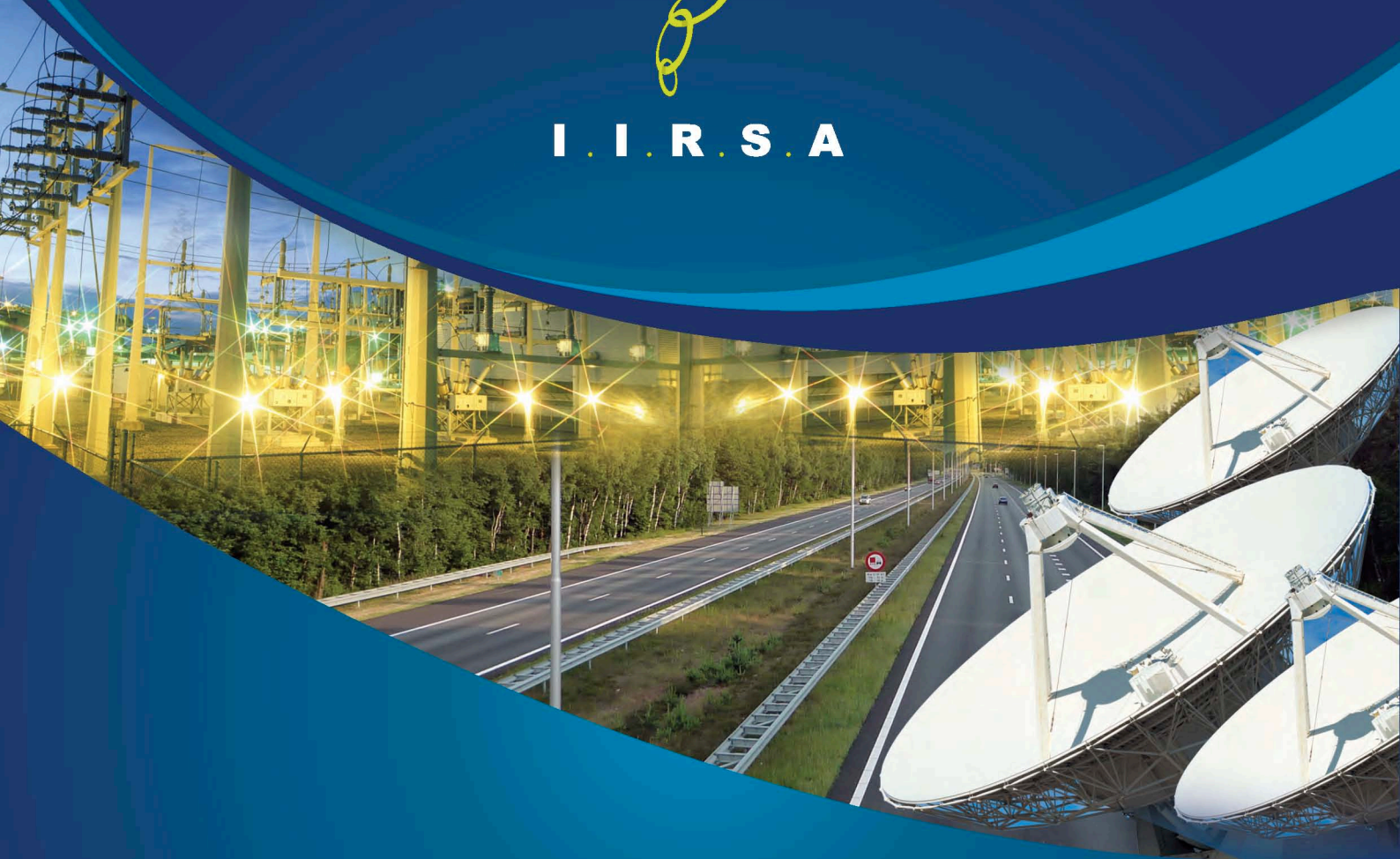




**I . I . R . S . A**



**Implementation Agenda based on Consensus  
2005 - 2010**

**Assessment Report - July 2010**







**I . I . R . S . A**

INITIATIVE FOR THE INTEGRATION OF REGIONAL INFRASTRUCTURE IN SOUTH AMERICA

# AIC 2005-2010

## Implementation Agenda based on Consensus 2005-2010

Assessment Report  
July 2010

31 Strategic Projects  
on Integration of South America



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# Chapter I.

## INTRODUCTION

The purpose of this report is to analyze and evaluate, within the framework of the Initiative for the Integration of Regional Infrastructure in South America (IIRSA - *Iniciativa para la Integración de la Infraestructura Regional Suramericana*), the attainment of the goals set forth upon the creation of the Implementation Agenda Based on Consensus (AIC - *Agenda de Implementación Consensuada*) 2005-2010, made up of a set of 31 infrastructure projects that, given their features, have a strong impact on the physical integration of South America.

Furthermore, this report seeks to examine the results of the application of a new project management paradigm to the AIC 2005-2010 and the use of a tool designed for monitoring and providing support to the intensive management of strategic projects: the Strategic Management Information System (SIGE - *Sistema de Información para la Gestión Estratégica*).

All the background information and activities undertaken by the Initiative in relation to the AIC, the intensive management of projects, and SIGE have been identified, compiled, and analyzed for the purposes of this report.

The landmark in the history of the AIC is its adoption at the Sixth Meeting of IIRSA Executive Steering Committee (CDE - *Comité de Dirección Ejecutiva*), held on November 23 and 24, 2004, in Lima, Peru. However, this was the outcome of a process in which the structuring of the IIRSA Project Portfolio conducted between 2002 and 2004 on the basis of the Indicative Territorial Planning Methodology was highly relevant. Therefore, evaluating the strategic importance of the AIC and its contents (i.e., the projects selected to be included in it) calls for an analysis of its origin during the Portfolio structuring process.

In this report, the AIC is then conceived of as the result of the Indicative Territorial Planning and, at the same time, as the “break point” between planning and implementation in the evolution of IIRSA. In other words, the strategic shift towards implementation that the Initiative experienced as from 2005 was definitely promoted by the existence of the AIC, thanks to which the focus was brought to the following priority: a set of strategic projects, selected by consensus by the countries due to its crucial importance for the entire Portfolio, as it is the expression of regional integration infrastructure. Planning alone was not enough to make the integration process come true.

Therefore, this report is aimed at analyzing this strategic shift towards implementation, which meant focusing mainly on the execution of projects, to which the creation of the AIC made a decisive contribution. In addition, this Agenda defined by consensus was adopted at a historical moment: IIRSA concluded the first stage of the Project Portfolio structuring process, based on the Indicative Territorial Planning Methodology, and adopted the AIC on the eve of a Summit of South American Presidents (held in Cusco, Peru, on December 8, 2004) that was highly important, since the creation of the South American Community of Nations was decided on this occasion. Thus, IIRSA seized this historical opportunity to inform the Presidents about the existence of the AIC, which was met with immediate support.<sup>1</sup>

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<sup>1</sup> See the Declaration of Ayacucho, paragraph 8, subscribed on December 9, 2004, by the Heads of State and high-level representatives of the Presidents of some countries, in Pampa de la Quinua, Ayacucho, Peru, immediately after the Cusco Summit.

It is interesting to draw a parallel with the present, when the initial 10-year period of IIRSA, as established at the Summit of South American Presidents in Brasilia in 2000, and the implementation period of the AIC 2005-2010 are close to coming to an end, and the South American integration process is simultaneously entering a new phase. In this new phase, IIRSA becomes part of the Union of South American Nations (UNASUR - *Unión de Naciones Suramericanas*) and, under these circumstances, a new agenda of priority projects starts to be developed.

Identifying a small set of strategic infrastructure projects, or flagship and/or high-impact projects for regional integration, becomes now even more relevant since there is a renewed historical opportunity for IIRSA and the political decision-making level represented by UNASUR to converge. This limited group of projects offers a better platform to focus on specific actions. In this new context, "the AIC projects could be the UNASUR projects to ensure their implementation."<sup>2</sup> In other words, as the Initiative gets closer to the political sphere, which serves as the "facilitator of the materialization of projects,"<sup>3</sup> focusing actions become necessary. This is the criterion adopted by the organizational structure of IIRSA at different moments: in 2004, when the AIC was approved; in 2008, when the future of IIRSA and its relationship with UNASUR began to be discussed and when a proposal was made to create a South American Council of Infrastructure and Planning (COSIPLAN - *Consejo Suramericano de Infraestructura y Planificación*) within the context of the Union, considering that the "Implementation Agenda based on Consensus could be included in the projects boosted by UNASUR."<sup>4</sup>

In this sense, the agenda of strategic projects becomes a necessary element for mobilizing the relevant political bodies to encourage the regional integration process. There is a clear perception that there was and there is no other alternative for the Initiative.

This report analyzes first the origins of the AIC and its strategic approach, examining the work carried out within the framework of IIRSA from 2002 and 2004 by all its bodies: the meetings of the CDE, of the National Coordinators, and of the Executive Technical Groups (GTEs - *Grupos Técnicos Ejecutivos*). The report draws information from the minutes of the meetings, the notes resulting from them, and the presentations made by the Technical Coordination Committee (CCT - *Comité de Coordinación Técnica*) in its working sessions, among other documents, to show the dynamic leading to the AIC as well as its rationale.

Next, the report evaluates and analyzes whether the strategic objectives of the AIC have been met, i.e., the efficiency of the Agenda in attaining them and what its impact on the physical integration process within the framework of IIRSA has been. The strategic objectives of the AIC were defined at the Fifth Meeting of National Coordinators, in October 2004,<sup>5</sup> and ratified since then:

- Accelerate concrete results from the projects having a high impact on the physical integration of the continent
- Focus the attention and efforts of the twelve South American countries and the multilateral agencies on the search of visible results within the context of IIRSA
- Improve the perception among businessmen and their related concerns in relation to the Initiative
- Show the international community the coordination capacity of South America to support its own integration process, which would have a favorable impact on attracting investments in the region

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<sup>2</sup> Aide-Mémoire of the Deliberations of the Twelfth Meeting of National Coordinators, prepared by the National Planning Department of Colombia. Buenos Aires, Argentina. June 25-26, 2008.

<sup>3</sup> Ibid.

<sup>4</sup> Tenth Meeting of the CDE. Annex 9: Assessment of the Initiative: National Coordinations Reflections. Cartagena de Indias, Colombia. December 4-5, 2008.

<sup>5</sup> Presentation by IIRSA CCT at the Fifth Meeting of National Coordinators. October 2004.

All the material available related to the work performed by IIRSA during the 2005-2010 period, i.e., after the adoption of the AIC (meetings of the CDE, meetings of National Coordinators, GTE meetings, and other infrastructure events) has been compiled and analyzed. Furthermore, all the project data sources available to IIRSA have been reviewed with the purpose of examining the behavior and impact of the AIC.

Undoubtedly, an important milestone is the decision adopted at the Seventh Meeting of the CDE, held on December 1 and 2, 2005, in Asunción, Paraguay, regarding the Strategic Objectives of IIRSA for 2006-2010,<sup>6</sup> which were defined as follows:

- Implementation: Ensure that the Implementation Agenda based on Consensus is implemented
- Planning – Stage II: Work towards making a qualitative leap in the territorial planning process and the decision-making process related to investments in South American integration infrastructure
- Sectoral Processes – A New Approach: Capitalize the Initiative's actions and experience gained in the sectoral integration processes to support integration infrastructure-specific projects
- Wide Outreach of the Initiative: Strengthen the outreach strategy to broaden the South American society's knowledge of the progress and accomplishments made by IIRSA

This report is obviously concerned with the first objective: the implementation and, particularly, the role of the AIC. However, the third objective —a new approach to the Sectoral Integration Processes (PSIs - *Procesos Sectoriales de Integración*)— is reflected in the AIC, since it includes two projects from the Information and Communications Technologies (ICTs) PSI as well as several other projects from the Border Crossings PSI, which are also part of the Project Portfolio. Moreover, the objective of fostering “a second stage in the IIRSA communication and participation strategy, generating instruments which enable dissemination of the advances achieved by the Initiative”<sup>7</sup> (i.e., the Outreach or Dissemination Strategy) was reinforced by the AIC, as shown below in this report, since defining a set of priority projects facilitated the possibility of focusing specific actions and dissemination material.

It is worth mentioning that, as provided for in the minutes of the CDE Meeting held in Asunción, “the Government's commitment to carry out each and every project of the Implementation Agenda Based on Consensus (AIC) [was] the execution of priority projects for physical integration in South America by 2010.”<sup>8</sup> However, when analyzing the implementation process of these projects, the difficulty in complying with the original schedules becomes evident.

This document presents an analysis of the AIC, its efficiency in attaining its objectives, and its impact on the integration process within the framework of IIRSA.

This report also evaluates the compliance with the objectives set forth in relation to the intensive and specific management of the AIC projects and to the implementation of SIGE. In fact, in order to support the implementation of the AIC, a decision was made to adopt an intensive and specific management of projects oriented to results, the main element of which was the establishment of a special project monitoring system known as SIGE. The decision to use this management scheme was made at the time the AIC was adopted at the Sixth Meeting of the CDE.

This change in management methods was based on the principle that the obstacles to the “pioneering” or “strategic” projects not only lay in the financial dimension, but were also concerned with their management.

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<sup>6</sup> Minutes of the Seventh Meeting of the CDE, and Presentation by the CCT on IIRSA Strategic Objectives for 2006-2010. Asunción, Paraguay. December 1-2, 2005.

<sup>7</sup> Minutes of the Seventh Meeting of the CDE, paragraph 5.4. Asunción, Paraguay. December 1-2, 2005.

<sup>8</sup> Minutes of the Seventh Meeting of the CDE, paragraph 5.1 (the emphasis is ours), Asunción, Paraguay. December 1-2, 2005.

In order to obtain concrete results, financial resources are a necessary but insufficient requirement. The implementation of strategic projects is always hindered by many different obstacles, such as political, environmental, bureaucratic, institutional, technical, and other restrictions.<sup>9</sup>

In light of this, the intensive management of projects is conceived of as a tool for a new public management paradigm not yet clearly understood or fully adopted in our region. The key element is the following: result-oriented management —also known under other designations— demands dramatic changes not only in the methods (or information and monitoring systems) used but also in the attitude or positions assumed by the executives and professionals involved in the process.<sup>10</sup> The evaluation made in this report of the meeting of the objectives of the intensive result-oriented management method applied to the AIC follows the same criterion. Its purpose is to examine whether the difference between strategic and operational monitoring has become standard practice in IIRSA member countries after the adoption of SIGE.

According to the principles of result-oriented management, the challenge lies not only in adopting project monitoring tools and systems, but also in considering a series of critical success factors for strategic project implementation: political support, the project manager's intervention, strategic monitoring, cooperation environment, restriction management, and communication among the key stakeholders of the project.<sup>11</sup> This report seeks to evaluate the actions taken *vis-à-vis* this set of critical factors.

The strategic actions concerning the implementation stage, as defined at the Meeting of the CDE in Asunción (2005), are also of special relevance in terms of the evaluation and are in accordance with the critical success factors already mentioned:

- Focus the twelve South American countries' and multilateral agencies' attention and efforts on implementing the projects provided for in the AIC
- Create an intensive project management environment by sharing information and mobilizing expertise, decision capabilities as well as financial and technological resources
- Reinforce the presence of strategic actors (i.e., authorities in the economic, planning and other areas) to execute the AIC and IIRSA Portfolio projects<sup>12</sup>

In order to analyze the intensive management of projects as well as the IT tool used to support the AIC project monitoring and management (SIGE), the reports and experiences resulting from the missions conducted in all the countries were examined. Such missions were undertaken by consultants and CCT members and were aimed at both implementing SIGE and training project managers in intensive result-oriented management and strategic monitoring (first half of 2006). Furthermore, a review was made of the documents related to the Regional Workshop on the Intensive Result-oriented Management of Strategic Projects, attended by all the Project Managers, National Coordinators, and CCT Members responsible for the projects to exchange information and ideas about problems and solutions in the AIC implementation and the intensive management system (August 9, 2006, Rio de Janeiro, Brazil).

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<sup>9</sup> José Paulo Silveira, IDB/IIRSA Consultant, internal document on the monitoring system of the Implementation Agenda based on Consensus. December 2005.

<sup>10</sup> IIRSA, Workshop on Intensive Result-Oriented Management of Strategic Projects, introductory document prepared by the CCT. Rio de Janeiro, Brazil. August 9, 2006.

<sup>11</sup> Ibid. Presentation by José Paulo Silveira about the Strategic Project Management System. Rio de Janeiro, Brazil. August 9, 2006.

<sup>12</sup> Seventh Meeting of the CDE, presentation by the CCT on IIRSA Strategic Objectives for 2006-2010. Asunción, Paraguay. December 1-2, 2005.

Moreover, the different presentations made by the CCT during the 2005-2010 period at the meetings of National Coordinators and of the CDE about the status of SIGE and its future challenges were also taken into account for the analysis. In addition, all queries made to SIGE at different AIC project implementation stages have been compared in order to gain a broader view of the information generated by the system and of its dynamic as an instrument for strategic monitoring during this period.

The analysis conducted for the purposes of this report has led to the standardization of existing information, the formulation of working hypotheses, their confrontation with the evolution actually observed, and the drawing of conclusions, later enriched by interviews with key actors concerned with the AIC projects, their intensive management, and SIGE.



## Chapter II.

# THE ORIGIN OF THE AIC 2005-2010 AND ITS STRATEGIC APPROACH

### Indicative Territorial Planning: A Basis for the AIC 2005-2010

The ten Integration and Development Hubs of IIRSA were identified in the period between the Meeting of Ministers held on December 4-5, 2000, in Montevideo, Uruguay —when the Action Plan was adopted— and the Fifth Meeting of the CDE, held on December 4, 2003, in Santiago, Chile. Business Visions were also designed at the time for all the Hubs except the Southern Andean and the Paraguay-Paraná Waterway Hubs. The basic Project Portfolio for the physical integration of the region was defined in this period as well.

In 2003 and 2004, based on the Indicative Territorial Planning Methodology, the IIRSA Project Portfolio was structured with a regional vision agreed upon by the twelve South American countries. This process, led by the countries in the work undertaken by the respective GTEs, resulted in technical consensuses as to the projects to be included in each Hub, which were then grouped according to their linkages and synergies, thus forming several Project Groups within each Hub with the purpose of contributing to sustainable development.

The importance of having defined such Groups lies in the fact that the synergies among the infrastructure projects included in a Hub can be identified more easily. Each Group represents a set of interdependent projects, and these projects are grouped with a view to capitalizing on the benefits of a set of investments. Therefore, the concept of Project Group is crucial in the shift from a global vision of the Hubs to the structuring of the Project Portfolio. The “strategic function” of a Group is defined in terms of the benefits brought by the investments to the sustainable development of its area of influence, and is linked to the Business Vision of the Hub as a whole. The strategic function can be taken, then, as a way to express the impact that a set of investments in regional integration and sustainable development has on the territory of the Hub.

Each Group is set up around an Anchor Project, which gives meaning to the group and makes synergies viable. The anchor project “is identified as the bottleneck or missing link in the infrastructure network hindering the optimum use of the group’s combined effects for the sake of economic and social development.”<sup>13</sup> This is very important to explain why regional integration is so effectively boosted when an anchor project is implemented. The concept will be used further on to analyze the selection of the projects within the AIC.

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<sup>13</sup> IIRSA. “Indicative Territorial Planning: Project Portfolio 2009”. Section II, p. 33. IDB, CAF and FONPLATA. Buenos Aires, Argentina. November 2009.

The Indicative Territorial Planning Methodology is, then, the tool used by the Initiative to accomplish the goal of forging consensus among the South American countries around the creation of a common, structured infrastructure project portfolio in the areas of transport, energy and communications.

Toward 2004, the countries had reached consensus about a preliminary structuring of IIRSA Project Portfolio with a shared regional vision based on the analysis of the expected synergies and impacts of this Portfolio upon the development of the relevant economic space.

This achievement was not a pursued objective but became the necessary technical basis on which to launch the following stage —i.e., the implementation of high-impact physical infrastructure projects.

This methodology has also proved to be a major vehicle for enhancing a common understanding among the countries in each Hub in relation to the contribution of the projects to the sustainable development of the territories covered by the Hubs. As is well known, this methodology makes use of a three-stage analytical sequence, namely:

- Definition of Project Groups
- Establishment of analysis factors
- Comparative assessment of the Groups in each Hub

To advance in the comparative assessment of the Project Groups, a structure of factors was defined in order to identify their impact on regional integration and development, as well as their implementation feasibility conditions.

The task of structuring and defining the Project Portfolio by consensus and of comparatively assessing the impact of the Groups on each Hub took place during the GTE meetings held in Quito, Santa Cruz, and Buenos Aires (2003), and in Bogotá and Buenos Aires (first half of 2004). The planning process developed for eight of the ten Hubs and its results were described in the document known as “IIRSA Book,” published in December 2004 and entitled *Indicative Territorial Planning: IIRSA Project Portfolio 2004*. Until then, the Initiative had obtained the following results:

- The strategic geo-economic vision of the region as a space structured in ten Hubs, representing a territorial reference for the sustainable development of South America.
- The identification of 40 Project Groups (with their respective anchor projects and strategic functions) in eight of the ten Hubs. The Paraguay-Paraná Waterway and Southern Andean Hubs were not part of the Project Portfolio structuring that took place in 2004.
- A total Portfolio of 336 infrastructure projects, accounting for an estimated investment of US\$32,759,430,000 as of December 2004.<sup>14</sup>
- An assessment of the impact of the Project Groups in eight of the ten Hubs, which offered the possibility of having a comparative picture of the Groups having greater or lesser impact on sustainable development, as well as greater or lesser feasibility conditions for their implementation.

With all these instruments at its disposal, IIRSA was at a turning point: advance from design (of the Hubs and the structuring of the Portfolio) to implementation (or project execution). This task, however, called for a focusing process (i.e., selecting specific priority projects). It was impossible to promote the execution of the 336 projects in the Portfolio at the same time. But the basic conditions for identifying the AIC projects were in

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<sup>14</sup> Sixth Meeting of the CDE. “Presentation on the Project Portfolio 2004”. Lima, Peru. November 23-24, 2004.

place: the structuring of the Portfolio and the comparative assessment of the Project Groups contributed to this move toward prioritization.

The very existence of these previous elements strengthened the prioritization process based on the technical criteria jointly defined by the twelve countries in order to select the highest impact projects. Thus, the set-up of the AIC and its adoption by all the countries have been possible thanks to the planning stage, which at the same time became a major milestone in the transition to a new phase with an emphasis on implementation.

## A Post-planning Challenge: Project Implementation

By 2004, once the foundational, organizational, and planning stages had been completed, IIRSA needed a change: it had to shift to a result-based strategy, with focusing and intensive management as its integral parts. After so many meetings attended by the countries' delegates and after all the contributions by CCT experts and consultants regarding project inventories, studies on the business vision of the Hubs and planning exercises, the achievements made throughout four years could be wasted if no concrete results were obtained in terms of project execution in order to keep the countries' interest and support alive. In this regard, the AIC has been a strategic turning point.

As stated in the document "Implementation Agenda based on Consensus 2005-2010," adopted at the Sixth Meeting of the CDE, held in Lima, Peru, on November 23 and 24:

"During its four years of existence, the Initiative for the Integration of Regional Infrastructure in South America (IIRSA) has made significant progress in terms of its diagnosis capacity, concept, and information consolidation, identification of a portfolio of integration projects, and accumulation of institutional capital, which allowed the development of an important regional dialogue and consensus-building. Although there has been important progress in the execution and preparation of IIRSA projects, these have not been coordinated and managed through a common strategy."<sup>15</sup>

In fact, this is the strategic goal and/or major ambition of the AIC: that the "collective effort" of all the countries should encourage it jointly, rather than having each country individually develop its own projects, without the "full picture" perspective. After all, these are integration projects. This concept is stressed once again in the document adopting the AIC:

"Now it is necessary to meet the challenge of emphasizing the execution of strategic integration projects. It is thus essential for IIRSA to start an implementation stage, taking into account the full picture and building on the institutional capital and the agreed planning exercise."<sup>16</sup>

This means that the strategic significance of the AIC lies not only in setting the pace toward the implementation stage but, more importantly, in the fact that it involves implementation from a full picture perspective. This is reflected in the selection of projects, as shown in the following chapter, but it should also translate into the joint support for the furthering of the AIC.

Therefore, since the adoption of the AIC, the GTEs, the National Coordinators, and the CDE have examined, at most of their respective meetings, the progress made by the implementation using the following methodology: separating the AIC projects from "the other projects," with the Agenda carrying more weight in developing the implementation of the Project Portfolio. Moreover, SIGE was instituted as an instrument for the intensive management of projects.

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<sup>15</sup> IIRSA. "Implementation Agenda based on Consensus 2005-2010." Annex 3, p. 2. Sixth Meeting of the CDE. Lima, Peru. November 23 -24, 2004.

<sup>16</sup> Ibid.

Nevertheless, there are elements that show the difficulties encountered in trying to attain joint support for the furthering of the AIC. To support the AIC project execution, an intensive project management method had to be established, in which SIGE was to become a key instrument. One example of the obstacles the search for joint support came across is precisely the case of SIGE applied to binational projects, as will be explained further on in this report.

## Technical Work and Building of Political Consensus

The technical work carried out by the Initiative is evinced in the great number of GTE meetings held with the purpose of identifying, structuring, and implementing the Project Portfolio, accounting for the intense activity of IIRSA throughout its mandate. A minimum of four and a maximum of eight GTE meetings were organized per Hub, at a sustained pace, during both the planning (2001-2004) and the implementation stages (2005-2010).<sup>17</sup>

The technical efforts made by the Initiative until the end of 2004 were expected to culminate in a political agreement that should reflect that all this meant not only studies and diagnoses, but also the true intention of furthering the physical integration of South America. As already pointed out, the Third Summit of South American Presidents offered a historical opportunity to seek political support. The AIC was then conceived of as an instrument to attain a renewed and concrete political commitment of the countries to the physical integration of South America.

The document about the AIC 2005-2010 approved at the Sixth Meeting of the CDE, in 2004, is very explicit in this regard since it outlines the strategic objectives of the focusing process:

- “The establishment of an implementation agenda based on consensus for IIRSA projects is being proposed, which, in addition to becoming a symbolic and political framework for the new stage of the Initiative, should accelerate the achievement of specific outcomes in projects of a high impact on the physical integration of the continent.”<sup>18</sup>
- “The fact of focusing on a limited set of projects enhances execution possibilities, since this facilitates the setting of priorities by the governments...”<sup>19</sup>
- “... aims at establishing priorities in the national plans and budgets, as well as in the activities of the financial agencies [...] for the structuring of Public-Private Partnership schemes and [...] contributing to the attraction of the private sector for IIRSA projects.”<sup>20</sup>

It is a fact that, as from 2005, the Initiative has not devoted any time or energy to discussing general project financing models, but has rather sought to find solutions on a project-by-project basis. Thus, only one meeting of the GTE on the Financial Instruments PSI was held in 2004.<sup>21</sup>

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<sup>17</sup> IIRSA, *Indicative Territorial Planning, Project Portfolio 2009*. Section I, pp. 18 and 19. IDB, CAF and FONPLATA (updated on IIRSA website).

