL, in addition to the convergence of the authorities' and other institutions' efforts, contributed to reaching consensus leading to support the countries in their physical integration process, which was just beginning to unfold. This joint work experience within this framework for so many years has encouraged the banks to carry out coordinated actions in other areas, joining efforts to maximize the impact of these actions targeted for Latin America.

IDB

Cooperation among the banks has enabled them to respond more promptly to the countries' requests for non-refundable technical cooperations, credit lines, and partial credit guarantees to sustain the financial feasibility of public and public-private projects. The IDB, through IIRSA and later on through COSIPLAN, has gained vast experience in supporting the countries in the design and implementation of regional transportation projects.

What are the main contributions of the CCT to the work of COSIPLAN?

FONPLATA

The CCT has contributed the experience of the multilateral agencies that make it up with the major purpose of reinforcing the agreement reached by the countries in defining the regional integration agenda, particularly the Integration Priority Project Agenda (API) and the COSIPLAN Project Portfolio concerning the transport, communications and energy infrastructure sectors, as well as of keeping the commitment to its implementation.

IDB

One of the most significant contributions has been the uninterrupted continuity of a regional dialogue based on an integration infrastructure project portfolio selected by the countries and being implemented resolutely. The design of methodologies that complement the project planning process —such as the Strategic Environmental and Social Evaluation, the Production Integration and Logistics, the Integration Territorial Programs, and the Disaster Risk Management in Integration Infrastructure methodologies— is an innovative and important achievement. Moreover, the training activities in logistics and integration infrastructure add value to the implementation of integration projects.

These elements have ensured smooth communication within the CCT to financially help emblematic integration projects such as the Paita-Yurimaguas Road in Peru, IIRSA Norte, a concession awarded in 2015 with the support of partial credit guarantees from the IDB and a loan from CAF.

CAF DEVELOPMENT BANK OF LATIN AMERICA

The CCT contribution to the infrastructure integration process in the region and to the work of COSIPLAN has covered several areas, among which the following stand out: (i) the conceptualization of the integration infrastructure planning process, which led to the creation of the Integration and Development Hubs and the Sectoral Integration Processes; (ii) the continuity of the process thanks to the CCT institutions, despite the succession of representatives as a result of changes in the countries' governments; and (iii) the creation of a forum for technical dialogue that has facilitated consensus.

INTAL

One of the fundamental contributions of the CCT has been to encourage the countries to communicate the outcomes of their work within COSIPLAN through different technological tools. The website is the main tool for dissemination purposes and hosts all the documents issued throughout these 16 years.

The COSIPLAN Project Information System, developed by INTAL as the CCT Secretariat, has been recognized by civil society organizations as a significant step towards an effective exercise of the right of access to information and the right to transparency within UNASUR.

What is your institution's interest in participating in South American integration issues?

IDB

The IDB has been recognized for its role as a dialogue facilitator, embodied in its participation in COSIPLAN-IIRSA. Only in the South American region, it has financed several non-refundable technical cooperations through the Fund for the Financing of Technical Cooperation for Regional Infrastructure Integration Initiatives (FIRII), which include studies on borders and regional multimodal corridors, among others.

For instance, at present the IDB is about to approve the loan for the project known as Agua Negra Binational Tunnel, contributing to the improvement of Argentina-Chile border integration. The project seeks to broaden the access of the region to international markets based on a more efficient logistics network.

CAF
DEVELOPMENT BANK OF LATIN AMERICA

The very creation of CAF in the 1960s is the result of regional integration processes within the framework of ALADI and the Cartagena Agreement. Therefore, support to regional integration and to sustainable development make up CAF's two basic pillars in the region. Physical integration is one of the spaces through which it is possible to channel support for the region to speed up integration and sustainable development processes.

CAF considers that regional integration is not just an option —the South American countries need to be a competitive part of the globalized international markets, so that they can jointly encourage their economic and social development in a sustainable manner.

FONPLATA

In its constitutive agreement, FONPLATA has been given the mandate to contribute to the physical integration and harmonious development of its member countries; therefore, its interest in becoming part of the COSIPLAN CCT is clear and evident, since this is a way to respond to the will expressed by its constitutive members.

IDB

In the first decades following the creation of INTAL, trade integration processes marked the agenda of the region. The Institute supported this process through research work, dissemination activities and capacity-building actions on this topic in the countries. As years went by, infrastructure deficiency came to be identified as one of the obstacles in the path to taking advantage of the benefits of tariff reductions in intra- and extra-regional trade.

In this regard, the involvement of INTAL in the physical integration process broadens its scope of action and constitutes a challenge to include other integration-related matters, such as production, social inclusion, technological innovation and new governance.

How do you think the countries value the CCT commitment to COSIPLAN?

IDB

My perception is that the countries have a high opinion of the role that the CCT plays in COSIPLAN, of its capacity to standardize the information included in the project database and the work program, and to technically and financially support studies and methodologies. They also value its contribution to organizing activities and establishing priorities and goals to ensure the annual work plan is duly implemented.