<sup>18</sup> IIRSA. “Implementation Agenda based on Consensus 2005-2010.” Annex 3, p. 2. Sixth Meeting of the CDE. Lima, Peru. November 23 -24, 2004.

<sup>19</sup> Ibid., p. 3.

<sup>20</sup> Ibid., p. 4.

<sup>21</sup> First GTE meeting on Financial Instruments. Lima, Peru. October 25-26, 2004.

At the beginning, IIRSA member countries wanted to introduce a “fast track” procedure for IIRSA projects at the institutions participating in the CCT (the Andean Development Corporation - CAF, the Inter-American Development Bank - IDB, and the Financial Fund for the Development of the River Plate Basin - FONPLATA), i.e., a procedure faster than those applied to project financing operations in other sectors. On several occasions, the countries expressed their willingness to create an “IIRSA brand” to help find financing sources for the projects. This, however, is not standard practice in the case of the Project Portfolio, but the AIC contributed to encouraging the Banks to find solutions, either individually or jointly, aimed at overcoming difficulties and making the 31 priority projects viable.

Nevertheless, evaluating the AIC only from a financial perspective is to hold a very narrow view of its significance. There is another substantive element worth examining: whether the AIC enabled the strengthening of the countries’ commitment to the physical integration of South America. To this end, it is necessary to evaluate whether it managed to act as a “symbolic and political framework” for the purpose of IIRSA, i.e., to eliminate the infrastructure bottlenecks that prevent the South American countries from tapping into the opportunities of intraregional trade and international integration.

To attain this objective, the project selection to make up the AIC had to reflect that purpose. It follows that, as shown below, most projects in the AIC are either anchor or anchor-associated (i.e., directly complementary) projects within their respective Groups and Hubs, i.e., “bottleneck[s] or missing link[s] in the infrastructure network hindering the optimum use of the group’s combined effects for the sake of economic and social development.”<sup>22</sup>

The CDE Meeting held in Lima in 2004 adopted the document “IIRSA Project Portfolio” and submitted it for consideration by the South American Presidents during the Third Summit Meeting of South American Presidents seeking its approval “as a testimony of the achievements and progress reached by the Initiative in accordance with its Action Plan as approved in Summit held in Brasilia in 2000.” Similarly, the CDE adopted the AIC document and resolved to submit it for consideration by the South American Presidents on the same occasion, with the recommendation to be approved by the Presidents of the region to promote its immediate execution.<sup>23</sup>

## Visible Outcomes and Credibility

The AIC has had an impact on different aspects of IIRSA, not only on its implementation. It has played an important role in contributing to the improvement of the society’s perception of the capacity of regional integration to produce concrete results; furthermore, it has helped motivate the countries to make further progress in the integration process, as a result of which new opportunities were created for in-depth discussion of issues related to the Territorial Planning, while the network of IIRSA stakeholders was enlarged, strengthening the institutional capacity of the Initiative.

As stated in the AIC document adopted at the Sixth CDE Meeting, “[t]he necessary conditions exist for the Initiative to begin a more visible stage of project implementation. [...] This greater visibility in project implementation will contribute to improving the perception of IIRSA by the different social sectors in IIRSA member countries.”<sup>24</sup> Thus, another important element in relation to the AIC is the visibility or “demonstration effect” expected from advances in the physical integration process.

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<sup>22</sup> Definition of Anchor Project in IIRSA. “Indicative Territorial Planning: Project Portfolio 2009”. Section II, page 33. IDB, CAF and FONPLATA. Buenos Aires, Argentina. November 2009.

<sup>23</sup> Minutes of the Sixth Meeting of the Executive Steering Committee. Lima, Peru, November 23-24, 2004, p 10, paragraphs 11.1 and 11.2. As stated in the introduction to this report, the Presidents gave their support to the AIC in their Declaration of Ayacucho, following the Cusco Declaration, issued immediately after the Summit closing.

<sup>24</sup> IIRSA. “Implementation Agenda based on Consensus 2005-2010.” Annex 3, pp. 2 and 3. Sixth Meeting of the CDE. Lima, Peru. November 23 -24, 2004.

In fact, the Workshops on the South American Strategic Vision (VESA - *Visión Estratégica para América del Sur*), held in 2005, confirmed that the South American societies perceived integration efforts as lacking concrete results. In this regard, according to the opinions gathered, the outstanding feature of IIRSA was that it pointed to the concrete “development of the logistics infrastructure,” a feature that marked a striking difference with other integration schemes and was regarded as what would make “integration come true.”<sup>25</sup>

In stressing implementation, the AIC gives greater credibility to the process based on physical integration, which is capable of producing concrete results.

The outreach strategy, defined as one of the strategic objectives of IIRSA for the 2006-2010 period at the Asunción CDE Meeting on December 2005, upholds this objective, to which the very existence of the AIC has contributed substantially. The strategy consists in designing and putting into practice a communication strategy to let the South American society be acquainted with the progress made at IIRSA and the economic and social benefits derived from the execution of the AIC projects. In line with this, between 2006 and July 2010 eight documentary videos concerned with the AIC projects were shot.<sup>26</sup>

## Implementation: A Strategic Approach and Progress in the Integration Process

The AIC represents a strategic move in the process, not only because it is an essential element in the road to implementation, with its focusing strategy, but also because it reaffirmed the willingness of the countries to move forward to more advanced planning stages, an otherwise impossible enterprise had their interest in the Initiative not been reinforced with the emphasis given to concrete results and project execution.

Taking into account the structured Project Portfolio, the countries could have devoted themselves only to planning, stepping into Stage II of this process, by introducing and applying the new analytical tools known as the Strategic Environmental and Social Evaluation (EASE - *Evaluación Ambiental y Social Estratégica*) Methodology and the Production Integration and Logistics (IPr-Lg - *Integración Productiva y Logística*) Methodology to the Project Groups in order to support the development of the Hubs. But planning alone would not have been sufficient to foster the integration process. In other words, in the environment of implementation and results that the AIC managed to create, the technical work of the Initiative was undertaken with greater interest from the countries, and it was possible to reinforce the conceptual advances and renewed approaches to physical integration.

Consequently, the AIC contributed to enhancing the progress already attained and promoting the entire IIRSA agenda and not only its implementation aspects.

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<sup>25</sup> Seventh Meeting of the CDE. “Annex 6: Recommendations from the National Workshops on VESA”, p. 7. Asunción, Paraguay. December 1-2, 2005. Document presented during the Regional Workshop on the Strategic Vision for the Physical Integration of South America (VESA). Asunción, Paraguay. November 30, 2005.

<sup>26</sup> The projects included are: Upgrade Works of the Río Branco -Montevideo- Colonia - Nueva Palmira Road Corridor (Routes No. 1, 11, 8, 17, 18 and 26, Routes No. 23 and 12), and Construction of the Jaguarão - Río Branco International Bridge (2006); Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (*Rodovia Mercosur*) (2007); Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers (2007); Exports through Postal Services for SMEs - Uruguay (2007), Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor (2008); Interoceanic Corridor, Chile - Bolivia Section (2008); Paving of Iñapari - Puerto Maldonado - Inambari Road, and Inambari - Juliaca / Inambari - Cusco Roads, and Bridge over the Acre River (2009); Upgrade of Route 14 to a Four-lane Road, between Paso de los Libres and Gualeguaychú (2009).

## IIRSA: Coordination Space and Institutional Capacity

The process of analysis and structuring of IIRSA Project Portfolio and of defining the AIC led to the strengthening and enhancement at the institutional capacity of IIRSA. The achievements in terms of understanding and the creation of a network of people and organizations in the twelve South American countries, also involving the CCT institutions, were highly significant. The member countries participated in the GTE meetings to structure the Portfolio and define the AIC by sending multi-sector national delegations. Once the AIC was adopted, the appointment of the Project Managers for each one of the 31 priority projects entailed the enlargement of the network of people and institutions concerned with IIRSA.

It is relevant to note that, on the eve of the incorporation of IIRSA to UNASUR, two topics were simultaneously brought to discussion again: the importance of this forum of cooperation and consensus and the role of the AIC, understood as the two key elements in which the Initiative could be of use to UNASUR. The following statements, brought up at National Coordinators and CDE meetings, are good examples of this:

- “The Initiative should continue being a permanent technical forum, a highly-specialized forum for cooperation and consensus... [to] benefit, permanently, from the body that has been created for the technical-political discussion and exchange, at different levels, and in this way to keep a forum that should improve the instruments developed, have them updated, and produce the changes that may arise from the regional reality. [...] The Implementation Agenda based on Consensus could be included in the projects boosted by UNASUR.”<sup>27</sup>
- “The AIC projects could the UNASUR projects to make them come true. [...] Instead of creating two fora for project definition purposes, IIRSA may act as the technical coordination body and UNASUR as the body in charge of encouraging project execution.”<sup>28</sup>

## Final Remarks

The AIC is, indeed, a strategic instrument designed to draw the attention and focusing of the relevant stakeholders, particularly decision-makers, to encourage the execution of the priority infrastructure projects selected. The Agenda differs from other instruments “agreed upon by consensus” in other integration venues because it is concrete, includes clearly identified projects, and does not fall inside an ambiguous or unclear scope but explicitly affirms the willingness and commitment to carry out all the necessary efforts to push forward the projects defined as strategic.

The Indicative Territorial Planning contributed to shifting from a national to a “full picture” perspective of the projects in the Portfolio, thus becoming a highly valuable, symbolic element for integration purposes.

As the AIC was built on the basis of all the Portfolio projects, each project was viewed from a broader territorial frame, having its own regional dimension and linkages to the projects of other countries, a feature that used to pass inadvertently to the individual countries.

The strategic nature of the AIC is also perceived in its capacity to contribute to the positioning of projects at the national level, by giving them visibility and consequently increasing the domestic political support provided to

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<sup>27</sup> IIRSA. “Annex 9: Assessment of the Initiative: National Coordinations Reflection”. Tenth Meeting of the CDE. Cartagena de Indias, Colombia. December 4-5, 2008.

<sup>28</sup> “Aide-Mémoire of the Deliberations of the Twelfth Meeting of National Coordinators”, prepared by the National Planning Department of Colombia, p. 2. Buenos Aires, Argentina. June 25-26, 2008.

them as well as the weight attached to them in the countries' plans and budgets. Whenever a project is given priority and is set in motion, it is hard to hold it back. Therefore, the AIC has helped "seal" internal commitments to the strategic projects included in it and supported at a Summit of Presidents.

However, it should be noted that the process has not proved identical in all the countries concerned; in fact, there are different perspectives regarding the strategic importance of the AIC. In some countries, the AIC projects are deemed national priorities and their promotion, a matter of national planning rather than of IIRSA concern; consequently, the contribution of the AIC is not regarded as significant.

It should also be pointed out that the political priority given to some of the projects included in the AIC has undergone changes throughout the years. Hence the importance of validating the strategic nature of these projects with the highest-ranking national authorities of each country, from the beginning of their mandate and every time new authorities take office.

Finally, the historical opportunity seized by IIRSA of arriving at a Summit of Presidents with such important results in the structuring of its Project Portfolio accelerated the pace of the work performed by the Initiative to set up an implementation agenda. Even though the Agenda was the result of a negotiation and consensus-building process, some people believe that its definition process should have taken longer to ensure greater consistency, particularly because afterwards it could not be changed. In line with this, a "dynamic" agenda was proposed, whereby stagnated projects should be left out and new priority projects admitted, thus renewing on a permanent basis the political commitment of the countries to a concrete strategic integration agenda.

In sum, even though there is some discussion as to how the AIC could have been more efficiently designed, there is agreement as to how useful it proved to be as an instrument to push IIRSA from the planning to the implementation stage.

# Chapter III.

## THE SELECTION

### OF THE 31 STRATEGIC PROJECTS

The AIC 2005-2010 is made up of a set of 31 integration projects, agreed upon by the member countries on the basis of the results attained during the territorial planning and structuring of IIRSA Project Portfolio stages and which, given its features, has a high impact on the physical integration of South America. This chapter analyzes the criteria adopted to incorporate projects into the Agenda as well as the consistency of such selection with the criteria used.

The selection of the AIC projects resulted from a decision process undergone at each country level and from a negotiation and consensus-building process involving all the countries. To carry out this project selection, the countries agreed to consider as a general principle the consistency with the progress made in the IIRSA Project Portfolio structuring phase. In addition, the following “guidelines for the creation of a first set of projects for the AIC” were established:

- “IIRSA Portfolio projects having a strong domestic political support of the countries concerned and involving the economic and financial areas of their governments, thus ensuring that strategic priority is assigned to the projects.”
- “Preferably anchor projects, projects associated with anchor projects, high-impact or high-visibility projects.”
- “Projects at an advanced preparation stage and having good short-term finance and execution prospects.”
- “Projects within the Project Groups of the Hubs that have received best ratings at the GTE meetings held in Bogotá and Buenos Aires (2004).” <sup>29</sup>

At least one of the above-mentioned criteria was expected to be met. The most important criteria were that the selected projects had to be part of IIRSA Portfolio and consistent with its structuring process, conducted on the basis of the Indicative Territorial Planning Methodology. This accounts for the recommendation that preference be given to anchor or anchor-associated projects. The notion of “anchor project” is defined in said methodology as the one involving the bottleneck or missing link in the infrastructure network hindering the optimum use of the Group’s combined effects for the sake of economic and social development. In turn, the notion of “anchor-associated project” refers to an adjacent or directly complementary project.

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<sup>29</sup> Fourth Meeting of National Coordinators, Presentation by the CCT entitled “Structuring of the Project Portfolio: Future Challenges.” Lima, Peru. August 18-20, 2004.

The expression “preferably” was used in order to emphasize that this was not to be taken as an exclusive condition, since other options —such as “high-impact or high-visibility projects”— could be considered as well. Furthermore, a feasibility criterion was introduced when the prospective AIC projects were proposed to be those at an advanced preparation stage and with good finance and execution prospects in the short run. This is directly related to the time frame established for the AIC project execution purposes: 2005-2010. However, this criterion was not central, since the most important factor was the priority nature of a project rather than its chances of complying with the time frame.

Finally, it was recommended that the selection be made from “IIRSA Portfolio projects having a strong domestic political support of the countries concerned,” which would eventually increase the pace of project execution. In the light of the evolution of the AIC, it can be stated that this criterion has been variable over time, and that the strategic priority of a project does not always find expression in sustained political support. In fact, when analyzing these criteria contrastively, the criteria more directly related to the territorial planning process have proved to be the most constant ones, as they are associated with more structural factors.

## The Selection Process: Technical Criteria and Political Priority

It was important to have a rationale for selecting the projects; this explains why the key principle made reference to the structuring of the Project Portfolio carried out on the basis of the Indicative Territorial Planning Methodology. High-impact projects could thus be selected from a Portfolio already structured and agreed upon by consensus. In this regard, the project selection process was firmly founded on the basic concepts, whereby anchor projects, having been defined as a result of a planning process, are among the ones with the highest impact.

Nevertheless, no strategic project selection could be completely technical, since there are also political considerations. This means that although a technical viewpoint was required, some flexibility had to be introduced, resulting in the inclusion of other projects of a lower impact but offering other benefits; for example, they could mobilize the communities involved and/or they reflected national priorities. Consequently, some long-standing projects that had not found until then the necessary support for their execution were included in the Agenda, since this helped them gain visibility and weight at the national level to ensure their implementation. In this regard, the AIC was a major instrument in the encouragement of projects located in less developed areas of South America (Emerging Groups, see Table 1).

Furthermore, the broad perspective of a project within a Group extended by other connections beyond national borders, even to third countries of the region —which, upon completion of their own infrastructure projects, would contribute to meeting greater demands, among other things— constituted an unprecedented macro picture of each and every project. This, along with the political declaration made by the countries in support of the AIC, provided the necessary grounds for holding domestic negotiations with economic and financial authorities in search of financing sources.

Therefore, the criteria for selecting the AIC projects were not “pure,” but rather a combination of technical and political considerations, the former carrying more weight.

## Strategic Projects

Regarding the reference to project categories such as “strategic,” “emblematic,” “flagship,” “high-visibility,” and “high-impact,” it should be noted that rather than pointing to different project types, such categories point to features inherent in strategic projects that, first and foremost, are singled out for their potential for causing a transformation in the future.

Strategic projects are also “emblematic,” since they convey a mobilizing idea around which consensus is built and with which a vast majority of people can be identified. They are vital projects, typically representative of integration, to the extent that without them one cannot speak of such a process. In addition, they are usually long-standing projects. Strategic projects also have a “high impact” on the economic, social, and environmental development, and are of a “high-visibility” nature, since their benefits are perceived by a large number of people and have a strong bearing on an entire nation or area of influence.

Depending on the project, some of these features are more prominent than others. It should also be stated that high-impact projects include anchor projects, since these eliminate bottlenecks hindering physical integration and solve most connectivity problems, but are not limited to them, as the impact sought is to foster development, and physical integration is just the means to that end, rather than the end in and of itself.

Finally, the strategic nature of the projects is reflected in their impact on territorial development, in their capacity to encourage connectivity and attract additional investment, and in their potential for promoting territorial inclusion, increasing trade, and offering new opportunities for the country and, particularly, for the area of influence concerned.

## Multi-criteria Assessment

The feasibility criterion was incorporated into the project selection process based not only on an economic and financial analysis, but on a multi-criteria assessment. In fact, conducting a simultaneous multi-criteria project assessment not exclusively focused on financial indicators meant taking a qualitative leap. This alternative to the traditional project assessment methodology proved effective, although there was not a thorough impact assessment study resulting in a conclusive estimation; however, this assessment is borne out by opinions from qualified technical and other experts.

A multi-criteria assessment takes into account environmental, social, political, and other variables. The AIC projects have a little of all sorts. Naturally, their feasibility is underpinned by the political priority attached to the strategic project implementation. This prevents the population concerned from feeling frustrated about long-standing expectations regarding the implementation of projects.

The comparative evaluation of the Project Groups did not have a direct bearing on the selection of the AIC projects. Each country defined its own priorities, regardless of the rating given to their projects in the comparative evaluation of the Groups. Nevertheless, this evaluation made it possible to gain a clearer comprehension of all the dimensions of a project, i.e., to have a full picture perspective. This was not only important but indirectly helped in the understanding of the priority of projects, which resulted from such perspective rather than from the rating assigned to the Project Groups in the comparative evaluation.

## Long and Short Term

Although integration is a long-term task and the AIC projects should consequently have a long-term perspective, it was also necessary to attain concrete results in the short term for the Initiative to harbor expectations of realization and to mobilize support to physical integration. If no concrete outcomes are reached in a process, the potential for mobilization is lost. This is reflected in the fact that both short- and long-term criteria were applied to the selection of the AIC strategic projects.

This explains the criterion of selecting visible and important projects having political consensus. In fact, the projects that advanced the most in five years were the ones that presented the least difficulties at the time of their incorporation into the Agenda.

## Negotiation and Consensus-Building: The List of Projects in the AIC 2005-2010

The AIC was progressively set up on the basis of the proposals made by the countries. According to the CCT internal records, during the meeting on the MERCOSUR-Chile Hub held in Buenos Aires on September 13-14, 2004, the representatives of the five countries present discussed the Agenda as well as some projects that seemed to be eligible for their incorporation into the list. It was then agreed that the selection would focus on “emblematic” projects with good execution prospects (including projects with a financing source and already underway) and consistent with the progress made in the Indicative Territorial Planning phase.

The “emblematic project” presented as an example at the meeting was the *Rodovia MERCOSUR* (Upgrade of the Palhoça - Osório Road Section to a Four-lane Road). However, there was consensus as to the fact that the selection should focus on anchor projects or projects associated with anchor projects quite likely to be implemented. During the debate, the projects deemed eligible for their incorporation into the Agenda by the countries were the following:

### □ MERCOSUR-Chile Hub

- Upgrade of Route 14 to a Four-lane Road, between Paso de los Libres and Gualectuaychú (*Anchor project of Group 1*)
- Upgrade Works of the Río Branco - Colonia Road Corridor (Routes 1, 11, 8, 17, and 18), which later turned into Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor (*Anchor project of Group 2*)
- Construction of the Jaguarão - Río Branco International Bridge (*Associated with the anchor project of Group 2*)
- Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (*Rodovia MERCOSUR*) (*Project within Group 1*)
- Railway Project Los Andes - Mendoza (Central Trans-Andean Railway) (*Anchor project of Group 3*)
- International Route No. CH-60 (between Valparaíso and Los Andes) (*Associated with the anchor project of Group 3*)

### □ Capricorn Hub

- Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center (*Anchor project of Group 2*)
- New Presidente Franco - Porto Meira Bridge, with a Paraguay-Brazil Border Center (*Anchor project of Group 3*)

These eight projects were finally incorporated into the AIC agreed upon at the CDE meeting held that year. The analysis of eligible projects continued and, according to the CCT internal records, by October 18, 2004, the list included 15 projects (the eight projects already mentioned and the following seven):

### □ Central Interoceanic Hub

- Construction of Pailón - San José - Puerto Suárez Road (*Anchor project of Group 3*)
- Rehabilitation of El Sillar Road Section (*Anchor project of Group 5*)
- Toledo - Pisiga Road (*Project within Group 5*)

#### □ Andean Hub

- Desaguadero Binational Border Service Center (*Anchor project of Group 8*)

#### □ Amazon Hub

- Paíta - Tarapoto - Yurimaguas Road, Huallaga Waterway, Ports and Logistics Centers, which later turned into Paíta - Tarapoto - Yurimaguas Road, Ports and Logistics Centers (*Anchor project of Group 3 and associated projects*)
- Lima - Tingo María - Pucallpa Road, Pucallpa Port and Logistics Center, and Modernization of the Callao Port - First Stage, which later turned into the Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers (*Anchor project of Group 4 and associated projects*)

#### □ Peru-Brazil-Bolivia Hub

- Paving of Iñapari - Puerto Maldonado - Inambari Road, Inambari - Juliaca / Inambari - Cusco Roads (*Anchor project of Group 1*)

As of November 1, 2004, also according to the CCT internal records, the priority list comprised 28 projects, i.e., 13 projects had been added to the previous selection of 15, as detailed below:

#### □ MERCOSUR-Chile Hub

- Northeastern Argentina Gas Pipeline (*Project within Group 5*)

#### □ Central Interoceanic Hub

- São Paulo Ring Railway (Northern and Southern Sections) (*Anchor project of Group 2*)
- Infante Rivarola - Cañada Oruro Border Crossing (*Project within Group 1*)
- Construction of the Cañada Oruro - Villamontes - Tarija - Estación Abaroa Road (First Stage) (*Project within Group 1*)

#### □ Andean Hub

- Cúcuta - San Antonio del Táchira Border Crossing (*Anchor project of Group 2*)

#### □ Amazon Hub

- Francisco de Orellana Port (*Anchor project of Group 2*)

#### □ Peru-Brazil-Bolivia Hub

- Bridge over the Acre River (Project associated with the anchor project of Group 1)

#### □ Guianese Shield Hub

- Boa Vista - Bonfim - Lethem - Georgetown Road (First Stage: Studies) (*Anchor project of Group 2*)
- Bridge over the Takutu River (*Project associated with the anchor project of Group 2*)
- Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage) (*Anchor project of Group 3*)
- Improvement of Nieuw Nickerie - Paramaribo - Albina Road and International Crossing on the Marowijne River (*Anchor project of Group 4 and associated project*)

#### □ Sectoral Integration Process related to Information and Communications Technologies

- Exports through Postal Services for Small and Medium Enterprises (SMEs)
- Implementation of the South American Roaming Agreement

The list continued to expand and on November 12, 2004, four additional projects were considered eligible, of which only the following two were incorporated into the Agenda, thus totaling 30 projects:

#### □ Andean Hub

- Improvement of Navigation Conditions on the Meta River (*Anchor project of Group 4*)

#### □ Amazon Hub

- Pasto - Mocoa Road, which later turned into Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor (*Anchor project of Group 1*)

Then, in the context of the activities undertaken at the Sixth Meeting of the CDE, held in Lima on November 23 and 24, 2004, one last project was added to the list (thus completing the current 31 projects of the Agenda adopted by consensus):

#### □ Central Interoceanic Hub

- Paving and Improvement of the Iquique - Colchane Road (*Project within Group 5*)

To sum up, the Implementation Agenda based on Consensus 2005-2010 is structured as follows:

- Anchor projects: 19
- Anchor-associated projects: 4
- Projects selected under other criteria: 6
- Projects from the ICTs Sectoral Integration Process: 2
- Total AIC projects: 31

The structure of the Implementation Agenda based on Consensus is commented on below.

## Consistency with the Planning Stage

Table 1 has been designed for the purposes of this analysis to reflect the different criteria set out. Thus, the AIC projects are listed by numerical order,<sup>30</sup> specifying the Hubs to which they belong and whether they are anchor or anchor-associated projects. Table 1 also indicates the Group and type of Group (consolidated or emerging) of which the AIC projects are part,<sup>31</sup> as well as the stage in the project lifecycle in which they were

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<sup>30</sup> IIRSA. "Implementation Agenda based on Consensus 2005-2010." Annex 3. Sixth CDE Meeting. Lima, Peru. November 23-24, 2004.

<sup>31</sup> Consolidated groups: Territories with greater economic development, densely populated, and with more sophisticated infrastructure. Emerging groups: territories with lesser economic development, scarcely populated, and on which new infrastructure projects have a greater impact.

at the time of its incorporation into the Agenda. To this end, the information contained in the First Biannual Report on the AIC, published in July 2005, was used. The results in Table 1 showing the consistency of the selection of the projects with the Indicative Territorial Planning are analyzed below.

## High Share of Both Anchor Projects and Anchor-Associated Projects

Of the 31 projects in the AIC, 19 are anchor projects, accounting for 61% of the total number. If this share is calculated taking into account a total of 29 projects (since two of the projects fall within the ICTs Sectoral Integration Process and, consequently, do not follow the same Portfolio structuring methodology), then 66% of the AIC projects are anchor projects.

Furthermore, if the projects associated with anchor projects are also considered, this share amounts to 23 projects, accounting for 74% of all the AIC projects, or using a stricter criterion (i.e., excluding the two ICTs projects from the total number), the share of anchor and anchor-associated projects represents 79% of all the AIC projects. This criterion is, certainly, the one that best fits the Portfolio structuring process carried out through the Indicative Territorial Planning Methodology.

On average, 47.5% of the 40 anchor projects identified during the Portfolio structuring process in 2004 were incorporated into the Agenda (see Table 2). Some projects are commented on below for illustration purposes.

Three anchor projects of the MERCOSUR-Chile Hub are included in the AIC; one belongs to Group 1, a second one, to Group 2, and the last one, to Group 3. The anchor project of Group 2 (AIC Project 2, "Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor") was already in the execution phase when the Agenda was set up, whereas the anchor project of Group 3 (AIC Project 5, "Railway Project Los Andes - Mendoza (Central Trans-Andean Railway)") was in its pre-execution phase. Both projects were deemed of high priority by the countries concerned.

The Railway Project Los Andes - Mendoza was subject to a technical change, which repositioned it in terms of its lifecycle (from the bidding/concession to the project preparation phase again). This disruption turned this binational project into the most important single investment amount in the AIC (US\$5.1 billion). From the integration perspective, the project falls within the "emblematic" project category.

As for the Capricorn Hub, two anchor projects were included in the AIC: AIC Project 8, "Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center," and AIC Project 9, "New Presidente Franco - Porto Meira Bridge, with a Paraguay Brazil Border Center," which belong to Groups 2 and 3, respectively. Both binational border projects are emblematic within the Hub.

The Salvador Mazza - Yacuiba Binational Bridge is part of the main road corridor between Argentina and Bolivia, and is one of the major bottlenecks due to the overlapping of both formal and informal commercial activities that impair the international trade between both countries. The new Presidente Franco - Porto Meira Bridge, with a Paraguay-Brazil Border Center, will facilitate trade between Brazil and Paraguay, mainly of soybean and wood derivatives, by easing traffic congestion on the Puente de la Amistad, that joins Foz do Iguaçu and Ciudad del Este and is one of the most congested bridges in the region.

In turn, the Andean Hub is divided into nine Project Groups and includes three AIC projects. It is worthy of note that AIC Project 19, known as "Improvement of Navigation Conditions on the Meta River," was included in the Agenda as it was regarded as a strategic project for Colombia. When it was selected for its incorporation into the AIC, this binational project between Colombia and Venezuela was in the pre-execution phase, but with the passing of time it proved to be one of the most problematic projects to move on to the execution phase for reasons other than technical ones, which relate to the different visions held by each country as to how to carry out the project.

The four projects of the Amazon Hub included in the AIC are anchor projects. AIC Project 20, “Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor,” is a strategic project for Colombia and the entire region. It is the anchor project of the Group known as “Access to the Putumayo Waterway,” also called “The Green Road toward Peace,” and its major benefit consists in being a guarantee of the presence of the State in a traditionally conflictive territory, thus integrating its inhabitants to the social dynamic of the country.

In the Peru-Brazil-Bolivia Hub, there is a highly strategic and emblematic project for Peru, which is also the anchor project of its Group: AIC Project 24, “Paving of Iñapari - Puerto Maldonado - Inambari Road, and Inambari - Juliaca / Inambari - Cusco Roads.”

Finally, the Agenda includes three anchor projects of the Guianese Shield Hub, and in the case of two of them, only the first stage (i.e., studies).

In some Groups, the selection of projects for the AIC involved “pairs” of projects, that is, projects that are directly complementary to each other and complete a given connection (see Table 1). This is the case, for example, of the following project pairs from the MERCOSUR-Chile Hub: the Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor (AIC Project 2) and the Construction of the Jaguarão - Río Branco International Bridge (AIC Project 3), on the one hand, and of the Railway Project Los Andes - Mendoza (AIC Project 5) and the International Route CH-60 (between Valparaíso and Los Andes) (AIC Project 6), on the other.

Similarly, in the Peru-Brazil-Bolivia Hub, the Paving of Iñapari - Puerto Maldonado - Inambari Road, Inambari - Juliaca / Inambari - Cusco Roads (AIC Project 24) and the Bridge over the Acre River (AIC Project 25) are directly complementary to each other. The same situation holds in the Guianese Shield Hub between the Boa Vista - Bonfim - Lethem - Georgetown Road (First Stage: Studies) (AIC Project 26) and the Bridge over the Takutu River (AIC Project 27).

In addition, the connection between an anchor project and an associated project has been included under a single project name in the AIC, thus becoming a multimodal “corridor.” This is the case of the following Peruvian projects included in the Amazon Hub: Paita - Tarapoto - Yurimaguas Road, Ports and Logistics Centers (AIC Project 21) and Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers (AIC Project 22).

The idea of “associating” projects to produce a meaningful connection is very important in the AIC, making this Agenda with a “full picture perspective” different from any list of projects with a national vision, hence its key contribution to regional integration.

## Other Selection Criteria

As already stated, there are 23 AIC projects that are either anchor or anchor-associated projects. Without taking the ICTs Sectoral Integration Process projects into account, there are six additional projects, the selection of which relied on other criteria. These projects, which belong to two Hubs, the MERCOSUR-Chile (2 projects) and the Central Interoceanic (4 projects) Hubs, are the following:

### □ MERCOSUR-Chile Hub

- Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (*Rodovia MERCOSUR*)
- Northeastern Argentina Gas Pipeline

#### □ Central Interoceanic Hub

- Infante Rivarola - Cañada Oruro Border Crossing
- Construction of the Cañada Oruro - Villamontes - Tarija - Estación Abaroa Road (First Stage)
- Toledo - Pisiga Road
- Paving and Improvement of the Iquique - Colchane Road

The Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (*Rodovia MERCOSUR*) (AIC Project 4) was regarded as an emblematic project by Brazil. One of its benefits is to enhance the connection of the developed southern and southeastern areas of Brazil with Argentina, Chile, and Uruguay. Another major benefit is to reduce the high rate of accidents in a road known in Brazil as “the road to death.” Furthermore, the project was in its execution stage before its incorporation into the Agenda, i.e., the prospects for its short-term completion were good (see Table 1).

It is worth mentioning that the Northeastern Argentina Gas Pipeline (AIC Project 7) is the only energy project within the Agenda and contributes to a strategic objective: to diversify the energy matrix in the MERCOSUR member countries.

The importance of the Toledo - Pisiga Road (AIC Project 14) and of the Paving and Improvement of the Iquique - Colchane Road (AIC Project 15) should be jointly measured. Together, these projects complete a connection to the Pacific, from Bolivia to the Iquique port in Chile. Moreover, they will create an exit for third countries, thus promoting the integration of Chile, Bolivia, and Brazil. It should be stressed that these projects were in the execution phase at the time they were incorporated into the Agenda, i.e., they had good prospects for being completed in the short term (see Table 1).

The association of projects is the reason for the inclusion of the “Infante Rivarola - Cañada Oruro Border Crossing” project (AIC Project 12) and the “Construction of the Cañada Oruro - Villamontes - Tarija - Estación Abaroa Road (First Stage)” project (AIC Project 13). However, unlike the previous pair, this pair belongs to Emerging Group, which is in a less advanced stage of the project lifecycle (pre-execution) and in a relatively lower-rated position in the comparative evaluation. The inclusion of these projects in the Agenda is accounted for on the grounds of their high integration value, as they connect isolated territories, and of their importance for Bolivia and Paraguay.

## Group Type and Project Cycle

The Agenda includes 15 projects of Consolidated Groups and 12 projects of Emerging Groups (see Table 1). These categories, created during the territorial planning process, helped characterize the subspaces (areas of influence) of the Project Groups according to their degree of development. Thus, the Emerging Groups demand more basic infrastructure, and although they have a potential for trade, it is not sufficiently exploited yet. In contrast, Consolidated Groups have infrastructure in place, but usually need logistics-related improvements to meet a dynamic trade and a diversified demand.<sup>32</sup> It was not possible to classify two projects of the Capricorn Hub in any of these group types, and the classification does not apply to the two projects of the ICTs PSI. As already explained, this distinction is relevant to point to the degree of difficulty found in the projects at the time of attracting private investment and meeting their financing needs: self-sustainable projects are more likely to find a financing source easily. The fact that the projects that make up AIC belong mostly to Consolidated Groups proves that the criterion related to their execution feasibility was taken into account.

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<sup>32</sup> These definitions were taken from “Herramienta de Trabajo para el Diseño de Una Visión Estratégica de la Integración física Suramericana,” CCT: IDB, CAF and FONPLATA. Caracas, Venezuela. July 2, 2003.

In project lifecycle terms, six of the projects included were in the profiling stage, 15 in the pre-execution stage, and 10 in the execution stage (see Table 1). “Pre-execution” is a broad category that encompasses different levels of studies (pre-feasibility, feasibility, engineering) and does not provide any hint as to how near or far from their execution the projects are. Yet, most of the projects in the AIC were in the preparation (profiling plus pre-execution) stage. If we add the fact that the number of projects from Emerging Groups is quite considerable, we may conclude that, even though the proximity to or feasibility of execution was deemed important, this criterion was not decisive in the selection of the AIC projects.

In synthesis, as laid down in the agreement about the AIC reached at the Sixth Meeting of the CDE, the Agenda “... is made up of a first limited set of integration projects agreed upon by the countries [...] on the basis of the results accomplished during the structuring phase of IIRSA Project Portfolio. In view of their characteristics, they have a high impact on South American physical integration...”<sup>33</sup>

Finally, it should be borne in mind that IIRSA was originally structured around three sectors: Transport, Energy and Communications. The participation of one energy and two communications projects in the AIC is a true reflection of such original premises, although it is clear that transport projects stand out prominently in the Agenda, just as has been the case in all the activities of the Initiative throughout its ten years of existence.

## Final Remarks

The general principle whereby the selection of the AIC projects had to be consistent with the progress made in the IIRSA Project Portfolio structuring phase, conducted on the basis of the Indicative Territorial Planning Methodology, was almost fully respected. This is important because it involved a rational method for selecting the projects. The fact that most of the AIC projects are anchor or anchor-associated projects (74% of the total number of projects, or 79% if the ICTs-related ones are excluded) provides the Agenda with a technical basis decided by consensus during the previous structuring phase. In this regard, the project selection process was firmly founded on the basic concepts whereby anchor projects, having been defined as a result of a planning process, are among the ones with the highest impact.

Nevertheless, the selection of the AIC projects is accounted for on the grounds not only of technical criteria reached by consensus but also, to some extent, of political priorities and domestic decisions adopted in each country. Only half of the anchor projects identified in the planning process ending in 2004 were incorporated into the AIC and displayed on this “window” of integration. Other projects, fewer in number, were included in the Agenda even though they were neither anchor nor anchor-associated projects.

The AIC was an important instrument for projects belonging to Emerging Groups, as it includes 12 projects of this type. Thus, long-standing projects that, until then had not gathered the necessary support to be implemented and whose inclusion in the Agenda could help them gain more weight at the domestic level, were given visibility. Furthermore, the objective of raising expectations of fulfillment led to the inclusion in the Agenda of a majority of 15 projects of Consolidated Groups. The Agenda is, thus, an expression of the South American physical integration as a whole.

However, the objective of including projects in an advanced stage of preparation and with good short-term execution prospects was far from being fulfilled, and the selection criterion based on feasible or near implementation was not decisive. In fact, most of the AIC projects were in the preparation stage (profiling and pre-execution), a circumstance that explains the several re-scheduled completion dates over these five years and urges us to reflect on the relevance of attaching a time frame to the AIC (2005-2010).

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<sup>33</sup> IIRSA. “Implementation Agenda based on Consensus 2005-2010.” Annex 3. Sixth CDE Meeting. Lima, Peru. November 23-24, 2004.

Without a time frame, there was no fixed completion date. With a time frame, projects were expected to be concluded by the end of IIRSA mandate in 2010, but only two of the 31 projects have been completed to date. However, as will be seen in the chapter about IIRSA implementation, the expected AIC project completion ratio is 61% by 2012 and 77% in 2014. However, the goal and mandate of the AIC was not only to accelerate the implementation of projects but to attain their completion by 2010, and this goal was certainly not in line with the stage at which the projects were at the time they were incorporated into the Agenda in 2004, which also determined the relative inaccuracy in the originally estimated investment amount—which grew by 226% in five years as studies progressed and projects began to be implemented.

Again, it is concluded that the AIC was defined on the basis of a set of technical and political considerations and criteria that do not necessarily match traditional project assessment. A multi-criteria assessment was adopted and this is deemed a distinct feature of the Agenda, which led to the inclusion of emblematic, high-visibility and high-impact projects for development purposes.

In short, the criteria defined for project selection carried a different weight at the time the AIC was created. The establishment of a time frame could have been avoided in order not to raise expectations *vis-à-vis* the complexity of some projects. Defining strategic projects was key in the setting up of the Agenda and the countries were allowed some flexibility in their identification. The Indicative Territorial Planning contributed to gaining a better insight into the interrelations of the projects and their impact on the physical integration of South America, providing a broader view beyond national borders.



## Chapter IV.

# THE AIC 2005-2010 AND IMPLEMENTATION WITHIN IIRSA

The AIC basically sought to accelerate the materialization of concrete results in high-impact projects designed to ensure the physical integration of the subcontinent. To this end, it had to cause the governments and the CCT institutions to focus their attention and efforts on certain priority projects and, at the same time, capture the interest of private investors, either individually or in partnership with the public sector. An intensive, focused project management method should be the tool to be used to create a favorable “implementation environment” conducive to the successful execution of projects within a period of five years: 2005-2010.

To analyze compliance with these goals, this chapter focuses on implementation-related matters. The aspects to be examined have to do, firstly, with the implementation dynamics, i.e., the tools utilized at the GTE meetings, showing the evolution of the matters addressed as from 2005. Secondly, this chapter contains an analysis of the AIC projects (see details in the Annex), ending with a full picture description of their progress in their lifecycle, the corrective adjustment of the investment figures, and the compliance with the scheduled completion dates. Finally, the chapter presents some innovative management experiences demonstrating the behavior of the countries and the CCT institutions vis-à-vis the physical integration process with respect to the AIC projects.

## Implementation Dynamics

The considerable impetus given to the dynamics of consensus-building and coordination efforts both across IIRSA member countries and between them and the CCT supported the effective execution of the AIC projects. An impressive amount of information has been gathered throughout this five-year period, which began with the creation of the AIC and has been marked by the emphasis being placed on implementation. It is true that this outcome is not merely attributable to the AIC. Without the previous geo-economic vision of the South American space structured into Integration and Development Hubs and the Portfolio structuring process whereby projects within the Hubs were organized into Project Groups, it would not have been possible to effectively utilize the implementation tools with a full picture perspective of the South American physical integration process.

Hence, throughout these years, the implementation process has focused on the advancement of the AIC, while also boosting the remaining Portfolio projects. This stimulus grew as the overall economic environment in the South American countries improved, impacting favorably on their capacity to carry out infrastructure investment. In addition, the advent of the new Project Database has made it possible for IIRSA to display the progress made in the execution of the Portfolio projects as a whole.

## Getting Ready for Intensive Management

The process began with the design of the AIC “Project Guides,” which were the product of the joint effort of all the countries and experts from the CCT institutions at the GTE meetings devoted to the AIC 2005-2010 Monitoring and Intensive Management of the seven Agenda-related Hubs. A Basic and Strategic Information document was drawn up to support the Intensive Management Process in each AIC project, including the identification of critical points for their execution and the solution to potential restrictions. The National Coordinator/s, the project manager/s, and the CCT Coordinator for the pertinent Hub were engaged in this task.

Even though the preparation of the baseline information was important, the key accomplishment of this exercise was that it set the foundations for a new proactive attitude capable of anticipating problems in the AIC projects, with a view to enhancing their chances for success, which is the gist of intensive management, as will be seen below. Thus, one first shift in the dynamics of IIRSA brought about by the creation of the AIC was this focus on the projects and the attitudes in relation to them. The first step consisted in creating an initial information template about each AIC project based on the information provided by all the players involved.

The GTE commissioned with the monitoring of the agenda relative to projects involving the MERCOSUR countries as well as Bolivia and Chile met at the offices of the IDB-INTAL (Institute for the Integration of South America and the Caribbean - *Instituto para la Integración de América Latina y el Caribe*), in Buenos Aires, Argentina, on April 11-15, 2005. The GTE meeting on the monitoring of the AIC projects involving the Andean countries, Brazil, Guyana, and Suriname was held at the headquarters of CAF, in Caracas, Venezuela, on April 25-29, 2005.

## Implementation Stage: Consolidation of the IIRSA Agenda

As from 2007, the GTE meetings on the Hubs focused on two processes: implementation and planning. As far as implementation was concerned, a review was conducted of the projects of each Hub included in the AIC, identifying the progress made and the obstacles to be overcome for their execution phase to begin. In addition, other IIRSA Portfolio projects whose execution was underway were reviewed, identifying the headway made, the funding sources, and other relevant implementation aspects. For each one of these meetings the CCT prepared a new Business Vision report by Hub, and the national delegations were requested to attend together with the National Coordinator and officers serving in the areas of planning, as well as transport, energy, and communications infrastructure. This did not occur to the necessary extent, but the effort made in relation to the GTE meetings both by the countries and by the CCT, which attended with experts and consultants, is worth noting.

Within this framework (implementation-planning), and more precisely in relation to implementation (AIC Projects and Other Portfolio Projects), a first round of GTE meetings was held in 2007 on all Hubs having projects in the AIC (the round was completed in 2008 with the meeting of the GTE on the Guianese Shield and a new round of GTE meetings on the MERCOSUR-Chile and Capricorn Hubs).<sup>34</sup>

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<sup>34</sup> GTEs meetings on the Central Interoceanic and Peru-Brazil-Bolivia Hubs (Lima, Peru. April 24-25, 2007), the Amazon Hub (Bogotá, Colombia. June 5-6, 2007), the Paraguay-Paraná Waterway and Andean Hubs (Santa Cruz de la Sierra, Bolivia. August 21-23, 2007), the MERCOSUR-Chile, Capricorn and Southern Hubs (Santiago, Chile. September 25-27, 2007), and the Guianese Shield Hub (Paramaribo, Suriname. May 6, 2008).

## The AIC Projects and the IIRSA Portfolio

As of July 2009, another full round of GTE meetings had been completed,<sup>35</sup> and in the first half of 2010 a new one was held. From an analysis of the agendas of these meetings, however, it becomes evident that, as opposed to the 2007 GTE meetings, in the GTE meetings of 2009 the emphasis was not placed on the AIC projects but on the Portfolio, examined through its Project Groups. Indirectly, focus was kept on the monitoring of some AIC projects, though not in their capacity as such but rather because of their status as anchor projects of the Groups under analysis.

These GTE meetings proceeded according to the following sequence:<sup>36</sup>

- Presentation and debate by the countries within the Hub of the progress status of each Project Group and the positive aspects as well as problems encountered in the implementation of the projects in the Group
- Identification of projects in need of further preparation or not mature enough
- Proposal of actions required to boost project implementation
- In particular, examination of the progress status of the anchor projects of the Groups
- Likelihood of adding new projects to the Groups
- Source of information: IIRSA Project Database

In the Agendas of the 2010 GTE meetings, however, the subject of the AIC reappeared explicitly, so that the sequence above now included the following reference:<sup>37</sup>

- Analysis of the current status of each AIC project: progress status, fulfillment of purpose, obstacles encountered, expected completion date, and assessment of impact on the Project Group

To gain insight into the depth and scope of this analysis of the AIC during the sessions of these GTE meetings, their Notes have been reviewed. They only mention the progress made by each project within its respective Group, and reference is made to the anchor project. In other words, basically there is a unit of analysis around the Groups and anchor projects in the 2009-2010 GTEs.

As for the meetings of National Coordinators and of the CDE, we can see that, on the one hand, they analyzed the Portfolio based on the Database information and, on the other, they examined the AIC based on SIGE.

Hence, a major change is verified: the tracking of the AIC, as a privileged category of the implementation stage, becomes mixed into the follow-up of the implementation of the projects in the Portfolio, which is planned and structured as a whole. This is a clear sign of the consolidation, within the agenda of IIRSA, of the monitoring activities by the countries as a whole, of the headway made in the execution of integration projects and, at the same time, of the complete abandonment of the challenge posed by the intensive management of projects.

A key aspect that made it possible to broaden the tracking of IIRSA projects implementation was the effort that the countries, with the support of the CCT, have made in recent years to improve the quality of the information contained in the Portfolio Database.

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<sup>35</sup> The GTE on the Guianese Shield Hub did not meet.

<sup>36</sup> See the Agendas of the GTE meetings on the Amazon, Andean, Peru-Brazil-Bolivia and Central Interoceanic Hubs (Lima, Peru. April 15-17, 2009), and the Paraguay-Paraná Waterway, MERCOSUR-Chile, Capricorn, and Southern Hubs (Santa Cruz de la Sierra, Bolivia. March 16-19, 2009).

<sup>37</sup> See the Agendas of the GTE meetings on the Paraguay-Paraná Waterway, Capricorn, MERCOSUR-Chile and Southern Hubs (Montevideo, Uruguay. May 11-14, 2010), and the Andean, Amazon, Central Interoceanic and Peru-Brazil-Bolivia Hubs (Quito, Ecuador. April 12-14, 2010).

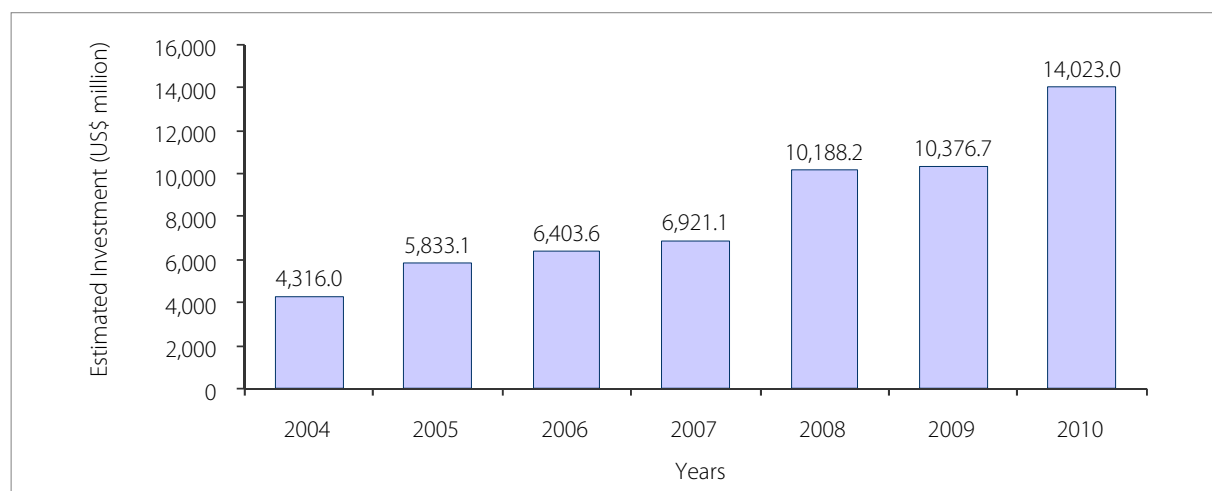
## Overview of the AIC Projects Execution

In light of the individual analyses of the 31 projects of the AIC listed in the Annex, an overall picture of the evolution of the AIC as of July 2010 is presented below. To this end, the analysis will be divided into four large sections: a) evolution of the AIC in terms of the investment required to carry out the projects; b) evolution of the AIC projects in terms of compliance with the expected implementation schedules, as well as their execution stage; c) evolution of the AIC in terms of the political aspects that have had a bearing on it; and finally, d) projects that, owing to their innovative management pattern, deserve special mention.

## Evolution in Terms of Estimated Investment

First, the financial evolution of the AIC projects will be discussed. As shown in the figure below, the total estimated investment of the Portfolio has escalated from US\$4,316 million in 2004<sup>38</sup> to US\$14,023 million in 2010 (see Tables 3 and 4).

Figure 1: Evolution of the AIC Estimated Investment (2004-2010)



Source: Prepared by IIRSA on the basis of the AIC annual reports from 2005 to 2010 and of the document whereby the AIC was created, dated December 2004.

This evolution in the investment amounts made it clear that the initial project execution cost appraisal was greatly underestimated. In five and a half years (December 2004 - June 2010) the amount tripled. Special mention is worth making of the Los Andes railway project, which was initially estimated to require an investment of US\$251 million, and ended up skyrocketing to US\$5.1 billion (see Table 4), accounting for almost one-third of the final budget for the AIC projects. In point of fact, this project underwent a transformation (to a low-altitude tunnel) in terms of its technical solution, resulting in a radical modification of the required investment estimation.<sup>39</sup>

<sup>38</sup> IIRSA. "Implementation Agenda based on Consensus 2005-2010". Annex 3, pp. 7 and 8. Sixth CDE Meeting. Lima, Peru. November 23-24, 2004.

<sup>39</sup> On January 15, 2008, a private initiative was presented for the "Construction and Exploitation of a Low-Altitude Railway Tunnel," which is the reformulation of the "Central Trans-Andean Railway" private initiative. During the bidding process, which was finalized in April 2008, one bid was submitted, but it was dismissed on the grounds that it was technically unacceptable. See Fourth Report on the Implementation Agenda based on Consensus. June 2008.

This point having been made, the reason for the evolution of the estimated investment lies in the fact that, in 2005, two-thirds of the projects were in an early implementation stage, with a basic definition level having been attained; six projects were in the profiling phase, while fifteen were in the pre-execution stage; therefore, the investments reported to be required were more or less accurate estimations. As studies progressed and their level of detail allowed a more realistic financial analysis, the value of the projects was updated. In addition, during this five-year period, as already mentioned, some projects came to include new elements and broadened their scopes for reasons associated with new technical solutions, new regulatory frameworks, or simply because the governments involved have ranked them higher in priority and importance.

Next, some projects will be examined that, due to their high final investment amount, impact on the evolution of the total estimated investment of the AIC.

The first project in this category is, as already said, AIC Project 5, “Railway Project Los Andes - Mendoza,” a binational Argentina-Chile endeavor in the MERCOSUR-Chile Hub, which is responsible for a good portion of this increase in the estimated investment of the Agenda. Thus, when we look at the evolution according to the progress made in the project lifecycle, on April 5, 2005, AIC Project 5 was in the pre-execution stage, where it remains so far. The first major leap in its investment estimation occurred in 2008, when a decision was made to modify the technical solution of the project. The second investment estimation readjustment took place in 2010, as project studies progressed.<sup>40</sup>

The second project requiring significantly greater investment is AIC Project 22, “Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers,” of Peru, in the Amazon Hub, the estimated investment of which climbed from US\$514 million in 2005 to US\$1,351,300,000 in 2010 (see Table 4), as a result of adjustments made in the appraisal of its different components, particularly the port of Callao, the Ramiro Prialé - Puente Ricardo Palma freeway, and the Tingo María - Pucallpa road.

Two further cases contributing significantly to the growth experienced in the total investment of the Agenda are AIC Project 24, “Paving of Iñapari - Puerto Maldonado - Inambari Road, and Inambari - Juliaca / Inambari - Cusco Roads,” in the Peru-Brazil-Bolivia Hub, the estimated investment of which jumped from US\$694 million in 2005 to US\$1,384,300,000 in June 2010 (see Table 4). In this case, the progress in the studies is clearly the determinant of the investment adjustment. When the AIC was established, this project was at the beginning of its final study phase.

Another major case, in terms of its share of the investment amount of the Agenda, is AIC Project 1, “Upgrade of Route 14 to a Four-lane Road,” which grew from US\$370 million in 2005 to US\$780 in 2010 (see Table 4). Again, the investment estimation was made when the project was still at the preparation phase.<sup>41</sup> In fact, when the project was included in the Agenda, it was in the pre-execution phase, moving to execution in 2008, i.e., the year when the required investment soared to US\$780 million.

This quantitative leap in investment in the first stage of the AIC is a symptom of the evolution of the projects and, hence, a step forward in their implementation, which is precisely what the Agenda pursues.

This cost adjustment has affected almost all the AIC projects. Table 4 shows this year-to-year evolution and, although the investment amounts stated for the AIC upon its approval in 2004 are taken as the baseline, it is more realistic to consider as a starting point the 2005 estimation, resulting from calculations made to prepare the Project Guides in the GTE meetings for the AIC Monitoring and Intensive Management held that year. In many cases, the 2005 figures already reflect significant changes as compared to “Annex 3: Implementation Agenda Based on Consensus,” which is the CDE-crafted document whereby the AIC was created in 2004.