CAF DEVELOPMENT BANK OF LATIN AMERICA

The countries value the CCT for its contribution in promoting the exchange of experiences in different topics, which has facilitated and accelerated the adoption of new policies or the reinforcement of existing policies in other countries. Additionally, thanks to the ongoing technical and logistical support given by the CCT, the countries comply with the agenda of face-to-face and online meetings to analyze different proposals, monitor the progress made in various fields and adopt the measures required to revitalize processes in a timely manner.

Finally, the CCT is valued by the countries for its commitment to the strengthening of the technical capacities of officials concerned with different areas related to the construction and maintenance of regional infrastructure.

FONPLATA

The countries regard the CCT as a technical-financial assistant that facilitates the tools and methodologies required to conceive and plan regional integration.

What challenges are still awaiting South America after 16 years of working together in order to effectively connect the continent?

CAF DEVELOPMENT BANK OF LATIN AMERICA

One of its challenges is to accelerate the implementation of the COSIPLAN Portfolio projects, particularly those that make up the Integration Priority Project Agenda (API). The huge financial demand with which the countries of the region are faced in order to find a solution to old and new problems has forced them to prioritize actions and, in this prioritization effort, regional integration projects are often postponed. Evidently, the high investment costs involved in the execution of most integration projects as well as their long processes do not contribute to their prioritization.

Furthermore, binational or multinational projects face an additional problem: the countries involved have to incorporate such projects into their work agendas simultaneously or coordinately. There are successful and very promising experiences involving such planning and coordination process, but they are very specific and limited. It is necessary to make greater efforts to achieve a harmony without which these projects will continue to be postponed.

IDB

Over the last years, even though the indicators measuring South American competitiveness have improved, it has been verified that more coordinated

efforts are required to improve integration infrastructure and facilitate trade relations.

Regional integration has shown an asymmetric progress in the region. The greatest progress is in the construction of national roads with a regional impact, followed by some agreements regarding border crossings to speed up freight transportation and the creation of new logistics platforms and land terminals. The areas showing the greatest integration difficulties due to integration costs and the magnitude of the investments required are railways and waterways. In the case of ports, much progress has been made with investments mainly based on concession agreements, the design of which take up considerable time. Despite such advances, the integration agenda still needs strong momentum.

INTAL

South America is faced with the challenge of devising a development strategy that includes disruptive technologies to strengthen growth and improve international integration, thus reducing social inequities. In this context, it is necessary to consolidate some of the actions promoted by the COSIPLAN, in addition to the implementation of classical infrastructure projects. Innovation is the new name for integration.

Without pretending to be exhaustive, we can mention inter-institutional cooperation to improve border crossings and reduce the delays associated with them; the use of new technologies in transportation to enhance the movement of cargo, make our products more competitive and reduce the impact on climate change; and the participation of the private sector in this process to promote the development of regional value chains.

FONPLATA

The regional integration of South America is an ongoing, dynamic task in which the implementation of the Integration Priority Project Agenda (API) contributes to facilitating regional physical integration and to strengthening the bonds between the governments, thus reinforcing the idea that through closer relationships and a greater trust among the governments, it will be possible to make headway in integration processes in other fields.

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Acronyms and abbreviations

API	Integration Priority Project Agenda
CAF	Development Bank of Latin America
CCT	Technical Coordination Committee
CEF	Economy and Finance Council
CMS	Continuous Monitoring System
COSIPLAN	South American Infrastructure and Planning Council
DRM	Disaster Risk Management
EASE	Strategic Environmental and Social Evaluation
EBITAM	Agua Negra Binational Tunnel Body
FIC	UNASUR Common Initiatives Fund
FONPLATA	Financial Fund for the Development of the Plata Basin
GRD	Gross Domestic Product
GIS	COSIPLAN Georeferenced Information System
GTE	Executive Technical Group
ICTs	Information and Communications Technologies
IDB	Inter-American Development Bank
IIRSA	Initiative for the Integration of Regional Infrastructure in South America
INTAL	Institute for the Integration of South America and the Caribbean
IPrLg	Production Integration and Logistics
m.a.s.l.	meters above sea level
MERCOSUR	Southern Common Market
MSMEs	Micro, Small and Medium Enterprises
SIP	COSIPLAN Project Information System
PAE	Strategic Action Plan 2012-2022
PPT	Presidency Pro Tempore
PSI	Sectoral Integration Process
PTI	Integration Territorial Program
UNASUR	Union of South American Nations
WG	Working Group
WSG	Working Subgroup

Editorial coordination and production
CCT Secretariat

INTAL Institute for the Integration of Latin
America and the Caribbean

UNASUR
COSIPLAN

www.iirsa.org/cosiplan

Technical Coordination Committee

IDB

CAF DEVELOPMENT BANK OF LATIN AMERICA

FONPLATA

Institute for the Integration of Latin America and the Caribbean