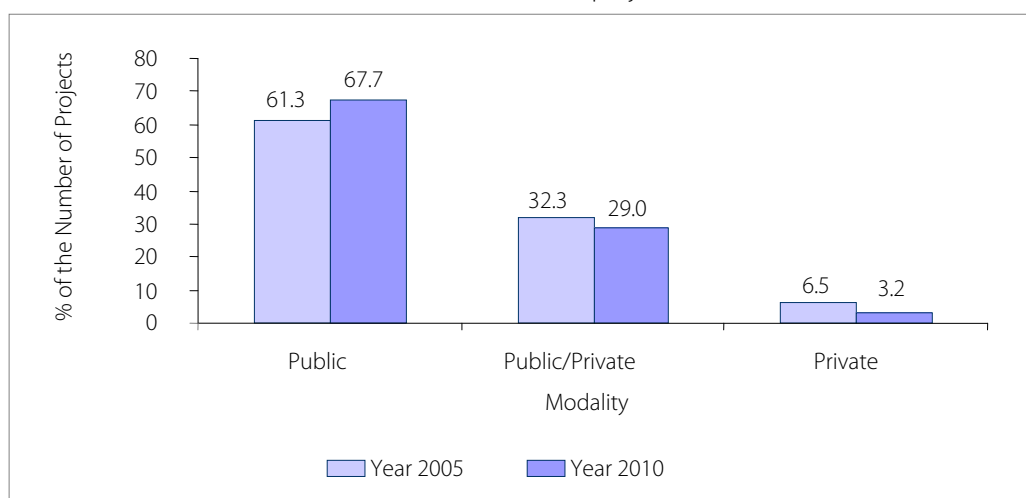
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<sup>40</sup> According to SIGE, the status of the project as of June 14, 2010, was as follows: “The first financial and economic rail- and tunnel-related studies were submitted in April 2009, and were recently completed.”

<sup>41</sup> According to the Project Guide, as of April 2005, only the feasibility study for Section 1 (Provincial Route 16 Junction/Provincial Route 20 Junction) had been completed, while for the remaining eight sections, the feasibility study was still in progress.

Furthermore, brief reference should be made to the financing modality originally planned for each one of the AIC projects, which has remained stable when year 2005 is compared to the present. In this regard, funding sources are distributed as follows: 67.7% of the AIC Portfolio is publicly funded, 29% has public-private financing, and only 3.2% is funded by the private sector, as shown in the figure below.

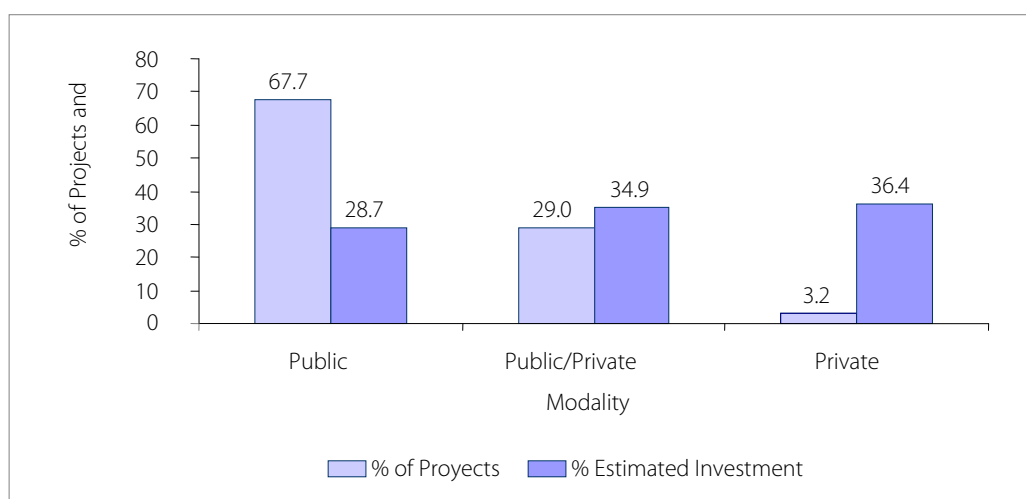
Figure 2: Evolution of the Financing Modality of the Projects in the AIC 2005-2010  
(% of the number of projects)



Source: Prepared by IIRSA based on the AIC annual reports from 2005 to 2010.

In this same respect and as can be seen in the figure below, publicly-funded AIC projects (67.7%) account for about 28.7% of the total investment of the Agenda Portfolio, while, although the private-public modality is present in 29% of the AIC projects, it represents an investment of 34.9%, contributed, to a large extent, by the Peruvian projects (AIC Projects 21, 22 and 24), which, as mentioned above, require considerable investment. There is only one privately-funded project, accounting for 36.4% of the total AIC investment, which is explained by the fact that this project —the Los Andes-Mendoza railway— requires a huge investment effort.

Figure 3: AIC Projects by Investment Modality  
(% of number of projects and investment)



Source: Prepared by IIRSA based on the AIC 2005-2010 annual reports from 2005 to 2010.

Finally, it should be noted that the strategic importance of the AIC projects and the priority attributed to them by the countries has focused the attention of the international organizations on them, particularly of the CCT, to assist them either in the pre-investment studies or in the construction of the works. In this regard, the three financial institutions that make up the CCT (the IDB, CAF and FONPLATA) support or have supported, in their preparation or execution phase, 20 of the 31 projects in the Agenda, which accounts for some 65% of the AIC projects. The total investment required for these 20 projects is US\$6,472,700,000.

## Evolution in Terms of Time Frames and Execution Phase of the Projects

Under this heading, an overall analysis of the compliance with the time frames initially estimated for the AIC execution (see Table 1) is offered. It can be seen that, in spite of the initial aspiration to complete the projects in the Agenda between 2005 and 2010, only two of the 31 projects were completed in this period (AIC Project 25, “Bridge over the Acre River,” and AIC Project 27, “Bridge over the Takutu River”). Moreover, almost all projects (26) are today scheduled to be completed between 2011 and 2020. The following is a summary of this information:

Projects completed in 2005-2010	2
Projects scheduled to be completed in 2011	12
Projects scheduled to be completed in 2012	7
Projects scheduled to be completed in 2013	2
Projects scheduled to be completed in 2014	3
Projects scheduled to be completed in 2016	1
Projects scheduled to be completed in 2020	1
Projects with completion date pending definition	3
<b>TOTAL</b>	<b>31</b>

In all cases, a significant gap exists between the completion date scheduled when the Agenda was agreed upon and the presently expected date of completion (see the Annex). The resulting gap ranges, in most projects, from two to six years.<sup>42</sup> The inaccuracy verified in the estimation of the investment required for the AIC, due to insufficient project preparation, is also reflected here.

The conclusion, therefore, is that the original aim of having the AIC projects completed by late 2010 was not achieved. Nevertheless, this does not necessarily mean that the AIC failed to fulfill its mission to speed up project implementation. One first aspect worth considering is whether the AIC projects would have progressed to the same extent had they not been incorporated into the Agenda. For obvious reasons, this question is hard to answer. From the interviews conducted with the project managers between May and June 2010, however, there appears to be general consensus that the inclusion of projects in the AIC gave them visibility, at both national and regional levels, which has contributed one way or another to their prioritization.

Overall, with the exception of the projects that for political reasons have ceased to be a priority for any of the countries involved, as is the case of projects involving Venezuela, the delays have been due to bureaucratic contingencies or changes in the definition of the projects in terms of the extension of the study period or the works time frames.

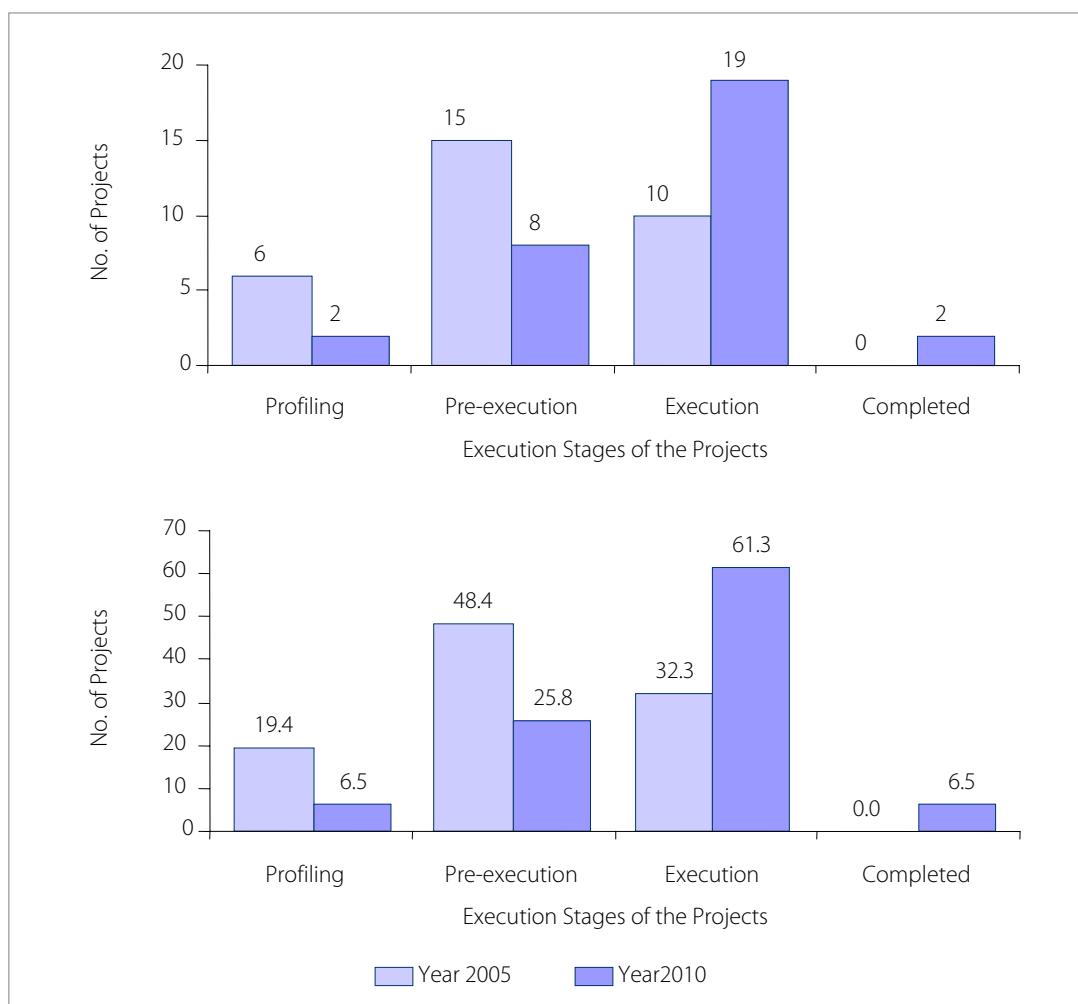
<sup>42</sup> The twelve and a half-year difference in the Railway Project Los Andes-Mendoza is considered atypical and the product of a special situation verified in this project.

Considering different AIC completion scenarios, we would obtain a 45% completion ratio if its duration were extended to December 2011, and a 61% completion ratio if it were extended by two more years, until 2012. According to current estimations of completion dates, 77% the AIC projects would probably be completed in 2014. This would imply that, of the total 31 projects, 14 of them should be completed by late 2011, 19 by late 2012, 21 by late 2013, and 24 by late 2014.

A second reading of progress compliance in terms of the evolution of the execution stages, based on Table 1, is as follows: in 2005, there were 10 projects (of a total 31) in execution. As of June 2010, nine additional projects had progressed from the profiling and/or pre-execution phase to the execution phase, and two had been completed; that is, 68% of the entire Agenda is either at the execution phase or completed, and only two projects —AIC Project 18, “Cúcuta - San Antonio de Táchira Border Crossing,” and AIC Project 28, “Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage)” — are still in the profiling stage.

The figures below depict the evolution of the execution stages of the projects, comparing year 2005 with the current status.

Figures 4 and 5: Evolution of the Execution Stages of the AIC  
(Number of projects and %)



Source: Prepared by IIRSA based on the AIC 2005-2010 annual reports from 2005 to 2010.

Therefore, the mere fact that 61% of the AIC projects is in the execution stage, compared to 32% in 2005, and that 6.5% of them has already been completed evidences that the South American countries' integration agenda, in terms of physical integration, is in the process of being accomplished thanks to the impetus given to the projects selected due to their high impact on the region. This has great significance, not only because of the construction of physical works and their potential impact, but also because of the integration process itself (agreements, talks, consensus-building) that is taking place within each one of the countries as well as between neighboring countries, in spite of the technical, economic, financial, and political hurdles as may be encountered.

## Evolution of the Projects in Terms of the Political Aspects Impacting on Them

As already seen, while the Agenda projects are characterized for impacting highly on South American physical integration, they also require important political backing to ensure their execution, especially in those cases in which they are not financially self-sustainable or involve huge investment amounts.

As an example of this, we can mention projects such as AIC Project 8, "Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center," which, despite having undergone an intricate negotiation process to meet the social demands of the towns located on the borders of both countries, has received precisely political prioritization by the governments of Argentina and Bolivia, which has contributed the most to overcoming difficulties and, thus, kept the process going.

There are, however, other projects where the lack of political consensus has caused delays or deadlocks in their progress. The binational (Colombia - Venezuela) projects AIC 18, "Cúcuta - San Antonio de Táchira Border Crossing," and AIC 19, "Improvement of Navigation Conditions on the Meta River," are hindered by problems related, in the former project, to "Venezuela's withdrawal from the Andean Community of Nations (CAN)" and, in both projects, to Venezuela's position with respect to the "purpose of and proposed solution for the projects." Supposedly, these aspects had been agreed upon by consensus when these projects were made a part of the AIC, yet Venezuela claims that they must be reviewed entirely. In addition, AIC Project 28, "Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage)," is dependent upon an agreement being reached among the three countries involved. Likewise, AIC Project 11, "São Paulo Ring Railway (Northern and Southern Sections)," is delayed due to a lack of consensus between the Brazilian federal government and the government of the state of São Paulo. The key to unlock these projects is, thus, in the political sphere.

In spite of the situations described in the paragraph above, it is important to note that in most binational cases, the same strategic and priority ranking that influenced the decision to include the projects in the AIC has mobilized and generated the necessary political backing and consensus to give stimulus to the projects and make headway in this respect. And it is here, as mentioned above, where the integration project possesses an intangible value that far transcends the construction of works.

## Innovative Management Examples

Under this heading, reference should be made to the Peruvian projects in the AIC, as they were pioneers in the implementation of solutions aimed at working out the problem of financial self-sufficiency and secure road infrastructure execution through an innovative solution originally designed to ensure the viability of the IIRSA ventures that this country established as its priority projects and that today is being applied in other areas as well (ports, airports, sanitation, electricity, among others).

This groundbreaking solution consisted in the financial structuring of road concessions under the public-private partnership (PPP) modality for the roads known in Peru as “IIRSA Norte” and “IIRSA Sur,” i.e., the Paita - Tarapoto - Yurimaguas Road, which is a component of AIC Project 21 (which also includes ports and logistic centers); and the Paving of Iñapari - Puerto Maldonado - Inambari Road and Inambari - Juliaca / Inambari - Cusco Roads (AIC Project 24), that is, sections 2, 3 and 4 of the concession of the commonly named “Southern Interoceanic Road Corridor,” which further includes sections 1 and 5 leading to the ports on the Pacific Ocean.

What is innovative about this financial scheme is that it is a State co-financed PPP, as toll revenue was insufficient to afford the investment required. In a co-financed project, the State undertakes to make future regular payments to the concessionaire, which thus is able to cover the initial capital investment through the Annual Payment for Works (PAO - *Pago Anual por Obras*), as well as the maintenance expenses through the Annual Payment for Maintenance and Operation (PAMO - *Pago Anual por Mantenimiento y Operación*). During the term of the concession contract, the concessionaire receives the PAO plus the PAMO in consideration for service delivery.<sup>43</sup>

A new kind of asset designed to finance projects and concessions has been created, consisting in the Certificates of Acknowledgement of the PAO (CRPAOs - *Certificado de Reconocimiento del Pago Anual por Obras*), defined as an “undertaking by the Peruvian State to make regular payments to the concession holder. Once approved, as work progress is verified upon achievement of certain milestones, the CRPAOs may be transferred to third parties, who thus also contribute to financing the project (financial leveraging). The concession holder only funds with its own resources the execution of the works required to reach the first milestone, and from there on, the subsequent requirements may be financed with funds sourced from the capitals market through the assignment of the CRPAOs issued. When they were issued, the IDB granted a partial credit guarantee backing the payment obligations of the Peruvian State.”<sup>44</sup>

For its part, CAF provided “support throughout the process, from beginning to end: financing of feasibility studies (US\$3.5 million); independent verification of the concessionaires’ technical solutions and of the impacts on costs; advice to the government of Peru to ensure the ‘bankability’ of the concession contracts and intermediation in discussions among the government, concession companies and finance providers; bridge lines of credit (US\$200 million) to allow prompt commencement of works; a revolving partial credit guarantee (PCG) for up to US\$280 million to support private financing structuring; a parallel program to address immediate environmental management actions in the area of influence.”<sup>45</sup>

Hence, this is a case where the conditions characterizing the AIC were verified to be met: high economic and social impact of the project, high political priority, and joint efforts by the governments and multilateral agencies to ensure project advancement.

Another element worth noting is the focus shift from a public “works” to a public “service” perspective, where the concessionaire becomes accountable not only for the construction of the works but also for the operation with a long-term vision. This results in the creation of efficiency incentives, as the risk associated with proper quality service delivery (operation and maintenance) is transferred to the concession holder. IIRSA Norte and IIRSA Sur PPPs in Peru were also pioneers in this regard.

The Pasto - Mocoa road also deserves special mention. It was built by the 1930s, meeting very low technical standards, thus limiting vehicle traffic as well as the commercial and economic development of the region. The lack of a road with better specifications hinders the integration of the southern region of Colombia with

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<sup>43</sup> See Zaira Rojas, Henry. “Concesión del Corredor Vial Interoceánico Perú-Brasil.” Ministry of Transport and Communications of Peru, in IIRSA, “Taller de Casos Exitosos.” Bogotá, Colombia. November 4, 2008.

<sup>44</sup> Ibid.

<sup>45</sup> Wulff, Francisco. “El Caso Interoceánica Sur (Perú) como un Ejemplo de Asociación Público-Privada.” Material for the Course “Integration and Development of South American Regional Infrastructure,” organized by IIRSA-ECLAC. Santiago, Chile. October 6-10, 2008.

the neighboring regions of Ecuador, Peru, and Brazil. This road is part of the Tumaco - Pasto Mocoa - Puerto Asís Road Corridor (AIC Project 20), and constitutes an example of a complex, difficult AIC project that has managed to move ahead, overcoming the obstacles encountered on the way. In this respect, the rugged geography of its territory, its rich environment, and the social and political complexity of the region called for a detailed diagnosis of these issues, as well as for the design and implementation of an ambitious program of measures intended to secure the conservation of the natural heritage and the promotion of the sustainable development of local communities. Both endeavors were self-financed and supported by a strengthened public institutionalism capable of overseeing program compliance. The value added to this project raised the standard of IIRSA projects overall and not only deserved the recognition of multiple stakeholders, including local and international civil society organizations, but also became an example of successful resolution of social and environmental issues.

Another project that has proved emblematic within the framework of IIRSA is that of Exports through Postal Services for SMEs (AIC Project 30), submitted for consideration by the representatives of IIRSA member countries by the Ministry of Communications of Brazil, on the basis of the successful experience of this exporting mechanism in this country.

This project is a clear example of how its inclusion in the AIC has significantly contributed to its advancement, IIRSA becoming the regional coordination space leveraging cooperation across the countries and assisting in the implementation of the project in the interested countries. This endeavor is further supported by international agencies.

Activities in this project have grown since its incorporation into the AIC, and have become particularly assiduous in recent years. As of June 2010 —without considering Brazil, where the project is already operational— activities are underway or about to begin in nine of the twelve member countries of IIRSA, with different degrees of progress, and the system is fully operational in Peru, Uruguay, and Colombia, as well as, of course, in Brazil, its pioneer.

The activities in progress or completed within the framework of IIRSA in relation to this project are an example of a cooperative venture where mutual lessons are learned. We should note that a regional work team has been established, with a network of technical experts from Brazil, Peru, Uruguay, and Colombia —where the project is already in place— who may lend support to the activities to be carried out in the countries where major strides are being made in the implementation of this export through postal services system.

In closing, as already seen, it is worth saying that the successful experience of this project within IIRSA has caught the attention of many other countries outside the South American subcontinent, which evidences how much more visible the project has grown since its inclusion in the AIC.

## Final Remarks

The AIC projects have made headway even when their execution has failed to progress within the originally established time frames. This progress involves tangible and intangible elements deriving from the launch of the physical integration process. The tangible aspects appearing from the analysis of the status report of the projects are the works or studies underway and/or completed. No less important are the intangible results that followed from understandings reached among countries and the political willingness to set in motion often complicated projects. Indeed, a strong political commitment and the willingness to build consensus across nations has many times been the main driver boosting project implementation.

As for cross-border infrastructure, although there are major difficulties in some cases, there are also concrete examples in the AIC of binational agreements, creation of joint commissions, dialogue and cooperation, among other efforts.

The AIC “seal” within IIRSA has translated into an enhanced visibility of these projects and contributed to the progress of works. In addition, their status as strategic projects of the IIRSA Portfolio, coupled with the dissemination stemming from their inclusion in the AIC, has ensured readier access to financial resources, particularly from multilateral institutions.

None of the 31 projects has met their originally scheduled time frames. This having been said, 28 of them have achieved different degrees of progress and the remaining three are facing difficulties whose solution is pending. The projects that did move forward can be broken down as follows:

- Two projects have been completed.
- Fifteen projects have progressed properly, facing minor difficulties of various types, attributable to the very characteristics of the works involved.
- Three projects have encountered financial obstacles that have been overcome.
- Another three projects have faced bureaucracy-related problems, which have been overcome thanks to the political willingness to solve them.
- Five projects have been forced to extend their design time frame due to a redefinition of the technical or environmental solutions adopted.

## Chapter V.

# INTENSIVE PROJECT MANAGEMENT AND THE STRATEGIC MANAGEMENT INFORMATION SYSTEM (SIGE)

This chapter examines the level of compliance with the goals established for the intensive management of the AIC projects and the use of its related monitoring tool: SIGE. The reasons for which the intensive management method failed to be adopted are explored, and an analysis is presented of how successful SIGE was as a tool designed to monitor obstacles and facilitate cooperation, both by the governmental spheres and by the CCT member institutions, in the process to advance the effective execution of the projects in the Agenda.

As discussed in the previous chapter, boosting the execution of the AIC projects was a permanent concern of the GTEs of the Initiative; yet, this effort did not translate into the application of result-oriented intensive project management, of which SIGE would serve as a support tool.

Firstly, some conceptual aspects of intensive management of strategic projects are presented; then applicability of this method to the AIC is analyzed and, finally, the efforts made to implement SIGE are discussed. The chapter ends with an assessment of SIGE five years after its launch as the monitoring tool of the AIC projects within the framework of IIRSA.

## Intensive Management of Strategic Projects

Result-oriented management of strategic projects is a method widely used in countries outside the region, gradually replacing bureaucratic management —in which the focus is typically placed on intermediate activities, resulting in slow processes and also lack of communication and cooperation among departments or functions of one organization and across organizations, all of which prevents results from being attained and increases costs for public administration institutions.

This is a tool designed to suit a new public governance paradigm, i.e., result-oriented management, which, although still hardly adhered to in South America, has been gaining strong impetus over the last 15 years and constitutes a movement led by countries with a British institutional matrix (the United Kingdom, Australia, New Zealand, Canada).<sup>46</sup> For its part, Brazil has 14 years of experience in the use of this method, which has

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<sup>46</sup> IIRSA. Workshop on Intensive Result-Oriented Management of Strategic Projects. Rio de Janeiro, Brazil. August 9-10, 2006. Presentation by Marcel, Mario: "Bureaucratic and Budgetary Management Related to Results: International Experience."

been implemented in more than 15 cases at federal, state, and municipal government levels. Particularly well known is the successful case of the governments of the state of São Paulo<sup>47</sup> and, more recently, of the state of Minas Gerais, in Brazil.

The rationale behind this management method is not just that project execution demands exceed available resources. Even if sufficient resources are available, management or administration capacity may become a bottleneck hindering project progress.

This tool entails a new monitoring concept that is not defined as “tracking” the execution of a project but as removing the obstacles that may hinder its advancement. Major transformations are required, not only of methods, but also of the attitudes and positions of the officers and professionals involved in the process, as well as a huge effort to change habits and encourage a particular way of approaching tasks, characterized by a proactive, problem-anticipation attitude.

In the realm of public administration, the occurrence of non-financial restrictions delaying, freezing, and sometimes even preventing the implementation of projects is not infrequent. Typically, these are restrictions that a project manager cannot resolve at an operational level. In many cases, their solution depends on the coordinated action of different government bodies and the involvement of strategic-level authorities. In these cases, the intensive management modality is useful because it is capable of monitoring and detecting such obstacles, as well as preparing the necessary information and making it available to the executive management so that the proper decisions may be made.

A management information system allows different duly empowered players involved in the execution of a project to learn, in real time, about its evolution, planning, critical milestones, and problems so that they may take the required actions within their competence. In isolation, however, a management information system does not intensify management. Its value is dependent upon the set of elements that make up the intensive management method.

Administrations run a very common risk of thinking that an IT system may work per se as a management system. In point of fact, an IT system is only a tool allowing the people involved in monitoring tasks to communicate. In the absence of the conditions for those individuals to effectively conduct strategic management, the IT system will not fulfill its purpose and strategic management will not work properly.

Hence the attempt to implement intensive management and use SIGE as the support tool enabling communication and cooperation among all the players involved in each AIC project, at the national level as well as between country pairs. In the case of binational projects, this was a highly ambitious aim that IIRSA pursued and, although it translated into significant efforts, as will be seen below, expectations that it would become consolidated were not realized.

## Success Factors

For intensive management of strategic projects to work successfully, three key factors, or conditions for success, should concur:

- Strong political support to boost the execution of projects, which results in their implementation priority being decided at the highest government level

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<sup>47</sup> Ibid. Pereira Vieira, Saulo: Planning and Evaluation Coordinator, Economy and Planning Secretary of the State of São Paulo, “Strengthening of the Management of Strategic Planning, Government of the State of São Paulo 2005-2006.”

- A strategy driven by a long-term vision shared by the different actors involved in the implementation of projects
- Project monitoring and management capacity, which implies having a project follow-up team or head with direct access to government decision-making levels

The explicit political support of the highest-ranking authorities is of the essence to ensure effective cooperation among the entities involved in the implementation of the project and that resource allocation is given priority to this end. Likewise, a shared long-term vision helps create a “cooperation environment,” where contributing to the solution of a problem occurring in the project is the main reference for the coordination of the different members of the management team.

Finally, within the monitoring team of a project, the performance of the Manager (or the person responsible for the follow-up of the project throughout its stages) is a key factor that should be characterized by an enterprising (rather than bureaucratic) attitude, troubleshooting skills, capacity to develop a network of collaborators from the different entities participating in the project, continuous communication efforts addressed to all stakeholders, and constant team motivation. Another decisive aspect is a prospective focus to minimize project-threatening risks, which is known as “restriction management”<sup>48</sup> in the monitoring system.

A problem identified in the information system (Critical Stages and Restrictions) should be addressed with full determination and absolute priority. The management levels effectively empowered to solve the problem should be given notice. The actions taken should be monitored. The commitment and motivation of the teams involved in monitoring tasks should be regularly and systematically stimulated to sustain the cooperation environment.

## Intensive Management and the AIC 2005-2010

The AIC, adopted at the Sixth Meeting of the CDE in Lima, 2004, features 31 selected projects and an intensive management scheme. Both elements make up the Agenda, designed to focus and intensify the management efforts of IIRSA to ensure that South American infrastructure integration projects were actually brought to completion.

Thus, the CDE resolved that an intensive, focused project management modality should be adopted through the creation of a special system for the monitoring of the Agenda projects. With that purpose in mind, it decided to patronize the creation of an Agenda follow-up system in each country. This would allow the generation of information and monitoring mechanisms at the highest-ranking government levels.<sup>49</sup>

It was also agreed that special importance would be given to the coordinated actions of the governments and multilateral agencies in order to overcome the obstacles preventing projects from moving ahead, according to the procedures detailed in a document approved by the Ministers (Annex 3 of the Minutes of the Sixth CDE Meeting, 2004).

- “The IIRSA National Coordination in each country will be responsible for following up the pertinent priority project in the ‘Agenda’ with the objective of identifying in a timely manner and with the support of the CCT, if the so case requires, problems that may arise in the agencies and/or countries in the preparation or execution of such project. [The IIRSA National Coordination] shall articulate all the government levels involved in the project implementation process, thus helping to overcome any obstacles that could arise.”

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<sup>48</sup> Ibid. Silveira, José Paulo: “Strategic Project Management System” presentation.

<sup>49</sup> IIRSA. “Implementation Agenda Based on Consensus 2005-2010.” Annex 3, p. 4. Sixth CDE Meeting. Lima, Peru. November 23-24, 2004.

- “When a CCT Hub coordinator is informed of a problem in the preparation or execution of a project under his/her responsibility, such coordinator must suggest to the proper levels of the CCT institutions and to the IIRSA National Coordination the necessary measures to overcome such restrictions.”<sup>50</sup>

To ensure that Ministers, not only those responsible for infrastructure but also those in the economic area, as well as the highest-ranking officers in the CCT agencies, who typically interact with country ministers and authorities, were informed promptly and systematically of any major difficulty, the information should be of the highest quality and as up-to-date as possible. Hence, the entry of data into the special monitoring system had to be prompted, assessed, and reviewed on a continuous basis by the National Coordinators, the CCT officers responsible for each project, and the CCT Secretariat.

SIGE was thus devised as the AIC progress monitoring tool, and a new group of IIRSA-related actors came into play: the AIC Project Managers.

## Key Players and Basic Components

The Project Manager position completes the so-called “management team” in each AIC project and plays a key role in the scheme. In theory, the Manager is responsible for the project, which encompasses the management of all its preparation and execution phases, in conformance with the procedures established in each country. His/her role is also essential because he/she is the one who loads information into the special project monitoring system.

One manager was appointed for each national AIC project, and two managers (one for each country) for binational projects. In the cases of multinational projects, one “multilateral” and one national manager for each country involved in the project were appointed. In sum, there are 16 national project managers, 23 binational project managers (excluding the case of AIC Project 19, “Improvement of Navigation Conditions on the Meta River,” for which Venezuela appointed a manager only during the first year of the AIC), three managers for the only tri-national project in the Agenda (AIC Project 28, “Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage)”), two multilateral managers for the ICTs Sectoral Integration Process projects, and seven managers for the national components of one of these projects, AIC Project 30, “Exports through Postal Services for SMEs.”

A total of 50 Project Managers were linked to IIRSA by SIGE. It should be borne in mind, however, that this does not necessarily mean that there are 50 new players, as many projects share the same Manager. In addition, neither does it imply, as will be seen further on, that the country-appointed managers were actually “responsible for the project,” a condition that intensive management entails.

In the monitoring system, the definition and follow-up of the assessment of the “Critical Stages” in the implementation of projects constitute the most crucial aspect of strategic management, where knowledge is contributed about problems and restrictions deserving actions that far transcend the traditional ones. For the initial SIGE data input, a list was built for each project of the key stages pending execution, containing a summary description, a detailed indication of the decision required to go past such stages, and the identification of the competent body as well as other bodies bearing on this outcome.

In addition, the possible restrictions and the actions that the Manager deemed necessary for the timely completion of each stage were identified. The importance of the Manager’s role is made evident by the fact

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<sup>50</sup> Ibid., p. 4.

that he/she can review the scheduling of the Critical Stages at any time, by furnishing the required information leading to “Restriction Management,” which is a SIGE-specific field.

Restriction Management is clear proof that SIGE is not a mere information system but a cooperation space. Restriction Management is the set of actions conducive to overcoming obstacles blocking the progress of a project and, according to the initial conception of SIGE, these actions should engage the Manager, who is responsible for the project, the National Coordinator, who is a “strategic facilitator,” and the Hub or Project Coordinator, on behalf of the CCT, who has come to be called “CCT Contact for Monitoring” (as recorded in SIGE).

SIGE allows authorized users to make online queries, and features a warning system that notifies the relevant stakeholders of the status of critical activities and expiry dates, with a view to expediting decision-making. This is based on the assumption that the data entered by the Manager is accurate and permanently updated. Otherwise, the system does not work.

Reciprocally, for the system to work, country Project Managers need to see that the problems identified in the monitoring systems do indeed trigger the quick response of their authorities and the CCT, who should provide solutions and cooperate with management teams so that obstacles are indeed overcome. What is of the essence is that the problems identified should reach government decision-making levels.

In sum, the special AIC 2005-2010 monitoring system relied on two pillars: (i) the adoption of a commonly accepted work methodology reflecting intensive project management concepts and procedures; and (ii) the development of a management information system.

## Expected Benefits

The management method and its related information system, in this effort to customize the intensive management methodology to IIRSA, were conceived of as instruments intended to help foster the creation of a “multilateral cooperation environment,” characterized by the constant action of National Coordinators, Project Managers, country authorities, high CCT spheres, and officers from the CCT member banks in favor of the AIC projects.

Through the sharing of information as well as the mobilization of competences, decision-making capabilities, and financial and technological resources, the process was expected to bring about a proactive, trouble-anticipation attitude that would enhance the chances for success of the Agenda projects.

This ambitious goal involved not only launching the SIGE tool in a group of countries and bringing about the attitudinal change needed for a result-oriented management method to work, but also doing so in a multilateral context.

In spite of the fact that intensive management of strategic projects brings enormous gains in other contexts, its implementation in the context of IIRSA failed to be accomplished. SIGE was not used as a tool allowing the strategic monitoring of the projects that make up the Implementation Agenda based on Consensus. The information entered in this system contributed neither to the removal of the obstacles hindering the progress of the projects nor to the making of decisions in relation to these obstacles.

Nevertheless, significant efforts were made and lessons were learned through this experience, which we will attempt to highlight throughout this chapter.

## Launch of Intensive Management and SIGE

The preparatory work for launching SIGE was initiated in 2005 and went through the different stages summarized below.

In 2005, the AIC 2005-2010 Intensive Management and Monitoring GTEs met to plan the process of intensive management of the Agenda projects and structure their monitoring system. The work was conducted on a project-by-project basis, and its outcome was a basic and strategic information document designed to support the intensive management process for each project in the Agenda that served as the basis of the initial information entered in SIGE.

In 2006, special emphasis was placed on consolidating and streamlining SIGE. During the first four-month period of the year, eleven technical missions were sent to the countries, where 43 Project Managers received training. These technical missions, conducted by a team made up of consultants and members of the CCT, were intended to generate a “work network” and encourage an intensive management environment in each project and country.

The information recorded in the system was reviewed and improved together with the appointed Managers and, in particular, special efforts were made to enhance the quality of the information regarding the Critical Stages, in view of the fact that, as mentioned above, this field is of crucial importance for the type of strategic monitoring that SIGE sought to support. As a result of the technical missions and the suggestions gathered in the different countries, some operating improvements were made with the goal of rendering SIGE a more useful tool.

On August 9 and 10, 2006, the IIRSA Workshop on Result-Oriented Management of Strategic Projects, intended for National Coordinators and AIC Project Managers, was held in Rio de Janeiro, Brazil. The purpose of this workshop was to give IIRSA member countries and result-oriented strategic project management specialists the chance to share their experiences, as well as to strengthen the National Coordinators and AIC Project Managers’ training in intensive project management, and, finally, to assess the implementation of SIGE, with special emphasis on the management of restrictions and the progress made in the implementation of the 31 projects included in the Agenda.

At that time, the aspiration was “to form an informal South American network composed of project executors who have the aim of working for the physical integration of the Region.”<sup>51</sup>

This event was an opportunity for Project Managers, National Coordinators, CCT Project Heads, and other participants to exchange information about the projects, share implementation problems and solutions, as well as discuss how the AIC management system could be improved and used to best support the execution of projects. The focus of the debate was thus placed on sharing experiences rather than on the details of the execution of each project. Already at this early stage the existence of certain problems became evident and, as they were not solved throughout these years, the implementation of the AIC intensive management has not been possible; hence, SIGE has been rendered useless.

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<sup>51</sup> CCT. “Guidelines containing the working methodology of the work groups at the Workshop on Result-Oriented Intensive Management of Strategic Projects”. Rio de Janeiro, Brazil. August 9-10, 2006.

## Conclusions of the 2006 Workshop on Intensive Management of AIC Projects

The conclusions of the workshop held in Rio de Janeiro, Brazil, reflect the opinions expressed by the countries during an exercise at which they were asked four questions designed to prompt experience sharing. The following is a summary of the conclusions and recommendations contributed by the participants.

*First Question:* How can the new management model help to overcome the difficulties encountered during project implementation?

*Diagnosis 1:* SIGE facilitates project management; yet, it cannot turn an individual into a Manager.

*Conclusion 1:* In result-oriented management, a Manager's response capacity and proactive attitude are essential for the successful implementation of projects.

*Recommendations 1:*

- (i) In certain cases, there are Manager empowerment problems. Therefore, it is crucial that efforts be made for the purpose of ensuring that his/her function in SIGE gains further visibility in project-related government spheres, which will result in enhanced project management efficiency.
- (ii) Managers have very dissimilar profiles, which impacts on their role and responsibilities. To ensure proper SIGE operation and the intensive management of the AIC, the country-defined manager should come as close as possible to fulfilling the role expected to be performed by the "natural" project managers, i.e., those who have the greatest influence on the day-to-day management of projects.
- (iii) It is recommended that countries strive to find the means to overcome intensive management problems, bearing in mind the reality that managers are often unable to be devoted full-time to this function.
- (iv) A project-by-project assessment is required to be conducted to have a reliable picture of the status of the 31 AIC projects.

*Diagnosis 2:* Basically, SIGE is being used as an online information system providing data about the up-to-date progress status of projects.

*Conclusion 2:* SIGE has not yet contributed to the management and solution of problems in projects because (a) the roles have not been fully assumed by SIGE operators; and (b) SIGE does not reach decision-making levels.

*Recommendations 2 (a):*

- (i) All AIC-involved players should have a better understanding of SIGE as a management tool in terms of its IT as well as operational aspects.
- (ii) Intensive project management should be aimed at decision-making; therefore, greater emphasis should be placed on the management of restrictions. In keeping with this, a proposal was made for the creation of best-practice discussion forums on result-oriented project management.
- (iii) Since some managers and national coordinators were unable to attend the workshop, the lessons learned and the action plan to be implemented from then on in relation to the AIC intensive management should be made available to them.

*Recommendations 2 (b):*

- (i) The mechanisms or opportunities should be created for the authorities and decision-making spheres to become aware of SIGE.
- (ii) Measures should be taken to make sure that the CDE member Ministers and other officers empowered to make decisions in relation to the AIC learn about the efforts made to implement intensive management, the existence of Project Managers and management teams, and the benefits they might derive from using SIGE as a support tool.
- (iii) To secure greater acceptance, the comparative advantages of SIGE against other systems internally applied by each country should be highlighted, particularly the “value added” that SIGE represents as it provides a regional, collective vision of South America.

*Second Question:* What kind of support may the Project Manager expect to receive from the National Coordinators?

*Answers:*

- (i) Provide access to political contacts. Favor and lead a strong coordination with government entities regarding projects. Serve as the “bridge” that provides access to decision-making levels.
- (ii) Introduce the Manager to the relevant project stakeholders and contribute to ensuring multi-sector coordination. This is an important aspect because the main structural limitation has been identified to be project management bureaucracy and, to address it, inter-ministry coordination and access to information are critical.
- (iii) Conduct regular meetings, as well as national and binational workshops, with Project Managers for the purpose of assessing how projects are progressing jointly and with their counterparts in the case of binational projects, to which all stakeholders should be invited.
- (iv) Provide the Manager with permanent feedback as to the headway made by IIRSA (National Coordinators and CDE meetings).
- (v) Contribute to internal dissemination and awareness-raising in relation to the AIC projects and IIRSA overall.

*Third Question:* What kind of support may the Project Manager expect to receive from the CCT heads responsible for the project?

*Answers:*

- (i) Given the lack of continuity of project-related authorities and officials, the CCT Project Heads may act as a project continuity factor to ensure that the priority status of the project in the highest-ranking spheres is maintained.
- (ii) In intensive management, the CCT Project Heads should have the role of a catalyst. Their inclusion in the project management team should not be a mere formality. They should make proposals and be more active in the efforts intended to overcome restrictions, as well as in the definition and start-up of projects.
- (iii) The AIC projects should be given preferential treatment by the CCT in relation to their financing, in terms of both resource allocation as well as the reduction of lead times for completing technical cooperation/funding operations.
- (iv) Technical cooperation should be available to ensure the exchange of experiences about the intensive management of the AIC projects.
- (v) The CCT should organize more Manager training events focused on the definition of critical stages and restriction management.

*Fourth Question: Is any further change required to be made in SIGE?*

*Answers:*

- (i) Improve system operation to ensure it is more user-friendly and efficient.
- (ii) SIGE should include more communication tools to facilitate the management of binational projects. Project management should be simultaneous, so that it enables a real interaction and the performance of duly justified checks. Likewise, electronic communication between the national chapters of the AIC multilateral projects should be encouraged.
- (iii) Management of Restrictions: Further clarification is required in relation to their operation and definition. SIGE should also enable inquiries about and coordination of restriction management in the case of national projects whose execution is associated with actions of other countries involved.
- (iv) Define mechanisms and procedures for the translation of SIGE contents in the case of binational projects involving Managers speaking different languages.
- (v) Additional system changes or upgrades should be made based on project management experience. Hence, the functionalities of SIGE should be verified as it is implemented. In this regard, a proposal was made to add information about project management efficiency and efficacy.
- (vi) Allow the interaction of “non-confidential” SIGE information with the IIRSA website, so that the general public may learn about the main achievements and benefits of the projects. This information should also be disseminated to decision-makers so that they may become aware of the achievements of IIRSA.

In sum, even though the creation of a region-wide communication space enabling access to strategic information—which was the comparative advantage of the system relative to other similar tools available in the countries—was acknowledged as one of strengths of SIGE, its weaknesses were also pointed out, which basically consisted of the limited room for the players involved to maneuver, and a poor “internalization” of this modality in the national management schemes of the countries and the CCT agencies.

The general and specific action lines defined ended up being recommendations, the compliance of which failed to be tracked. In fact, the Rio workshop was the only event of this type conducted within the framework of IIRSA. Even though SIGE was discussed at the meetings of National Coordinators and the CDE, the focus was placed more on the output of the system than on the key actions required for it to be adopted as the basis for the intensive management of the AIC projects.

In this context, the initially detected problems failed to be worked out, and SIGE grew progressively out-of-date and lost applicability, in spite of some improvements having been added by the CCT to the IT tool (such as the discussion forum, e-mail triggering by SIGE, etc.).

## Intensive Management and SIGE: Five Years Later

This section will firstly touch upon several issues revealing that the management model and the monitoring tool were not used to their fullest potential. To this end, the quality of the information contained in SIGE was analyzed—where some inconsistencies were highlighted—and certain indicators of SIGE users’ operation difficulties were examined, which are a tell tale sign of the fact that the so-called “management team” did not work properly. Finally, the primary reasons for the problems encountered will be explored.

## SIGE Information Quality

As mentioned above, for strategic monitoring to be successful, high-quality, permanently updated data are essential. Some examples are indicative of the fact that this was not the case:

- Initially, the new management system generated expectations that motivated Project Managers to keep SIGE updated.
- With the passing of time and with intensive management not working as expected, the Managers began to update information upon the request of the CCT Secretariat on a date close to the issue of the AIC Annual Report, thus failing to reflect continuous follow-up. Therefore, a query to SIGE dated April 27, 2010, revealed that only one country had updated information in the Current Status field of its three projects, while for the remaining 28 AIC projects, the Current Status shown in SIGE kept reflecting the data as of April 2009. Moreover, the country that had updated SIGE as of April 2010 had done so in response to a request from the Secretariat (this country was the first to meet this requirement and, progressively, all the other projects have been updated as of July 2010, anticipating the preparation of the Sixth AIC Report).
- System updates are mostly required to be made in the SIGE field where the Current Status is reflected, but Physical Goals or Critical Stages scheduling is neither reviewed nor updated. By way of example, there is one project whose Status is updated as of June 2010; yet, it displays a Physical Goal scheduling dated 2005 to 2006. In addition, there is another project where the completion date is extended to 2016, but its Critical Stages are stated to end in 2009. There are other cases like these ones.
- Some information fields are empty. For instance, the information required to perform strategic monitoring has not been entered in the Critical Stages field in all of the projects. There are cases in which only the initial template has been filled out. However, each Critical Stage has a drop-down menu where the following data should be provided: a brief description of the Stage, the required decision, the key competent bodies, the related bodies, and the relevant previous actions required to be completed to go beyond the Critical Stage. The fact that these fields remain empty, with only the global template having been filled out, evidences that, in point of fact, information recording, rather than strategic monitoring, is what is being done.
- Only six of the 31 projects contain information about Economic as well as Social & Environmental Benefits. On the other hand, only in 11 of the 31 projects has some project-related documentation been attached.

In conclusion, the existence of inconsistencies and/or empty fields, in addition to the fact that data are updated for Annual Report preparation purposes and not on a continuous basis, explains why SIGE has become an unreliable source of information that can no longer be used as the basis for a strategic monitoring the output of which has any chance of reaching decision-making levels. Moreover, the changes of Managers throughout the lifecycle of the AIC added one further difficulty to the system.

## The AIC Reports

In fulfillment of the 2004 mandates of the CDE (Annex 3 of the Minutes), each National Coordinator would issue a bimonthly progress report for each project, with the support of the CCT if so required, to directly inform on a restricted basis all managerial levels involved in the project implementation, both at a country and at the CCT agencies levels. IIRSA Presidency, with the support of the CCT and on the basis of the bimonthly progress reports, would prepare a biannual report, which was to be distributed among the competent authorities of each country with a view to contributing to the creation of a shared implementation environment at the decision-making level.<sup>52</sup>

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<sup>52</sup> IIRSA. "Implementation Agenda Based on Consensus 2005-2010." Annex 3, p. 5. Sixth CDE Meeting. Lima, Peru. November 23-24, 2004.

Interestingly enough, the initial agreement talked about bimonthly reports on each project and a biannual report about the 31 projects, neither of which was ever drawn up. The AIC Report was issued once a year, another indicator that the originally planned intensive management did not occur at the expected pace. However, it is worth recognizing that the CDE Ministers, the National Coordinators, and the CCT institutions had online information available through the “Reports” of SIGE, a format specially designed to encourage the strategic monitoring of projects.

## Management of Restrictions

This is the field of SIGE where the difference between an information system and a strategic monitoring system is most noticeable. It is here where the “management team,” made up of the Project Manager and the National Coordinator, should enter the actions undertaken to overcome a restriction hindering the progress of the project, which has been recorded as such in this field by the Manager.

Thus, Restriction Management should be the most active part of the system. In fact, in the examples presented at the monitoring training meetings attended by strategic project management teams on occasion of the workshop held in Brazil, it was expressed that “all that is to be said must be in the system,” and that Restriction Management should be the most widely used field.

Conversely, in SIGE this field is mostly empty. Only in two projects have Restrictions been recorded, which might be an excellent indicator of the fact that the Agenda is progressing well. Yet, in reality, this only indicates that the countries have not used this SIGE field. There are not more restrictions because SIGE is not being used rather than because there are no obstacles. Likewise, in the two cases in which Restrictions were recorded, system entries date from 2006-2007. Since then, SIGE has not been used again.

With a more advanced query in “Restrictions Overcome” in SIGE, it can be seen that only four projects of the 31 contained in the AIC have a history of having overcome restrictions. When taking a look at the four projects with “Restrictions Overcome,” it is interesting to note that in one of them the Manager wrote a recommended action addressed to another player in the “management team,” but no one ever took any action in that respect. The “executed actions” field only shows, three years later, one subsequent action by the same Manager. This example comes in handy to demonstrate that this SIGE field was practically not used.

In part, this reflects a poor understanding of what this SIGE field was about, as it was perceived as a restriction identification field (by the Manager), rather than a restriction management field (by the “management team”). “Management” should imply that, once an obstacle has been detected to hinder project advancement, all members of the “project team” must cooperate in order to find a way of overcoming it.

“Restriction Management” is the only field in SIGE where the management team’s players may enter information. It is there where the system truly works as a cooperation space and, hence, for the purpose of this diagnostic assessment, the fact that this field has not been used is highly significant. Upon completion of the initial data entry and update phase, the opportunity to take advantage of SIGE for management purposes was wasted by all stakeholders.

The explanation for not having used SIGE as a management tool lies, in part, in the insufficient understanding of the concept of Restriction. It should have been methodologically clarified to the players involved how “Restriction Management” works, and the role to be played by each member of the management team of each project should have been explicitly accepted. But none of this happened.

## Binational Projects

Thirteen of the 31 AIC projects are binational endeavors (including here the only tri-national project). Therefore, for result-oriented intensive management of the Agenda to be effective, it was necessary to secure the cooperation of the management teams of the two countries involved in the projects and, in particular, of their respective Managers.

One initial difficulty was reaching consensus as to the contents to be entered by each Manager in SIGE. In this respect, binational project Managers were predominantly prone to condition data entry into SIGE to the actual meeting of the pertinent binational joint committees. Thus, SIGE failed to fulfill its project monitoring function and remained as a mere database where record was kept of the decisions of the joint committees, the meetings of which either lack regularity or are held every several years.

Secondly, intensive management had difficulties in ensuring interaction between the two Managers of a binational project. There are national sensitivities and, in addition, SIGE Managers of binational projects never, or hardly ever, met in person (one occasion was the 2006 Rio de Janeiro workshop). When the Managers served as officers who, in addition, took part in the joint binational committees, interaction through SIGE was more fluid.

A proactive attitude by both parties to binational projects might have helped, as SIGE features virtual contact mechanisms. The result, however, has been that each Manager has operated as a national manager as far as the “portion” of the project within his/her jurisdiction is concerned. And even in certain cases, only one of the Managers records data in SIGE, while the other one does not use the tool. Thus, the vision of integration projects *par excellence*, i.e., border crossings, has not been able to translate into joint management.

Finally, reference should be made to the problems outside the scope of action of SIGE, particularly those related to binational projects, which have been impacted by contingent conflicts between the countries involved. Joint monitoring was affected in these situations. Therefore, the system players are not to blame for all the problems, as political externalities have a huge bearing on binational projects because they set the general cooperation environment across the countries.

## Unity of Command

One of the success determinants of intensive management was identified to be a strong political support capable of giving impetus to the execution of projects. In the case of IIRSA, this political support should stem from the CDE Ministerial meetings. The Ministers, however, overlooked SIGE; they did not adopt it as an AIC project execution driver; they did not pay attention to it. Therefore, no “demand” from the authorities was generated, which would have prompted Managers to keep the information of the different SIGE fields updated and the three management team players (Managers, National Coordinators, and CCT Project Heads) to progressively enhance intensive management efficiency.

As a result, some information has been updated but the system overall has not been used. Instead, mandatory national systems are used, as failed execution (or unsatisfactory progress) of the projects included in them has consequences for the officers involved.

On the other hand, control of the variables impacting on projects is very different in the cases in which intensive management of strategic projects has been successful, such as the experiences of the governments of the states of São Paulo and Minas Gerais, in Brazil, where there is one single authority exercising unity of command, a radically different situation from the one existing in a multinational initiative such as IIRSA, which has an intergovernmental decision-making level.

Systems like SIGE have been successful when the leadership is exercised by one national or regional authority. The critics of SIGE hold that it was unrealistic to believe that a tool like this might be applied in a multilateral context, especially when taking into consideration the changes that have occurred in the South American political environment throughout this decade, which brought about dissimilar levels of involvement and leadership by the countries in IIRSA.

The advocates of this experience claim, however, that in the early years of the Initiative, until the adoption of the AIC, IIRSA enjoyed wide political support, thanks to which it was able to approach the implementation stage with greater expectations. In addition, they maintain that, with a strong pro-integration political will, it is possible to propel intensive project management capacity at a country level.

## Shift in Management Culture

The challenge represented by the application of intensive project management and its IT tool (SIGE) to the AIC projects was underestimated at the time when the Agenda was launched for a number of reasons. Firstly, it did not only entail the use of a new management model and monitoring system. Actually, the endeavor sought to bring about a cultural shift in the management of strategic projects, which differed dramatically from the follow-up and management systems traditionally being applied in each member country. Secondly, the complexity of transposing a model that was successful at a national (or sub-national) level to the multinational scope may have been miscalculated. Finally, the fact that SIGE would showcase project management details, including weaknesses, to the entire Initiative may have raised national sensitivities, creating misgivings in relation to the use of SIGE as a management support tool.

## Intensive Management and National Systems

Each country has its own different management model. The convergence of all of them into a single management model intended for a group of projects required a long adjustment period. The countries did not adopt this system to serve their own purposes; they did not take advantage of the tool to manage their everyday priority projects.

At the national level, several information systems are in place for project execution follow-up. Although SIGE operates at another level of information, national officials naturally prefer their national systems to other new ones with which they are not familiar and that, in addition, are not required by their own national authorities. Moreover, instead of facilitating management, the tool is perceived as a hassle, adding another information demand to the ones already coming from the national monitoring systems as well as from IIRSA Database.

Another point worth mentioning is that IIRSA Database is transparent; it is available on the web and, hence, there is a pressure to keep it updated. National monitoring systems are mandatory, and there are control mechanisms and sanctions in place to ensure they are kept current. SIGE lacked both ingredients and, therefore, it was not used. This is one aspect of the difficulties of adjusting this tool to a multilateral scheme. Countries are sovereign, and no enforcement mechanism may be established beyond the national scope.

Moreover, some “perverse incentives” were created: SIGE had the power to unmask a country’s weaknesses in relation to the management of a given project. Since no country wants to be shown as not having complied with a Critical Stage or lacking sufficient progress in its projects, the color bar indicative of the Critical Stages at which a project is ended up, over time, being a hardly reliable indicator of the actual status of projects.

## Obsolescence of SIGE

To be able to respond to users' needs, a system requires continuous improvement. In addition, technology evolves very fast. The SIGE model used in IIRSA, though technologically current in 2005, has become obsolete in 2010, especially when the fact that it has not been adequately maintained throughout these years is taken into account. This is explained by the countries' lack of interest in this tool. Since they did not adopt it as their strategic monitoring tool, it made no sense to invest more technical cooperation resources in upgrading this IT tool.

In addition, a vicious circle occurred. After receiving initial training, the Managers were provided with a support service that lost strength as time went by. This contributed to reducing stakeholder interaction, a condition that was necessary for SIGE to be effective and decisive to maintain people's positive attitude toward the system. Monitoring meetings attended by all the Managers were not held either. This practice that has been customary and permanent in the cases of São Paulo and Minas Gerais, where the Managers' role gained visibility and empowerment, is an essential condition for the scheme to work.

## Management Team Players

Many SIGE projects have one basic problem in common: the "appointed" Manager is not necessarily the "actual" project Manager, i.e., the person who is responsible for the progress of the project or, in other words, for "the management of all preparation and executions phases of the project, in accordance with the procedures laid down by each country."<sup>53</sup> The inclusion of this player within the monitoring scheme was critical for its success.

Most "actual" project Managers are not actively involved in the IIRSA work dynamics. This hindrance has significantly contributed to the system being used as a data recording tool—to which very few resort, certainly not for decision-making purposes— instead of as a monitoring application.

In addition, IIRSA-related activities are centralized through the National Coordinations, which may or may not have jurisdiction over the project execution sphere of government. Thus, Project Managers and CCT Project Heads may have little incentive to furnish information and assume obligations in relation to mandates not emanating from their own institution. Likewise, they do not necessarily acknowledge South American integration to be the highest-priority goal in their most immediate objective function. Hence, achievement of results in intensive management is dependent upon these types of restrictions, and some mechanism must be found whereby project executors effectively include the South American integration priorities in their management scope.

Thus, the following paradoxical situation has occurred: the "actual" Managers have not used SIGE and do not have an active participation in IIRSA, while the "appointed" Managers are not generally leading the AIC projects. Both cases are indicative of the fact that the Initiative failed to achieve one of its declared purposes: "to form an informal South American network composed of project executors who have the aim of working for the physical integration of the Region."<sup>54</sup>

The situation should have been analyzed at the meetings of National Coordinators, in conjunction with the CCT, as well as at the CDE Ministerial meetings for the purpose of making the required decisions. Yet, the focus was

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<sup>53</sup> Silveira, José Paulo. Presentation at the Seventh Meeting of IIRSA National Coordinators about the System for Strategic Monitoring of the AIC 2005-2010 Projects. Asunción, Paraguay. November 9, 2005.

<sup>54</sup> CCT. "Guidelines containing the working methodology of work groups at the Workshop on Result-Oriented Intensive Management of Strategic Projects." Rio de Janeiro, Brazil. August 9-10, 2006.

placed more on reviewing the progress of the AIC projects than on assessing the intensive management scheme that was intended to be applied to such projects. Nevertheless, there are the diagnostic assessments and recommendations produced at the 2006 Rio de Janeiro workshop, which gave origin to the technical missions sent that same year to each country to launch SIGE and analyze the management environment of each project.

These diagnostic assessments and recommendations still hold true, five years later, and contain elements that might be used by each country to boost the execution of strategic South American physical integration projects.

## Final Remarks

The success determinants for the intensive management of strategic projects to work properly were not present in the case of IIRSA. Even though the starting point of the AIC, consisting in placing the focus on a group of strategic projects, was backed by the CDE Ministers and a Presidential Summit, the application of the result-oriented intensive management scheme at the multilateral sphere of the Initiative failed to become consolidated, and its support tool, SIGE, was progressively abandoned, and ended up being a mere annual information recording space that is not used for any decision-making purpose.

When strategic project management does not reach any higher than intermediate government levels, it does not yield the expected outcomes, as results are dependent on the priority allocation of resources and the cooperation of different areas, which are not mobilized unless there is a higher level driving them and giving priority to the implementation of these projects.

This is what has happened in IIRSA. The intensive management of the group of strategic projects making up the AIC never materialized because its highest political leaders, the Ministers of the CDE, were not a driving force capable of summoning the efforts required to be made at the level of the different technical areas involved in the process. Thus, this first condition for success did not hold.

Moreover, at the multilateral level of a group of countries, there is no natural unity of command and, in addition, no compliance enforcement mechanisms can be established in relation to control variables that are sovereign at a country level. This adds one further encumbrance to the mechanism and hinders the use of an intensive management model and a tool, such as SIGE, which have proved successful at the national and sub-national levels but hardly efficient at the multinational level.

A second condition for success, as mentioned above, is that project monitoring and management capability should rely on a management team having the capacity to serve as a bridge between project execution and government decision-making levels. This did not happen in IIRSA either. The National Coordinations worked toward this aim, but they not always belong to the agencies in charge of executing the projects. On the other hand, these governmental project execution spheres are not necessarily aware of or committed to the purposes and mandates of the South American physical integration process. This situation is worsened by the difficulties encountered to bring the “actual” project Managers into the integration process.

Finally, it must be admitted that the management of integration infrastructure projects is complex, especially in the case of strategic projects requiring more attention throughout their lifecycle than any ordinary project. Thus, the design of the AIC 2005-2010 entailed the idea of using a new intensive management system. Even when this proposal is still valid, the experience with the AIC and SIGE shows that it is crucial that technical solutions be found and political decisions be made so that the obstacles hindering the progress of the strategic or emblematic projects may be overcome.



## Chapter VI.

# CONCLUSION

The AIC 2005-2010 is a strategic tool designed to ensure that all stakeholders involved, particularly the decision-making levels, focus their greatest possible attention on boosting and accelerating the execution of the strategic South American infrastructure projects.

The AIC was created when IIRSA was already four years old and had become a consolidated space for regional dialogue and consensus-building among the South American nations. The opportunity was deemed to be the right time to take a turn and mark a watershed between planning and implementation, thus allowing the Initiative to move on to an execution stage with a full picture perspective, building upon its institutional capital and the planning effort based on consensus that had been completed.

Even though the process was not the same in all the countries and there were and still are different viewpoints in relation to the strategic importance of the AIC, five years after its creation it has become evident that one of its fundamental characteristics was its contribution to the positioning of strategic projects by giving them visibility and, therefore, helping ensure them increased political support. In this regard, the AIC was instrumental in the “sealing” of national commitments to the strategic projects included in it and endorsed by a Presidential Summit.

The definition of what projects were to be incorporated into the Agenda was of crucial importance and countries were allowed some flexibility to identify them. Project selection is not explained only by technical criteria agreed upon by consensus but also, to a certain extent, by political priorities and domestic decisions at each country level. Thus, the Agenda is the product of a combination of technical and political criteria, and the Indicative Territorial Planning contributed to gaining a better insight into the interrelations of the projects and their impact on the physical integration of South America, providing a broader view beyond national borders.

Although the goal of having the AIC projects execution completed by late 2010 was not achieved, this does not mean that the Agenda has not accomplished its mission of expediting project implementation. In fact, at the time when the AIC was devised, the 2010 deadline was more related to the time frame envisaged for the first stage of IIRSA than to an objective assessment of the progress status of the projects and their prospects for real progress.

In sum, if we take into consideration that 61% of the projects in the Agenda is being executed, as compared to 32% in 2005, and that 6.5% of them is completed, it is clear that the countries' integration agenda is progressing, though at different paces depending on each case. This is a very valuable accomplishment, not only due to the building of physical works and their potential impact, but also because of the integration process that is taking place within each country as well as across neighboring nations (agreements, dialogue, consensus-building), in spite of the technical, economic, financial, and political obstacles that may be encountered.

In this respect, the incorporation of IIRSA to UNASUR as its technical infrastructure and planning forum is envisioned as an opportunity to renew the support needed and take advantage of the highest-ranking political influence with a view to giving impetus to the strategic South American infrastructure projects and finding solutions that today lie beyond the scope of action of the Initiative.

Therefore, the importance of the identification of a limited group of strategic projects, or emblematic and/or high-impact projects for regional integration, is reaffirmed as a necessary driver capable of mobilizing the political spheres to boost their successful execution. Thus, it can be said that an Agenda Based on Consensus is a necessity, rather than a choice, for the South American integration process.

As for the evolution of the investment amounts throughout these five years, their growth is due to the progress made in project studies as well as in the execution of works. The increase in the investment required to complete the projects in the Agenda constitutes another indicator of the fact that implementation is making headway.

As mentioned above, the analysis has further demonstrated that the AIC is a collective Agenda. Its effects should be seen as impacting “across” the countries. The AIC is not the sum of a series of individual investments with a national vision. It is a group of integration projects with a regional vision, approached with a full picture perspective. This is its distinguishing feature.

The above should also have reflected in a joint, collective follow-up of the evolution of the Agenda until its projects were in execution. Nevertheless, the opinions gathered indicate that it would have been desirable to have had more frequent meetings solely devoted to the AIC project monitoring, attended by the relevant players of the 31 AIC projects, where viewpoints on the AIC progress and lessons learned might be exchanged, and a collective assessment could be made, sharing experiences about difficulties encountered and solutions found regarding each specific project. In several cases, the AIC projects pioneered the implementation of solutions designed to ensure the execution of the selected road infrastructure, in terms of social and environmental aspects as well as of PPPs structuring-related issues, among others.

The success determinants for the intensive management of strategic projects to work properly were not present in the case of IIRSA. Even though the starting point of the AIC was the support pledged by the CDE Ministers and a Presidential Summit, the application of the result-oriented intensive management scheme at the multilateral level of the Initiative failed to become consolidated and its support tool, SIGE, was progressively abandoned, and ended up being a mere annual information log that is not used for any decision-making purpose.

The management of the AIC projects, with SIGE as its enabling tool, remained at the intermediate governmental levels of each country, and failed to reach the political decision-making level of the process, represented by the CDE Ministers. Moreover, mechanisms of compliance with control variables, which are in place in each country on a sovereign basis, could not be enforced. This resulted in increased complexity and precluded the successful application of intensive management based on a tool such as SIGE that has proved successful at national and sub-national levels, yet hardly operational at the multinational level.

In closing, the AIC has, in spite of the above-mentioned difficulties, leveraged the progress already made and given impetus to the agenda of IIRSA as a whole. Its creation, in addition to establishing it as a symbolic and political framework for a new stage of the Initiative in which the focus is on implementation, has secured faster concrete results in high-impact projects, which are turning the regional vision of the physical, economic, social, and cultural integration of the South American subcontinent into a reality.

## ANNEX





## Implementation Agenda Based on Consensus 2005-2010

### Strategic Projects for the Integration of South America

No.	Projects	Hub/Process	Million US\$	Countries <sup>(1)</sup>
1	Upgrade of Route 14 to a Four-lane Road, between Paso de los Libres and Gualeguaychú	MERCOSUR-Chile	780.0	AR (BR)
2	Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor	MERCOSUR-Chile	234.0	UY (AR-BR)
3	Construction of the Jaguarão - Río Branco International Bridge	MERCOSUR-Chile	35.0	BR-UY
4	Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (Rodovia MERCOSUR)	MERCOSUR-Chile	700.0	BR (AR-UY)
5	Railway Project Los Andes - Mendoza (Central Trans-Andean Railway)	MERCOSUR-Chile	5,100.0	AR-CH
6	International Route No. CH-60 (between Valparaíso and Los Andes)	MERCOSUR-Chile	286.0	CH (AR)
7	Northeastern Argentina Gas Pipeline	MERCOSUR-Chile	1,000.0	AR (BO)
8	Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center	Capricorn	23.0	AR-BO
9	New Presidente Franco - Porto Meira Bridge, with a Paraguay - Brazil Border Center	Capricorn	80.0	PY-BR
10	Construction of Pailón - San José - Puerto Suárez Road	Central Interoceanic	477.0	BO (BR-CH-PE)
11	São Paulo Ring Railway (Northern and Southern Sections)	Central Interoceanic	850.0	BR
12	Infante Rivarola - Cañada Oruro Border Crossing	Central Interoceanic	2.0	BO-PY
13	Construction of the Cañada Oruro - Villamontes - Tarija - Estación Abaroa Road (First Stage)	Central Interoceanic	49.0	BO (PY)
14	Toledo - Pisiga Road	Central Interoceanic	95.0	BO (CH)
15	Paving and Improvement of the Iquique - Colchane Road	Central Interoceanic	42.0	CH (BO)
16	Rehabilitation of El Sillar Road Section	Central Interoceanic	120.0	BO (CH-PE)
17	Desaguadero Binational Border Service Center	Andean	7.5	BO-PE
18	Cúcuta - San Antonio del Táchira Border Crossing	Andean	2.0	CO-VE
Subtotal			9,882.5	

No.	Projects	Hub/Process	Million US\$	Countries <sup>(1)</sup>
19	Improvement of Navigation Conditions on the Meta River	Andean	108.0	CO-VE
20	Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor	Amazon	373.0	CO
21	Paita - Tarapoto - Yurimaguas Road, Ports and Logistics Centers	Amazon	681.2	PE (BR)
22	Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers	Amazon	1,351.3	PE (BR)
23	Francisco de Orellana Port	Amazon	105.3	EC
24	Paving of Iñapari - Puerto Maldonado - Inambari Road, and Inambari - Juliaca / Inambari - Cusco Roads	Peru-Brazil-Bolivia	1,384.3	PE (BR)
25	Bridge over the Acre River	Peru-Brazil-Bolivia	12.0	BR-PE
26	Boa Vista - Bonfim - Lethem - Georgetown Road (First Stage: Studies) <sup>(2)</sup>	Guianese Shield	3.3	GY-BR
27	Bridge over the Takutu River	Guianese Shield	10.0	GY-BR
28	Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage)	Guianese Shield	0.8	VE-GY-SU
29	Improvement of Nieuw Nickerie - Paramaribo - Albina Road and International Crossing on the Marowijne River	Guianese Shield	105.0	SU-GY
30	Exports through Postal Services for SMEs	ICTs	5.0	Regional
31	Implementation of the South American Roaming Agreement	ICTs	1.3	Regional
Subtotal			4,140.5	
TOTAL			14,023.0	

Notes: The project stages used in the preparation of this report follow the classification used for IIRSA Portfolio in the Project Database..

■ Profiling 
 ■ Pre-execution 
 ■ Execution 
 ■ Completed

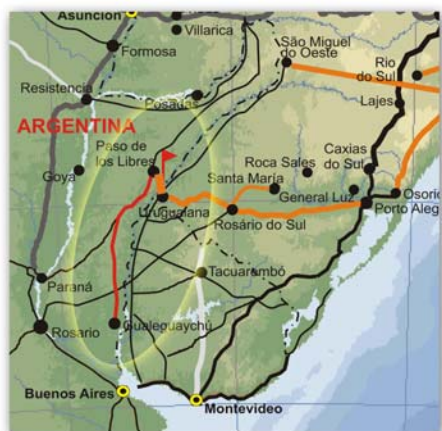
<sup>(1)</sup> The neighboring country or countries impacted by the project are listed in parentheses.

<sup>(2)</sup> Given that only the first stage of the project is included in the AIC and that it comprises studies that have already begun, the project is deemed to be in the execution phase.

Source: VI Report of AIC. July2010.

1

## Upgrade of Route 14 to a Four-lane Road, between Paso de los Libres and Gualeguaychú



Integration Hub  
MERCOSUR-Chile

Group 1  
Belo Horizonte - Argentina/  
Brazil Border - Buenos Aires

Countries  
Argentina (Brazil)

Current status  
Execution



- Type of Project**

Transportation/Road

- Modality**

Public

- Financing Sources**

Public, through national and multilateral agencies

National Treasury  
IDB

- Executing Agency**

National Road Authority of Argentina

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li><b>Project Phase</b> Pre-execution</li> </ul>	<ul style="list-style-type: none"> <li><b>Project Phase</b> Execution</li> </ul>
<ul style="list-style-type: none"> <li><b>Expected Completion Date</b> Second half of 2008</li> </ul>	<ul style="list-style-type: none"> <li><b>Expected Completion Date</b> First half of 2011</li> </ul>
<ul style="list-style-type: none"> <li><b>Estimated Investment</b> US\$370.0 million</li> </ul>	<ul style="list-style-type: none"> <li><b>Estimated Investment</b> US\$780.0 million</li> </ul>

## • Purpose

To provide road traffic in the MERCOSUR-Chile Hub with improved safety conditions.

## • Proposed Solution

Increasing road capacity through the construction of a second 7.30-meter wide, 452-kilometer long carriageway; the building of eighty-seven 10.8-meter wide bridges, grade separations, and interchanges.

## • Current Status - May 10, 2010

The National Route No. 14 capacity enhancement project will upgrade this road into a four-lane divided highway, with two lanes in each direction, stretching from Ceibas (Province of Entre Ríos) to Paso de los Libres (Province of Corrientes).

The project has been divided into eight sections, five of them in the Province of Entre Ríos and the other three, in Corrientes. The works to be performed in each section are as follows: upgrade to a four-lane road with a view to the improvement of service level, redesign of ramps, and reconfiguration of urban sections (elimination of dangerous crossings, inclusion of collector roads, etc.), signing and signaling, lighting, installation of traffic guidance equipment and guardrails, road safety works and supplementary works.

The works under way —seven sections, each consisting of two segments— have attained a physical progress of 60%. The remaining section is the responsibility of the concessionaire and works have already been completed.

As of May 2010, US\$405 million have been invested.

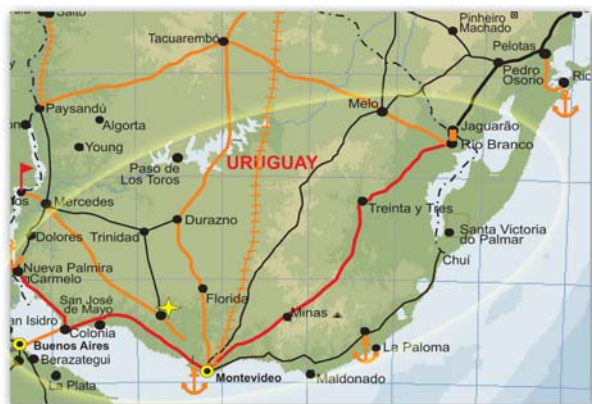
## • Implementation Analysis

This project has been progressing since July 2005, even though the initial completion date has been extended to the first half of 2011. In spite of its magnitude and complexity, no factors hindering implementation were identified.

At the time it was included in the Implementation Agenda based on Consensus, the project was in the pre-execution phase, with one section already tendered and the other eight under study and/or in the planning process. These works, the estimated investment of which increased by 110% vis-à-vis the amount planned in 2005 as the project evolved, will introduce changes related to road safety, which will enable other uses of the highway and, consequently, attract new users that chose alternative roads in the past, thus strengthening regional growth. The adjustment in the estimated investment amount was made between 2007 and 2008.

It is important to note that the identification of this project as strategic and a priority for the physical integration of the subcontinent as well as its inclusion in the Implementation Agenda based on Consensus has made the handling of formalities with the different provincial and/or federal agencies easier, such as those concerned with obtaining the right of way for the alignment of the road and the environmental licenses, as well with holding the pertinent public hearing, among others.

On the other hand, the need to improve integration with the other MERCOSUR member countries (Brazil, Paraguay and Uruguay) and, at the same time, contribute to enhancing connectivity within the MERCOSUR-Chile Hub; the compliance with Argentina's international territorial integration policies; and serving local and regional interests to have the conditions of this road improved, thus boosting regional economic activities such as citriculture, tourism, poultry farming and others, are also key factors that promoted the implementation of this project.



Integration Hub  
MERCOSUR-Chile

Group 2  
Porto Alegre - Argentina/  
Uruguay Border -  
Buenos Aires

Countries  
Uruguay (Argentina - Brazil)

Current status  
Execution



• **Type of Project**

Transportation/Road

• **Modality**

Public/Private

• **Financing Sources**

Public, through national and multilateral agencies  
National Treasury, IDB, World Bank, CAF, MERCOSUR  
Structural Convergence Fund (FOCEM - *Fondo de  
Convergencia Estructural del MERCOSUR*)

Private Sector

• **Executing Agency**

Corporación Vial del Uruguay  
Ministry of Transport and Public Works of Uruguay  
National Road Authority of Uruguay

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b> Execution</p>	<p>• <b>Project Phase</b> Execution</p>
<p>• <b>Expected Completion Date</b> Second half of 2009</p>	<p>• <b>Expected Completion Date</b> December 2011</p>
<p>• <b>Estimated Investment</b> US\$163.0 million</p>	<p>• <b>Estimated Investment</b> US\$234.0 million</p>

## • Purpose

To improve the flow of freight and passenger road transport along the backbone road network of MERCOSUR by consolidating the road infrastructure for it to conform to the new requirements for international freight transportation, and by supplementing the Brazil-Uruguay-Argentina road connection in the MERCOSUR-Chile Hub.

## • Proposed Solution

The project encompasses routes 1, 11, 8, 17, 18, and 26, linking the cities of Río Branco, Montevideo, and Colonia, with supplementary routes 23 and 12 reaching Nueva Palmira, and is aimed at improving the service level in its different sections, mainly in terms of condition, comfort, and safety. Condition and comfort are enhanced through road surface dressing and structure strengthening, as well as reinforcement or replacement of engineering structures with a view to solving the current freight restriction problems. To improve safety conditions, works will be carried out involving the realignment of certain dangerous curves, the by-passing of populated centers, road realignment, the fitting of signing and signaling, marking and lighting, and the installation of other safety devices (barriers, speed bumps, etc.). Extending the corridor up to Nueva Palmira is considered as it will provide an alternative physical connection with Argentina near Zárate-Brazo Largo.

## • Current Status - May 7, 2010

Project execution is in full progress, with works having been initiated, some at the bidding stage, while others have already been completed.

Taking 2003 as the initial year, approximately 60% of the works have been completed, 20% are at the execution phase and soon to be completed, and the remaining 20% are in the bidding stage. By the end of 2010, close to 80% progress of the work plan is expected to have been achieved.

It is worth noting that on May 15, 2006, the Executive Branch approved the new contract signed between the Ministry of Transport and Public Works (MTOP, in Spanish) and the Uruguayan National Corporation for Development, covering a significant portion of the corridor-related works (72% of the works amount).

## • Implementation Analysis

This project has been moving forward since July 2005, in spite of the fact that its completion has been extended by some two years *vis-à-vis* the original estimates, its conclusion now being scheduled for late 2011.

As of the incorporation of the project into the Implementation Agenda based on Consensus, works were underway on some sections, while other sections were in the bidding stage and the remaining ones had their relevant studies completed.

The works on some of the sections included in the project are financed by direct public investment. Due to the economic policy in place in Uruguay, which entails fiscal control and, therefore, inflation targeting, there is a trend to restrict disbursements by the National Treasury, which could be a constraining factor for the project. Completion of the pending works, which involve approximately 20% of the road corridor, will depend on the funds earmarked for such purpose in the new Works Plan of the National Budget and, should any new loan be available, on the debt ceiling approved by the economic authorities for the country.

It is worth noting that the inclusion of this corridor in the above-mentioned Agenda, which is strategic for the integration of the MERCOSUR member countries, has played a major role in promoting the project at the highest political level as well as among the institutional authorities concerned with each relevant area.

Another driver boosting the implementation of the project was the need to conceive and establish a transnational interconnection corridor, with a strong emphasis on the economic development of Uruguay and fully in line with the regional integration process in place since the inception of MERCOSUR in 1991, with the purpose of creating true synergies among the countries with the existing or prospective physical links.

These upgrade works in the road corridor are conducive to increased road safety and reduced transport costs and times, thus positively impacting on regional competitiveness and integration.



**Integration Hub**  
**MERCOSUR-Chile**

**Group 2**  
**Porto Alegre - Argentina/  
Uruguay Border - Buenos Aires**

**Countries**  
**Brazil - Uruguay**

**Current status**  
**Pre-execution**



- Type of Project**

Transportation/Bridge

- Modality**

Public

- Financing Sources**

Public  
National Treasury (Brazil and Uruguay)

The new agreement signed between Brazil and Uruguay (February 26, 2007) establishes that the investment costs related to the construction of the bridge, its approaches and supplementary works, as well as to the rehabilitation of the Barão de Mauá Bridge, will be distributed between the parties.

- Executing Agency**

National Department of Transport Infrastructure (DNIT - *Departamento Nacional de Infraestrutura de Transporte*) of Brazil  
Joint Brazilian-Uruguayan Bidding Committee  
Ministry of Transport and Public Works of Uruguay

- Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li><b>Project Phase</b> Pre-execution</li> </ul>	<ul style="list-style-type: none"> <li><b>Project Phase</b> Pre-execution</li> </ul>
<ul style="list-style-type: none"> <li><b>Expected Completion Date</b> Second half of 2009</li> </ul>	<ul style="list-style-type: none"> <li><b>Expected Completion Date</b> Second half of 2012</li> </ul>
<ul style="list-style-type: none"> <li><b>Estimated Investment</b> US\$12.0 million</li> </ul>	<ul style="list-style-type: none"> <li><b>Estimated Investment</b> US\$35.0 million</li> </ul>

## • Purpose

To improve the flow of international freight and passenger road transport; to supplement road connection, leveraging the integration of economic and trade capabilities as well as of social and cultural permeability with neighboring countries; to divert the traffic from the Chuí-Chuy road with a view to preserving the Taim Ecological Reserve and alleviating traffic on the Pelotas-Rio Grande section (BR-392/RS); to preserve the "Littoral Route" for passenger and tourist traffic; and to reduce travel distance by 53 kilometers in the Montevideo-Porto Alegre stretch.

## • Proposed Solution

Building a second road bridge over the Jaguarão river in the vicinity of the cities of Jaguarão (Brazil) and Río Branco (Uruguay), including supplementary infrastructure and its approach roads (BR-116/RS and Route 26); and restoring the Barão de Mauá International Bridge, which crosses the Jaguarão river, joining the cities of Jaguarão and Río Branco and spanning 276 meters in operation since 1930, preserving its status of historical monument, a valuable joint Brazilian and Uruguayan piece of architectural heritage.

## • Current Status - June 7, 2010

Since the construction and operation of the project under a concession contract is hardly attractive due to the fact that no minimum traffic can be guaranteed, the governments of Brazil and Uruguay prioritized the building of the second bridge under the public work modality and agreed to revamp the Barão de Mauá bridge. Consequently, on February 26, 2007 two new agreements were signed: one providing for the building of the second bridge, superseding the November 21, 2004 accord, and the other one, effected by an exchange of notes, whereby a Technical Executive Group was created to accompany the Barão de Mauá refurbishment works.

The Joint Brazilian-Uruguayan Committee was established on April 14, 2004, and its members met on five occasions (May 2004, September 2004, January 2006, August 2007, and December 2009).

The new international bridge will have an approximate span of 700 meters. As far as its structure is concerned, it may be a progressive cantilever or a cable-stayed bridge. The border complex shall include parking spaces, return lanes, and buildings to house the national enforcement authorities, such as the Federal Police, Customs, and the National Health Surveillance Agency.

As a result of a bidding process, on October 5, 2009, the firm ENECON Engenheiros y Economistas Consultores S/A was engaged for conducting the Technical, Economic, and Environmental Feasibility Study and preparing the engineering project for the construction of the second international bridge over the Jaguarão river, at a cost amounting to R\$1.4 million.

Once the Technical, Economic, and Environmental Feasibility Study—which the consulting firm is currently preparing—is approved by the DNIT, it will be translated into Spanish so that it may be submitted to Uruguay for analysis and, subsequently, to the Joint Committee for final approval. The Joint Committee proposes to hold its next meeting on July 22, 2010, in the city of Montevideo for the purpose of analyzing and approving the contents of such study.

The Basic Design should be completed by November 2010, and the Detailed Design, by January 2011.

The Environmental Impact Assessment and the subsequent Environmental Impact Report, which were commenced in April 2010, are being prepared by the firm PROGAIA Engenharia e Meio Ambiente at a cost of R\$1.2 million.

As to the rehabilitation of the Barão de Mauá bridge, on September 26, 2009, the DNIT awarded its Basic and Detailed Designs to the consortium made up of the firms AZAMBUJA Engenharia e Geotecnia LTDA (Structure) and PATRIMONIUM Arquitetura y Restauro LTDA (Restoration), its cost amounting to R\$664 thousand. The preparation of these designs started in November 2009.

## • Implementation Analysis

Even though the project has made progress over the last five years, it has encountered some delay due to the need to substitute the agreement signed by the parties in November 2000, which provided for the construction and operation of the bridge under a public works concession contract without governmental guarantee as to financing/profits or minimum traffic. For this reason, the original estimated completion date has been provisionally extended by three years, the conclusion of the project now being scheduled for the second half of 2012.

At the time of its inclusion in the Implementation Agenda based on Consensus, the project was in the pre-execution phase, with a preliminary traffic study completed but with the pre-feasibility, feasibility and social-environmental studies pending.

The revision of the above-mentioned agreement was based on an analysis presented at the first meeting of the Joint Brazilian-Uruguayan Committee, held in May 2004, which showed that the daily traffic volume was only 140 freight vehicles; hence, the works would hardly attract the private sector. In addition, the charging of tolls would be economically and politically difficult to accept.

As a result, in February 2007 two new agreements superseding the original agreement were entered into: one for the building of the second bridge with public funds, and the other one, concluded in the form of an exchange of notes, providing for the reconstruction of the Barão de Mauá bridge.

It is worth pointing out that the investment amount is a preliminary estimation that will be more accurately established by the Joint Technical Committee at its next meeting, once the study review in progress is completed.

As already mentioned, it may be considered that the project has evolved in spite of the delay; the main factors that contributed to the continuity of its implementation are:

- The framework agreements signed by the presidents of Uruguay and Brazil providing institutional support to the project, and
- The active participation of the institutions involved in the construction of the second international bridge, i.e. the Jaguarão-Rio Branco bridge, within the framework of both the Joint Brazilian-Uruguayan Committee and IIRSA.

## 4

## Upgrade of the Palhoça-Osório Road Section to a Four-lane Road (Rodovia MERCOSUR)



Integration Hub  
MERCOSUR-Chile

Group 1  
Belo Horizonte - Argentina/  
Brazil Border - Buenos Aires

Countries  
Brazil (Argentina - Uruguay)

Current status  
Execution



- **Type of Project**

Transportation/Road

- **Modality**

Public

- **Financing Sources**

Public

National Treasury

- **Executing Agency**

National Department of Transport Infrastructure  
(DNIT) of Brazil

- **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li>• <b>Project Phase</b></li> </ul> <p>Execution</p>	<ul style="list-style-type: none"> <li>• <b>Project Phase</b></li> </ul> <p>Execution</p>
<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b></li> </ul> <p>March 2010</p>	<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b></li> </ul> <p>Fourth quarter of 2012</p>
<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b></li> </ul> <p>US\$800.0 million</p>	<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b></li> </ul> <p>US\$700.0 million</p>

## • Purpose

To improve traffic flow capacity and road safety; to eliminate critical points; to take remediation measures concerning environmental liabilities; and to minimize environmental aggression, thus enhancing freight and passenger road traffic along the MERCOSUR Corridor.

## • Proposed Solution

Refitting and upgrading road BR-101/SC/RS to a four-lane road, i.e. 294 kilometers in the State of Santa Catarina and 88.5 kilometers in the State of Rio Grande do Sul, including the building and revamping of bridges, and the construction of tunnels, viaducts, underpasses, and pedestrian overpasses.

## • Current Status - May 11, 2010

Works included in the Growth Acceleration Program (PAC - *Programa de Aceleração del Crecimiento*) in January 2007, currently being carried out by the National Department of Transport Infrastructure of the Ministry of Transport (DNIT/MT) of Brazil.

*BR-101/SUL - State of Santa Catarina Section (Upgrade of the Palhoça-SC/RS Border Section to a Four-lane Road):* 2007-2012 planned investment: R\$1.457.000.000

- New four-lane road: 141 kilometers have been opened to traffic; 184 kilometers of pavement, 27 bridges, 26 underpasses, 20 viaducts, and 202 kilometers of embankments have been completed. Works in progress: 9 viaducts, 11 underpasses, 16 bridges, 7 pedestrian overpasses, 26 kilometers of embankments, and 43 kilometers of pavement.
- Old road: 134 kilometers have already been reconditioned, while the restoration of 29 kilometers more remains in progress.
- Morro dos Cavalos tunnel: The Detailed Design was contracted out on July 22, 2008, and should be approved by November 10, 2010. The Environmental Impact Assessment/Environmental Impact Report began on November 5, 2009, and must be completed no later than July 30, 2010; a Preliminary License, valid until October 30, 2010, as well as an Installation License, effective until December 30, 2010, were granted. The call for bids will close on November 20, 2010, and works are expected to begin by March 15, 2011.
- Laguna de Imaruí bridge: The Basic Design was submitted on July 30, 2009, and the Detailed Design, on August 14, 2009. The environmental studies were completed on December 23, 2009, and the DNIT is waiting for the Brazilian Federal Environmental Enforcement Agency (IBAMA) to issue the Preliminary License. Works are expected to commence by late 2010.
- Morro do Formigão tunnel: The Basic Design was submitted on February 7, 2008, and the Detailed Design, on September 4, 2009. The Preliminary License was granted on December 17, 2009. The Basic Environmental Project has already been completed, and the Installation License was requested on February 1, 2010. The works were open for tender and are expected to start by June 15, 2010.
- Morro Agudo tunnel: Half-section excavation —990 meters— and a 50-meter grade down were completed.

*BR-101/SUL - State of Rio Grande do Sul Section (Upgrade of the SC/RS Border-Osório Section to a Four-lane Road):* 2007-2010 planned investment: R\$600 million

- New road: 61.4 kilometers completed. Lots 1, 2, and 3 (72 kilometers) completed: 45 kilometers paved and 6.12 kilometers of pavement works in progress; 82 kilometers of embankments completed and 6.06 kilometers of embankment works in progress; works for 18 viaducts, 4 underpasses, 3 pedestrian overpasses, and 8 bridges; 11 special engineering structures (passages, bridges, and viaducts) in progress.
- Morro Alto tunnels: Completed. Auxiliary service works (ventilation and lighting) in progress.
- Lot 4 (16.4 kilometers): The Osório-Aguapés section (16.4 kilometers) has been completed and opened to traffic.
- Remaining lots 1A and 2A: Works contracted out on August 21, 2009, with 16 kilometers of embankment works already completed. Works completion date: September 30, 2010.

## • Implementation Analysis

Despite the extension of its original completion date by more than two years, this project has been progressing since July 2005. As of its incorporation into the Implementation Agenda based on Consensus, some works were underway while others were soon to be tendered.

In 2007, the project was included in the Brazilian Growth Acceleration Program.

Emphasis was placed on the fact that the major challenge faced during the initial phase of the Florianópolis-Osório Road Connection (BR-101/SC/RS) Modernization and Capacity-Increase Program was to make the institutional coordination proposed in the Basic Environmental Plan work properly and produce the expected results, as it involved heterogeneous institutions with different functions, working methods and priorities.

On the other hand, the significance of these works for the national road system and for the consolidation of the process of physical integration with the other MERCOSUR member countries has been singled out as an encouraging factor that has furthered the progress of the project.



**Integration Hub**  
MERCOSUR-Chile

**Group 3**  
Valparaíso - Buenos Aires

**Countries**  
Argentina - Chile

**Current status**  
Pre-execution



• **Type of Project**

Transportation/Rail

• **Modality**

Private

• **Financing Sources**

Private Sector

• **Executing Agency**

Rail Transport Undersecretariat - Transport  
Secretariat of Argentina  
Ministry of Federal Planning, Public Investment  
and Services of Argentina  
Concession General Coordination Office - Ministry  
of Public Works of Chile

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Pre-execution</p>	<p>• <b>Project Phase</b></p> <p>Pre-execution</p>
<p>• <b>Expected Completion Date</b></p> <p>June 2008</p>	<p>• <b>Expected Completion Date</b></p> <p>December 2020 (1st Stage)</p>
<p>• <b>Estimated Investment</b></p> <p>US\$251.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$5.1 billion</p>

## • Purpose

To expand the transportation capacity of the “Cristo Redentor System” border crossing so that it can meet the growing demand for freight traffic between Argentina and Chile and strengthen the transportation system in the MERCOSUR-Chile Integration and Development Hub. The low-altitude rail tunnel solution is designed to secure a land connection that is operational under any weather condition, and to avoid a significant portion of mountainous terrain, where traffic speeds are lower and the adverse weather conditions render it non-operational for a large part of the year.

## • Proposed Solution

The project covers an approximate distance of 220 kilometers, and consists in a railway system that crosses the Andean ranges through a 30- to 50-kilometer long tunnel, with a diameter of 9.5 meters, located approximately 2,400 meters above sea level. It features, among other things, a shuttle system for transporting vehicles and includes a proposal for a logistics corridor integrating the Chilean and Argentine railroad networks. The purpose of this corridor is to join Mendoza, in Argentina, with Los Andes and the ports of Valparaíso and San Antonio, in Chile, in addition to providing a connection with Uruguay and Brazil.

The project further includes the rehabilitation of the rail infrastructure between Chile and Argentina; the electrification of the branch line; the licensing of a hydroelectric dam within Argentine territory that will ensure the project's self-sufficiency in terms of energy; and the construction of multimodal stations for passenger transport as well as for light-vehicle and truck transport at both ends of the tunnels.

## • Current Status - June 4, 2010

In August 2008, the Chilean government declared these works to be in the public interest, and the Argentine government did so the following month.

The first financial and economic rail- and tunnel-related studies were submitted in April 2009, and were recently completed. The sponsors of this initiative have submitted a work plan proposing more detailed studies in connection with demand, engineering, social assessment, and financing (2nd Stage), to then move on, if appropriate, to the bidding phase of the project.

The project amounts to an estimated US\$3 billion in its preliminary phase (to meet short-term demand) and US\$4.8 billion in its final alternative (long term).

The demand study estimates a minimum demand of 10 million tons/year and 52 million tons by 2045. On the basis of this traffic flow evolution forecast, the project provides for the construction, by 2020, of a one-tube, single-track tunnel, which will be upgraded to a two-tube, four-track tunnel to meet increased demand.

## • Implementation Analysis

This project is peculiar in that it has been redefined in 2008, which explains the considerable deferment of its expected completion date as well as the significant increase in its estimated investment amount. However, the project is making headway so far.

At the time it was included in the Implementation Agenda based on Consensus, the aim was to reactivate, operate and maintain the rail freight transportation service so that it would join the cities of Mendoza, Argentina, and Los Andes, Chile, by restoring the rail connection through the construction or reconstruction of the necessary infrastructure and the provision of rolling stock suitable for rendering the service. A call for bids was launched in July 2006. The bidding process ended in April 2008 with only one bid received, which was rejected on the grounds that it was not technically acceptable.

In January 2008, the firms Corporación América S.A. and Petrolera del Sur S.A. submitted the “Construction and Operation of a Low-Altitude Rail Tunnel and Reactivation and Operation of the Central Trans-Andean Railway” private initiative. The purpose of the low-altitude tunnel was to provide a land connection that would be operational under any weather condition. Once the project was analyzed, the works were declared to be in the public interest in August and September 2008 by the Chilean and the Argentine governments, respectively.

Given the magnitude of the project, completion of the 1st Stage, which consists in the construction of one-tube, single-track tunnel, is planned for December 2020.

The inclusion of this project in IIRSA Implementation Agenda based on Consensus made it known to investors and governments from the continent. The following are some of the key drivers of this project:

- The willingness of the Argentine and Chilean governments to strengthen the political, social, economic and commercial integration of the two countries.
- The project promotes the economic growth of the areas involved and will make a significant contribution to competitiveness in the region.
- This border crossing is the most important of all the land border crossings between Argentina and Chile, as it is located on the major horizontal trade axis of both countries, along which the most significant Argentine and Chilean cities and production and consumption centers are located.
- There is logistics infrastructure supplementing the project on both sides of the border: on the Argentine side, the San Martín railway, with more than 1,200 kilometers of track and more than 100 stations, runs from Buenos Aires to Mendoza, while on the Chilean side, the Pacific Railways (FEPASA - *Ferrocarril del Pacífico S.A.*) freight rail network connects Los Andes, where the Chilean end of the tunnel involved in the project is located, with the most important ports of Chile, such as Valparaíso, Ventanas, San Antonio and Concepción, as well as with National Route 60, which joins Los Andes and Santiago, and routes 68 and 78, leading to Valparaíso.
- Estimations reveal a very large prospective demand for the new connection between Argentina and Chile, which will be more efficient than the existing ones and others planned in terms of costs and time savings for its users.



Integration Hub  
MERCOSUR-Chile

Group 3  
Valparaíso - Buenos Aires

Countries  
Argentina - Chile

Current status  
Execution



• **Type of Project**

Transportation/Road

• **Modality**

Public/Private

• **Financing Sources**

Public-Private Partnership

• **Executing Agency**

Sociedad Concesionaria Autopista de los Andes S.A.

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Execution</p>	<p>• <b>Project Phase</b></p> <p>Execution</p>
<p>• <b>Expected Completion Date</b></p> <p>June 2008</p>	<p>• <b>Expected Completion Date</b></p> <p>December 2011</p>
<p>• <b>Estimated Investment</b></p> <p>US\$286.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$286.0 million</p>

## • Purpose

To enhance the capacity and standard of International Route CH-60 so that it can absorb the growth in traffic demand. This structuring highway cuts across Chile, starting at the Chilean-Argentine border, in the Cristo Redentor tunnel area, and running west up to the Port of Valparaíso.

## • Proposed Solution

Upgrading approximately 92 kilometers of International Route CH-60, so that it may be capable of carrying traffic traveling at 100 kilometers per hour along most sections. The project envisages second carriageways, grade separations, and frontage roads. The project is divided into two sectors. The first one starts 6.5 kilometers west of the Las Vizcachas Bridge, in the municipality of Los Andes, and spans 53 kilometers until it reaches Route 5 North. The second section covers a total distance of 38.5 kilometers; it begins at the El Olivo interchange, on Route 5 North, in the municipality of La Calera, and ends at the junction with Troncal Sur freeway, which provides a connection with the Port of Valparaíso. In areas where the project crosses populated centers, bypass sections are provided for, such as:

- (a) El Sauce, between Los Andes and San Felipe, a 19.5 kilometer stretch where the road follows the northern bank of the Aconcagua river;
- (b) the Panquehue section, comprising 25 kilometers, 7 of which run along the northern bank of the Aconcagua river and 18 kilometers stretch along the southern bank of the same water course; and
- (c) a 16-kilometer long bypass section at the Quillota Poniente junction.

## • Current Status - June 14, 2010

International route under a concession contract. More specifically, the section comprised between Route 5 and Limache is completed and currently operational as a divided highway, while the Los Andes-Route 5 stretch has been divided into three sections: Los Andes-San Felipe (66% progress, undivided highway); San Felipe-Panquehue (undivided highway), where the detailed engineering study is underway; and Panquehue-Route 5, the works of which have been recently delivered for operation as a divided highway.

Investment pending disbursement amounts to some US\$86 million, with US\$200 million having been disbursed so far, accounting for approximately 70% of the total investment.

## • Implementation Analysis

The concession began on July 22, 2004, and construction on January 27, 2005. Since then, the project has been advancing, and is expected to be completed by the end of 2011. Its completion date has been extended *vis-à-vis* the original one due to delays in private investment.

The construction of a bypass will prevent traffic from crossing the city of Los Andes, thus reducing travel times and local road maintenance costs, as well as improving the quality of life of the population in the area.

It is worth mentioning that the inclusion of the project in IIRSA Implementation Agenda based on Consensus has bolstered knowledge of the Cristo Redentor border crossing in South America. More than 5 million tons are carried between Chile and the MERCOSUR member countries (Argentina, Brazil, Uruguay and Paraguay) along Route CH-60. The duplication of its current capacity will help absorb the growth in demand as the project is completed.

Some of the factors that contributed to its implementation include governmental support and the need to improve infrastructure in one of the most important border crossings in the continent.

## 7 Northeastern Argentina Gas Pipeline



Integration Hub  
MERCOSUR-Chile

Group 5  
Energy Group

Countries  
Argentina (Bolivia)

Current status  
Execution



### • Type of Project

Energy/Gas Pipeline

### • Modality

Public

### • Financing Sources

Public

Private sector involvement is foreseen, under the modality of transport concession awarded via an international competitive bidding.

### • Executing Agency

Ministry of Federal Planning, Public Investment and Services of Argentina

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Pre-execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> Second half of 2007	<b>• Expected Completion Date</b> Being re-scheduled
<b>• Estimated Investment</b> US\$1.0 billion	<b>• Estimated Investment</b> US\$1.0 billion

## • Purpose

To ensure natural gas supply to the northern and central regions of Argentina, which comprise the provinces of Salta, Formosa, Chaco, Misiones, Corrientes, Entre Ríos, and Santa Fe.

## • Proposed Solution

The works will comprise the trunk gas pipeline and the provincial branches stemming from it, as well as the gas compressor station, pressure regulator station, and measuring station; above-ground facilities; and other ancillary civil engineering, electrical, and communications works, including, among others, those related to electronic data transmission, remote operation, and telemetry.

The trunk gas pipeline will be 1,500 kilometers long, with a diameter of 30 inches, operating under a 95-bar pressure. It will link the gas reserves located in the north of Argentina and in Bolivia —extending across the Argentine provinces of Salta, Formosa, Chaco, and Santa Fe, with an additional transport capacity of 20 million cubic meters—with the National Interconnected Trunk Gas Pipeline System, in the vicinity of the city of Santa Fe.

This interconnection will ensure the flow of significant gas volumes in those parts of Argentina where the demand is greater, as well as expanded gas availability in the above-mentioned provinces, some of which either lack gas supply or have insufficient provision to secure the economic development that the region requires.

## • Current Status - June 15, 2010

The technical and economic pre-feasibility study as well as the engineering design have been completed. By Decree 267/2007, the firm *Energía Argentina Sociedad Anónima* (ENARSA) was awarded a 35-year concession for the construction, maintenance, operation, and provision of the gas transportation service.

An international competitive bid—including a preliminary basic engineering proposal—for the purchase of the turbo-compressors and pipe sections for 1,000 kilometers of the gas pipeline and a national competitive tender for the procurement of the cadastral survey services were conducted.

The call for bids for the submission of proposals for detailed engineering, procurement and provision of consumables and equipment, construction, pre-commissioning, commissioning, and start-up of the facilities was launched on February 27, 2008, and is currently on hold.

A bilateral meeting was held in March 2010, between Argentina and Bolivia, and both countries signed an addendum to the gas purchase contract, whereby they undertook to build the Juana Azurduy gas pipeline, which will be 50 kilometers long and interconnect the Bolivian gas reserves with the Argentine trunk gas pipeline joint.

The Argentine section of the Juana Azurduy gas pipeline is 30 kilometers long and has a diameter of 30 inches, stretching between the delivery point at the Argentine-Bolivian border and the Refinor-operated Campo Durán facilities, in the province of Salta, running parallel to the existing 8-inch gas pipeline. The estimated cost amounts to US\$50 million and the bidding process is underway; the works completion date is scheduled for late 2011.

## • Implementation Analysis

Even though this project has made headway from July 2005 to date, it has been subject to changes and is influenced by a series of conditioning factors that make the establishment of its time frame and goals much more difficult than in the case of a typical project. Therefore, its completion date, originally planned for the second half of 2007, is being re-scheduled. In this regard, the fact that an agreement on the gas supply conditions was not reached in a short period of time has been singled out as one of the obstacles for the progress of the project.

As of its incorporation into the Implementation Agenda based on Consensus, the technical and economic pre-feasibility study as well as the engineering design were completed, and the bidding forms as a preliminary basic engineering proposal were being prepared.

In this context, it is important to note that although energy-related projects develop with a momentum of their own, influenced by the need to increase supply, the inclusion of this project in the above-mentioned Agenda has reinforced its strategic nature.

Finally, it must be highlighted that the negotiations conducted by the Argentine and Bolivian governments have been crucial in unblocking the issue of ensuring gas supply.



**Integration Hub**  
**Capricorn**

**Group 2**  
**Salta - Villazón - Yacuiba -**  
**Mariscal Estigarribia**

**Countries**  
**Argentina - Bolivia**

**Current status**  
**Pre-execution**



• **Type of Project**

Transportation/Bridge

• **Modality**

Public

• **Financing Sources**

Public, through national agencies

Actions have been taken by Argentina to include the project in the 2011 budget under the National Treasury financing.

• **Executing Agency**

Binational Committee (Argentina-Bolivia Agreement Management Committee)

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Pre-execution</p>	<p>• <b>Project Phase</b></p> <p>Pre-execution</p>
<p>• <b>Expected Completion Date</b></p> <p>December 2008</p>	<p>• <b>Expected Completion Date</b></p> <p>December 2013</p>
<p>• <b>Estimated Investment</b></p> <p>US\$10.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$23.0 million</p>

## • Purpose

To come up with a solution to the existing serious difficulties in the border crossing and to ensure the smooth flow of international freight traffic. This border crossing is part of the main road corridor between Argentina and Bolivia.

## • Proposed Solution

Construction of a new bridge, border center, and access roads.

As a result of previously conducted studies, the building of a new international bridge to the west of the current border crossing was found to constitute an alternative to overcome traffic bottlenecks in the area. In addition, the solution included the construction of approach roads to the bridge in both countries and a border center where integrated control operations would be carried out at single headquarters located in Argentine territory.

The new border crossing works consist of 9.7 kilometers of approach roads (5.5 kilometers in Argentine territory and 4.2 kilometers in Bolivian territory); a two-lane 30-meter long international bridge; earthworks including 228,536 cubic meters of fill and 293,741 cubic meters of cut; and a 25-hectare border center for centralized operations of both countries. The project further includes the construction of three parking islands accommodating up to one hundred general freight trucks, and one 20-space parking island for vehicles transporting hazardous materials.

## • Current Status - June 12, 2010

A Binational Agreement is in place setting forth the obligations to be undertaken by the countries in relation to the project and the regulatory framework that will govern its execution.

A negotiation process has been initiated to redefine certain project parameters that will not significantly modify the works to be carried out, but will substantially alter the management model. Therefore, amending the Binational Agreement was necessary.

The formalization of such Binational Agreement as a Partial Scope Agreement is being sought before the Latin American Integration Association (ALADI - *Asociación Latinoamericana de Integración*) within the framework of this multilateral organization.

Works will be financed by the Argentine government.

Once these formalities are finalized and the funds are included in the Argentine budget for 2011, the call for bids will be launched to select the firm to which construction is to be awarded.

The Bolivian government is seeking financing for the construction of the approach road in Bolivian territory.

## • Implementation Analysis

The project has made progress as the bilateral negotiations aimed at reaching consensus on the management model were successful. Nevertheless, the originally planned dates were not met, and there are still some obstacles to overcome. The current works completion date has been estimated to be the end of 2013.

This project was included in the Implementation Agenda based on Consensus with the purpose of widening its scope in terms of integration, so as to link Bolivia not only with Argentina but also with the other MERCOSUR member countries.

By the time of its incorporation into the above-mentioned Agenda in 2005, the technical, economic and environmental feasibility studies as well as the engineering study were already completed, and had been conducted in accordance with the guidelines set forth in the Binational Agreement signed by both countries in 2004. This Agreement further

established the obligations to be undertaken by each country in connection with the project and the regulatory framework that would govern its execution. A committee —the YASMA, or Yacuiba-Salvador Mazza, Committee— was created and entrusted with the management of the Agreement as well as with the power to call for bids.

The project is being carried out in an area that is very sensitive in both regional and social terms, a fact that has called for a solution. This is one of the major bottlenecks in the MERCOSUR-Chile Hub, as formal and informal commercial activities coexist and, thus, adversely affect international trade between Argentina and Bolivia.

The binational factor entails a delay in the procedures for setting up a program of this kind. However, the political willingness of both countries to enhance their physical connections and, more specifically, the importance attached to this border crossing as an engine for development in the region have kept the project alive and making progress.



**Integration Hub**  
**Capricorn**

**Group 3**  
**Asunción - Paranaguá**

**Countries**  
**Brazil - Paraguay**

**Current status**  
**Pre-execution**



• **Type of Project**

Transportation/Bridge

• **Modality**

Public

• **Financing Sources**

Public, through national and multilateral agencies

The costs incurred in the preparation of the project studies and the construction of the bridge will be borne by the Brazilian government, and each party will pay the costs of their respective bridge and ancillary works approach roads as well as those associated with the acquisition of land.

• **Executing Agency**

Ministry of Public Works and Communications of Paraguay  
National Department of Transport Infrastructure (DNIT) of Brazil

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Pre-execution</p>	<p>• <b>Project Phase</b></p> <p>Pre-execution</p>
<p>• <b>Expected Completion Date</b></p> <p>Fourth quarter of 2008</p>	<p>• <b>Expected Completion Date</b></p> <p>Second half of 2013</p>
<p>• <b>Estimated Investment</b></p> <p>US\$55.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$80.0 million</p>

## • Purpose

To alleviate traffic on the Puente de la Amistad ("Friendship Bridge"), which joins Foz do Iguaçu, Brazil, and Ciudad del Este, Paraguay; to foster urban planning in the border cities, by diverting freight traffic to a peripheral road and securing faster, more efficient connection along the binational transport systems; and to optimize the integrated border control system.

## • Proposed Solution

Building a second, approximately 745-meter long, 18-meter wide international road bridge over the Paraná river, featuring two 3.60-meter lanes, two 0.4-meter vehicle parapets, and two 1.80-meter pedestrian walkways equipped with two safety railings. The project further includes approach roads and supplementary infrastructure between the towns of Porto Meira (Foz do Iguaçu) and Presidente Franco, and the implementation of an integrated border control system where the Puente de la Amistad complex and the new bridge converge. In principle, the works will consist of a suspension bridge having a 360-meter span and two towers rising 136 meters. Each country will bear the costs of its respective approach roads, border facilities, and land acquisition for public use.

## • Current Status - July 1, 2010

For the purposes of implementing this binational project, which is essential for the sustainable development of Brazil-Paraguay physical integration, an agreement was signed in December 2005, which was ratified by the Brazilian and Paraguayan national legislatures in December 2008 and May 2007, respectively (Decree 6676).

In March 2009, the final outcome of the bidding process for contracting out a specialized firm for the preparation of the basic and detailed engineering designs of the bridge was published in the Brazilian *Official Gazette*. The successful bidder was the Brazilian firm VETEC Engenharia Ltda., for an approximate contract amount of R\$3 million to be borne by the Brazilian government. The contract was signed in August 2009.

All project stakeholders are taking the necessary actions to meet the following schedule agreed upon in April 2010, on occasion of the 11th meeting of the Joint Committee:

- Basic Design-related preliminary studies, May 2010
- Final Basic Design, June 2010
- Approval of Basic Design, subject to the issue of the preliminary license
- Detailed Design, August 2010
- Approval of Preliminary License, September 2010
- Works bidding, September 2010
- Contract award and commencement of works, December 2010

The works have been included in the Growth Acceleration Program of the Brazilian government.

The bridge will help stimulate trade, mainly between Paraguay and Brazil, in addition to impacting positively on transportation in MERCOSUR.

## • Implementation Analysis

Even though the project has remained in the pre-execution phase, progress has been made in its definition and a call for bids for the construction of the works is expected to be issued in September 2010, which would facilitate completion of the works in the second half of 2013.

The inclusion of the project in the Implementation Agenda based on Consensus evidences the importance of this binational land connection for both countries.

The first bidding process for the preparation of the detailed engineering design of the bridge concluded in June 2007, but it ended up being called off and a second call for tenders was launched, its terms of reference for bidders including more stringent environmental requirements. Finally, in September 2007 the Environmental Impact Assessment/Environmental Impact Report and the Basic Environmental Plan were commissioned for an approximate cost of R\$1 million to be borne by Brazil.

Although several bureaucratic hurdles concerning the substitution and amendment of agreements had to be overcome along the process, the active participation of the institutions involved in the construction of the new bridge, within the framework of both the Joint Brazilian-Paraguayan Committee and IIRSA, have been key for the progress of the project.



Integration Hub  
Central Interoceanic

Group 3  
Santa Cruz - Puerto Suárez -  
Corumbá Connection

Countries  
Bolivia (Brazil - Chile - Peru)

Current status  
Execution



• **Type of Project**

Transportation/Road

• **Modality**

Public

• **Financing Sources**

Public, through national and multilateral agencies

IDB, CAF, European Union  
National Treasury

• **Executing Agency**

Bolivian Road Authority

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Execution</p>	<p>• <b>Project Phase</b></p> <p>Execution</p>
<p>• <b>Expected Completion Date</b></p> <p>June 2008</p>	<p>• <b>Expected Completion Date</b></p> <p>Second half of 2011</p>
<p>• <b>Estimated Investment</b></p> <p>US\$435.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$477.0 million</p>

## • Purpose

The Pailón-Puerto Suárez road is part of the main Integration Corridor of Bolivia, which joins the country's east and west ends and is home to a significant portion of the country's population and economic activity. It supplements regional integration between the ports of Peru and Chile, on the Pacific ocean, and the ports of Brazil, on the Atlantic ocean, cutting across Bolivia.

## • Proposed Solution

A 600-kilometer long highway with two 7.3-meter wide separate roadways, using rigid and/or flexible pavement, featuring 1-meter shoulders on each side. Resources are earmarked for social and environmental mitigation programs.

## • Current Status - June 30, 2010

The current status of the road sections is as follows:

- The Pailas bridge, spanning 1.4 kilometers, has been completed and is operational. Investment: US\$30 million
- Construction of the Paraíso-El Tinto section, spanning 125 kilometers, is underway. Investment: US\$85 million
- Construction of the El Tinto-San José section, which is 82 kilometers long, is in progress. Investment: US\$67 million
- The 138-kilometer long San José-Taperas-Roboré section has been completed and is operational. Investment: US\$82 million
- The Roboré-El Carmen section, spanning 140 kilometers, has been completed and is operational. Investment: US\$97 million
- The 108-kilometer long El Carmen-Arroyo Concepción section has been completed and is operational. Investment: US\$81 million

Furthermore, in the Roboré-El Carmen section the construction of 15 bridges, which are currently operational, has been completed with a US\$15 million investment. In addition, the social and environmental component was funded by the IDB and represented an investment of US\$20 million.

## • Implementation Analysis

The project has made continuous progress since July 2005, despite undergoing a technical and financial reformulation process that resulted in an extension of its execution time frame. At the time of its incorporation into the Implementation Agenda based on Consensus, the project works had already been awarded, except for two sections that were in a contract award process and in a bidding process, respectively.

It is worth mentioning that there has been a problem with the execution of the works on two sections that are still pending completion regarding the originally contracted terms and conditions, due to an increase in the costs of the materials as well as of the transport and supply of Portland cement, among others, which jeopardized the technical and economic feasibility of the works, resulting in an excessive time frame for completion and in the requirement of funds highly in excess of the economic resources available. Finally, after analyzing the alternative solutions for keeping within the maximum available budget and not reducing the final quality of the works, the activities were resumed.

An outstanding factor conducive to the progress of the project is the decision to build the Santa Cruz-Puerto Suárez corridor in a single phase rather than in two phases, as initially considered, so as to work simultaneously on all of its sections. This decision led to bid and award the contract for the works on the last two sections of the corridor (Roboré-El Carmen and El Carmen-Arroyo Concepción) on a turnkey basis, whereby the two road sections were delivered ready for operation, and became operational, by the end of 2008.

The works on this road, which is part of the main bioceanic corridor for the integration of Bolivia, are expected to be completed by the second half of 2011.



Integration Hub  
Central Interoceanic

Group 2  
Optimization of the  
Corumbá - São Paulo -  
Santos - Rio de Janeiro Corridor

Countries  
Brazil

Current status  
Pre-execution



• **Type of Project**

Transportation/Rail

• **Modality**

Public/Private

• **Financing Sources**

Public-Private Partnership

• **Executing Agency**

Government of Brazil

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b> Pre-execution</p>	<p>• <b>Project Phase</b> Pre-execution</p>
<p>• <b>Expected Completion Date</b> October 2009</p>	<p>• <b>Expected Completion Date</b> December 2014</p>
<p>• <b>Estimated Investment</b> US\$300.0 million</p>	<p>• <b>Estimated Investment</b> US\$850.0 million</p>

## • Purpose

To redistribute and expand freight flows originating in, bound for, and/or passing through the São Paulo Metropolitan Region, with a view to reducing conflict between freight and passenger traffic, increasing the share of the rail mode in traffic flows across this Metropolitan Region, and improving access to the Santos (São Paulo), São Sebastião (São Paulo) and Itaguaí (Rio do Janeiro) ports.

## • Proposed Solution

Restructuring of the Greater São Paulo rail network via the construction of a ring rail and its joining with the system of roads and logistics centers in the State of São Paulo. The project includes the construction of two different, yet supplementary, branch lines: the Northern Section and the Southern Section.

## • Current Status - June 24, 2010

Project included in the Brazilian Growth Acceleration Program in January 2007. Since then, the federal government, the government of the state of São Paulo, and other participating agencies (the National Land Transport Agency, the Brazilian Development Bank, MRS Logística S.A., and the São Paulo Metropolitan Train Company or Companhia Paulista de Trens Metropolitanos, in Portuguese) have been discussing alternative alignments for the railway, although consensus has not been reached yet.

More recently, the government of the State of São Paulo proposed to reconsider the alternatives that provided for the possibility of joining the Northern Section of the Ring Railway with the Northern Section of the Ring Road project.

Brazil received from the International Bank for Reconstruction and Development (IBRD) a loan (No. 7383-BR, under a loan agreement) including a component of technical assistance to the National Land Transport Agency. This Agency is seeking to allocate a portion of such proceeds to the payment of consulting services for the development of the Ring Railway. The associated studies have a tentative implementation period of 12 months as from October 2010, and pursue the following goals:

- Conducting Ring Railway freight traffic demand studies with different interest scenarios, including the setting of macroeconomic and sectoral scenarios, the analysis of the market potential for selling freight and right of way access (i.e. the use by a customer or concessionaire of the rail network of another concessionaire), market research on grain and unitized general cargo transportation, and demand characterization; and
- Conducting a functional study of the Ring Railway as a whole within a schedule compatible with the expectation of actually establishing the rail connection to the north and south of the São Paulo Metropolitan Region. This study will encompass the preparation of the operational design, an environmental impact assessment, a legal and institutional study, a business model, an economic and technical assessment, and implementation strategy details.

The National Land Transport Agency is the executing agency under the loan, and the consultant services selection process will be conducted in conformance with the procedures established in the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers," published in May 2004, and revised in October 2006, using the Quality- and Cost-Based Selection (QCBS) method.

## • Implementation Analysis

The São Paulo Ring Railway (Northern and Southern Sections) project has not yet made the expected progress, and currently its scope is under discussion, which has led to re-estimate the investment involved and to reschedule the completion date originally planned.

The main obstacle in the way has been the lack of consensus between the Brazilian federal government and the government of the state of São Paulo as to the sequence of construction of the northern and southern sections.

The project is considered to be of strategic importance, as it will favor a substantial reduction in the costs of transporting Brazilian as well as Bolivian and Paraguayan freight to the main ports on the Atlantic located in southeastern Brazil. Furthermore, it will add weight to the rail component of the regional transport matrix and bolster tourism in the Mato Grosso Pantanal region once it becomes part of the Corumbá-São Paulo-Santos-Rio de Janeiro corridor.

## 12 Infante Rivarola - Cañada Oruro Border Crossing



**Integration Hub**  
**Central Interoceanic**

**Group 1**  
**Chile - Bolivia - Paraguay -**  
**Brazil Connection**

**Countries**  
**Bolivia - Paraguay**

**Current status**  
**Execution**



### • Type of Project

Transportation/Border Crossing

### • Modality

Public

### • Financing Sources

Public  
National Treasury

Paraguay undertakes to finance 100% of the project out of own resources.

### • Executing Agency

Ministry of Public Works and Communications of Paraguay  
Joint Paraguayan-Bolivian Committee  
Ministry of Public Works, Services and Housing of Bolivia

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Pre-execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> First half of 2007	<b>• Expected Completion Date</b> First half of 2011 (1st Stage)
<b>• Estimated Investment</b> US\$1.2 million	<b>• Estimated Investment</b> US\$2.0 million

## • Purpose

To develop the necessary infrastructure and services to allow efficient passenger and freight traffic between Bolivia and Paraguay, through the building and setting-up of an Integrated Border Control Center.

## • Proposed Solution

Building the infrastructure required for the installation of an Integrated Border Control Center, featuring access and cargo inspection areas, a cargo retention area, as well as IT and communications systems, and a phyto- and zoo-sanitary control laboratory.

## • Current Status - June 24, 2010

The governments of Paraguay and Bolivia agreed to establish integrated control facilities at the Infante Rivarola-Cañada Oruro border crossing.

Both countries undertook to build the Border Administrative Center with common premises and integrated controls in Paraguayan territory. In addition, they agreed to establish a Joint Technical Group to promote projects contributing to the physical integration of both territories.

On March 17, 2010, Paraguay, through its Ministry of Public Works and Communications, commenced the works for the construction of the Border Administrative Center with single headquarters and integrated controls (First Stage). This stage comprises the construction of the control platform and vehicle parking area, an administration building featuring parking spaces, and a housing area for Paraguayan and Bolivian officials with a cafeteria and a utility room, in addition to a housing for an electric generator and an artesian well, etc.

The works are expected to be completed in 330 days. The cost of the first stage amounts to US\$1.2 million, and that of the detailed design, to US\$70 thousand, to be paid with funds from the National Treasury.

## • Implementation Analysis

The project has made headway in spite of the need to extend the original time frames, which was probably due to a miscalculation of the time schedules actually required to implement the project.

Its significance for integration, as it will facilitate efficient passenger and freight traffic between Bolivian and Paraguay within the Central Interoceanic Hub, explains why the project was included in the AIC.

At the time it was incorporated into the Agenda, funding arrangements were underway with the IDB for conducting the pre-feasibility study, including studies on the location of the border center based on the profile and preliminary proposal prepared by the Paraguayan Ministry of Public Works and Communications. These studies were already completed as of 2006.

The first stage is expected to be completed in the first half of 2011 with funds from the Paraguayan National Treasury allocated as follows: US\$1.3 million for construction works and US\$70 thousand for the detailed design.

It has been noted that the indicative territorial planning methodology applied within the framework of IIRSA was essential for identifying and speeding up the processes—from decision-making by the countries to the creation of joint technical groups devoted to Paraguay-Bolivia physical integration—and, consequently, for the Paraguayan decision to carry out the works with funds from the National Treasury.

It is worth mentioning that in this stage of the project it appears necessary to consider the administrative aspects of the operation of the border center, taking into account that integrated controls will be carried out at a single headquarters on Paraguayan territory, as well as to move forward with a comprehensive planning process that should provide for the development of cities on both territories with joint administrative mechanisms.



**Integration Hub**  
**Central Interoceanic**

**Group 1**  
**Chile - Bolivia - Paraguay -**  
**Brazil Connection**

**Countries**  
**Bolivia (Paraguay)**

**Current status**  
**Execution**



• **Type of Project**

Transportation/Road

• **Modality**

Public

• **Financing Sources**

Public, through national and multilateral agencies

National Treasury  
Government of the Department of Tarija  
CAF

• **Executing Agency**

Bolivian Road Authority

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Pre-execution</p>	<p>• <b>Project Phase</b></p> <p>Execution</p>
<p>• <b>Expected Completion Date</b></p> <p>March 2007</p>	<p>• <b>Expected Completion Date</b></p> <p>January 2011 (1st Stage)</p>
<p>• <b>Estimated Investment</b></p> <p>US\$60.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$49.0 million</p>

## • Purpose

To allow, via a staged process, the permanent access of products from mining areas to regional and international markets, facilitating the departure of products originating in Bolivia and the Central Chaco region to the ports located on the Pacific ocean and to the main Andean markets, thus fostering trade (in salt, phosphates, fertilizers, wines, wood, berries, flowers, etc.) among the countries in the group.

Additionally, to establish a connection between the energy sector in the Bolivian Chaco region and that in the Paraguayan Chaco region through the creation of an integration route.

## • Proposed Solution

Construction of a paved road in a mountain area, with slope protection and drainage, asphalt or rigid concrete pavement, joining Tarija (Bolivia) and Paraguay through the Villamontes-Hito BR 94 (geo-reference point - Paraguayan border) connection and stretching 127 kilometers, which constitutes the First Stage of the project.

## • Current Status - June 4, 2010

The current status of the road sections included in the First Stage is as follows:

- The construction of the 75-kilometer long Hito BR 94-Palo Marcado section is in progress, requiring an investment of US\$29 million, with local and CAF funding.
- The construction of the 52-kilometer long Palo Marcado-Villamontes section is underway, at the expense of the government of the Department of Tarija.

The current status of the remaining road sections is the following:

- The Villamontes-Junacas section (64 kilometers) presents a gravel surface.
- The Junacas-Tarija section (54 kilometers) is paved and operational.
- The Tarija-El Puente section (106 kilometers) is under construction (within the Potosí-Tarija Project).
- The El Puente-Tupiza section (103 kilometers) presents a gravel surface.
- The Tupiza-Uyuni section (200 kilometers) is in the study stage.

## • Implementation Analysis

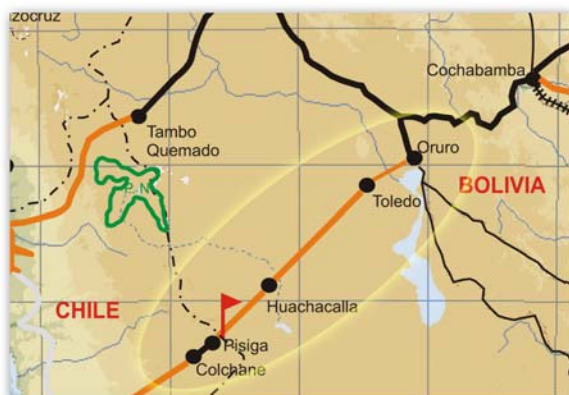
This project has been progressing from July 2005 to date. Only the first stage of the building of the Cañada Oruro-Estación Abaroa road is included in the Implementation Agenda based on Consensus.

An increase in the costs of construction materials in the bidding stage has been regarded as one factor conducive to changes in the contract for works that resulted in the deferment of the completion date. However, works are underway.

As of the inclusion of the project in the Implementation Agenda based on Consensus, the works were at the final phase of the bidding process. At present, works on the two sections comprised in the First Stage are in progress and expected to be completed by the beginning of 2001.

The Cañada Oruro-Villamontes road is divided into seven sections. In three of these sections, construction is underway (as stated above, only two of them fall within the scope of the project as included in the Implementation Agenda based on Consensus); other three sections are completed and operational, and the remaining one is in the study stage.

## 14 Toledo - Pisiga Road



Integration Hub  
Central Interoceanic

Group 5  
Connections of the Hub  
to the Pacific: Ilo/Matarani -  
Desaguadero - La Paz + Arica -  
La Paz + Iquique - Oruro -  
Cochabamba - Santa Cruz

Countries  
Bolivia (Chile)

Current status  
Execution



### • Type of Project

Transportation/Road

### • Modality

Public

### • Financing Sources

Public, through national and multilateral agencies

National Treasury  
Italian Government  
CAF

### • Executing Agency

Bolivian Road Authority

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> Second half of 2007	<b>• Expected Completion Date</b> Second half of 2011
<b>• Estimated Investment</b> US\$76.0 million	<b>• Estimated Investment</b> US\$95.0 million

## • Purpose

To supplement the linkage of Bolivia and the Central Interoceanic Hub countries with the Iquique port, with the aim of stimulating economic recovery and social development in a major Bolivian mining and commercial area by providing a connection to Atlantic ocean through the Oruro-Cochabamba-Santa Cruz-Puerto Suárez-Santos road.

## • Proposed Solution

Using rigid pavement for the Oruro-Toledo road supplement (142-kilometer Ancaravi-Pisiga connection), and flexible pavement for the Toledo-Ancaravi connection stretch (53 kilometers) given its high heavy freight traffic potential.

## • Current Status - June 4, 2010

The project comprises four sections:

- Section 1: Oruro-Toledo, 37-kilometer long, US\$18 million CAF-financed investment, already completed and operational
- Section 2: Toledo-Ancaravi, 53-kilometer long, US\$24 million investment funded by the Italian government, in progress
- Section 3: Ancaravi-Huachacalla, 70-kilometer long, US\$28 million CAF-financed investment, already completed and operational
- Section 4: Huachacalla-Pisiga, 72-kilometer long, US\$25 million CAF-financed investment, in progress. The works were begun in July 2007 and are expected to be completed by late 2010.

The completed sections (Oruro-Toledo and Ancaravi-Huachacalla) account for 47% of the Oruro-Pisiga road.

## • Implementation Analysis

The project has been moving forward from July 2005 to date. The road comprises four sections and, as of its incorporation into the Implementation Agenda based on Consensus, one section was already operational, the works on another one were underway, a third section was in the bidding stage, and financing was being procured for the fourth section. At present, without taking into account the section that was already completed, one of the sections is completed and operational, and works on the other two are in progress.

The strategic nature of this project, which was the reason for its inclusion in the Agenda, lies in the fact that it will supplement the linkage of Bolivia with the port of Iquique, in Chile. Additionally, it is expected to contribute to the economic recovery and social development of a major mining and commercial area in Bolivia. The road is planned to be completed in the second half of 2011.

Even though the project has made progress, a series of factors slowing down its implementation and thus extending its original completion date by almost four years —its completion is now estimated for the second half of 2011— have been identified. Some of these factors are the following:

- The formalities for obtaining the Italian government's "no objection" to the commencement of the construction of the Toledo-Ancaravi section, which is financed by said government.
- Although the physical progress of the Huachacalla-Pisiga section exceeds 50%, its failure to advance as expected may be considered the contractor's responsibility due to the slow execution of the works and the lack of resources.
- The weather conditions in the area are another factor affecting the activities related to the rigid pavement slab, which take place on the section that is critical to the works time schedule.

In spite of the already-mentioned slow progress made on the Huachacalla-Pisiga section, an element that helps expedite the works is the procurement in April 2010 of a state-of-the-art paver machine that allows continuous work on the entire width of the roadway and is used to finish the rigid pavement slab.

## 15 Paving and Improvement of the Iquique - Colchane Road



### Integration Hub Central Interoceanic

**Group 5**  
**Connections of the Hub**  
 to the Pacific: Ilo/Matarani -  
 Desaguadero - La Paz + Arica -  
 La Paz + Iquique - Oruro -  
 Cochabamba - Santa Cruz

**Countries**  
 Chile (Bolivia)

**Current status**  
 Execution



<ul style="list-style-type: none"> <li>• <b>Type of Project</b> Transportation/Road</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Modality</b> Public</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Financing Sources</b> National Treasury  Regional and sectoral investment</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Executing Agency</b> Ministry of Public Works of Chile</li> </ul>

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li>• <b>Project Phase</b> Execution</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Project Phase</b> Execution</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b> December 2008</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b> March 2011</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b> US\$19.0 million</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b> US\$42.0 million</li> </ul>

## • Purpose

To increase the capacity and upgrade the design of International Road CH-15. This project will provide a connection of the port of Iquique with the southern and central areas of Bolivia, such as Oruro and Iquique, and, through them, with the eastern areas of Santa Cruz and Puerto Suárez. This linkage is expected to prompt the development of the south of Bolivia by facilitating its access to the demand for goods in the city of Iquique and allowing direct exit to other countries from the Iquique port.

## • Proposed Solution

Rehabilitation in different stages of a 163-kilometer section of road CH-15 between the towns of Huara and Colchane. The project is included in Chile's Bicentennial Works Program (*Programa de Obras Bicentenario*, in Spanish) and in the Regional Programming Accord (*Acuerdo de Programación Regional*, in Spanish).

At present, all the sections are paved. Only road safety works between kilometers 113 and 163 are pending.

The road alignment, 80% of which is straight and with slight downgrades, will result in considerable cost and time savings for land transport, thus improving competitiveness in the Hub. Access to the integrated logistics system at the Iquique port and to the Iquique free trade zone will enhance the competitive advantages.

## • Current Status - June 4, 2010

The section between kilometers 50 and 67.5 was completed in March 2009; in the sections between kilometers 102 and 113.5 and between kilometers 144 and 163, works are in progress under a single contract for works, their completion being scheduled for March 2011. Asphalt pavement of these sections has been completed, except for road safety works.

In the other sections of the Huara-Colchane road, pavement maintenance works are underway.

Additionally, in 2011 a call for bids will be issued for the engineering study for the construction of the Colchane Weigh Station, which is scheduled to be completed in 2012.

## • Implementation Analysis

This project has been advancing from July 2005 to date. At the time of its incorporation into the Implementation Agenda based on Consensus, works were underway in some sections while the engineering studies for the other sections were being conducted.

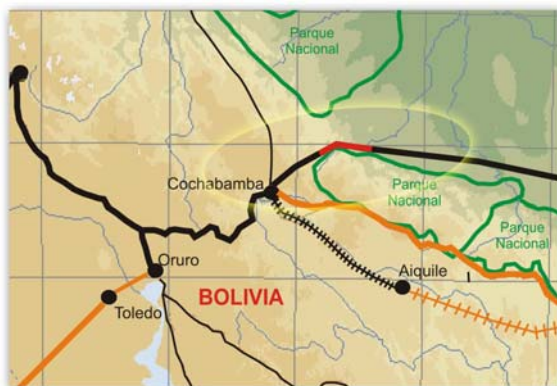
Worth noting is that the inclusion of this project in the Agenda made it known to all South American governments and investors.

According to the information gathered, no obstacles have delayed the implementation of the project or prevented it from meeting the original time schedules; therefore, the reason for the extension of the completion date by a little more than two years is to be found in an initial miscalculation of the time frames. Additionally, the investment amount estimated in 2005 has increased by 121%.

The awareness of the need to materialize the Atlantic-Pacific connection as well as the continued support of the governments of Bolivia, Brazil and Chile to the implementation of the project must be highlighted as elements that have boosted progress.

The strategic nature of this project lies in the fact that it will provide a connection of the port of Iquique with Bolivia and other countries in the region.

## 16 Rehabilitation of El Sillar Road Section



**Integration Hub**  
Central Interoceanic

**Group 5**  
**Connections of the Hub**  
to the Pacific: Ilo/Matarani -  
Desaguadero - La Paz + Arica -  
La Paz + Iquique - Oruro -  
Cochabamba - Santa Cruz

**Countries**  
Bolivia (Chile - Peru)

**Current status**  
Pre-execution



- Type of Project**

Transportation/Road

- Modality**

Public

- Financing Sources**

Public, through national and multilateral agencies

IDB

Government of the Department of Cochabamba

- Executing Agency**

Bolivian Road Authority

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li><b>Project Phase</b> Pre-execution</li> </ul>	<ul style="list-style-type: none"> <li><b>Project Phase</b> Pre-execution</li> </ul>
<ul style="list-style-type: none"> <li><b>Expected Completion Date</b> Third quarter of 2009</li> </ul>	<ul style="list-style-type: none"> <li><b>Expected Completion Date</b> Second half of 2011</li> </ul>
<ul style="list-style-type: none"> <li><b>Estimated Investment</b> US\$30.0 million</li> </ul>	<ul style="list-style-type: none"> <li><b>Estimated Investment</b> US\$120.0 million</li> </ul>

## • Purpose

To find a solution to the critical stretch of the new Santa Cruz-Cochabamba road (4,000 vehicles/day), where geological and drainage defects —worsened during rainy seasons as a result of the nearby Espíritu Santo river flood events— hinder smooth traffic interconnection both nationally and internationally. This is a strategic project for joining Bolivia's western highlands and eastern plains, and for their connection to the Puerto Suárez-Corumbá border crossing (Brazilian border).

## • Proposed Solution

Rehabilitation of a 30-kilometer section of the new Santa Cruz-Cochabamba road (between Paracti and Villa Tunari), which becomes unstable during rainy seasons. The project includes a study for the improvement of the existing section as well as a proposal for a new, alternative road alignment or a route that partially uses the existing course.

## • Current Status - June 5, 2010

The final detailed engineering design studies were completed in 2008, at a cost of US\$2.5 million, which were financed by the IDB.

Funding arrangements are underway for the works construction phase.

## • Implementation Analysis

This project has made headway from July 2005 to date. Since 2008, however, when the comprehensive study and final detailed engineering design of the divided highway (included in the scope of the project) were completed, funds are being sought for the construction of the works, with the consequent delay in their commencement.

The definition of the technical solution to be adopted resulted in a new estimation of the original project costs.

The strategic importance of rehabilitating this road section derives from the Bolivian government's need to find a solution for this critical stretch of the Santa Cruz-Cochabamba road, as it is part of the Central Bioceanic Corridor. Completion of the works is expected for the second half of 2011.

## 17 Desaguadero Binational Border Service Center



**Integration Hub**  
Andean

**Group 8**  
Peru - Bolivia (Huancayo -  
Ayacucho - Tarija -  
Bermejo) Connection

**Countries**  
Bolivia - Peru

**Current status**  
Pre-execution



### • Type of Project

Transportation/Border Crossing

### • Modality

Public

### • Financing Sources

Public, through national and multilateral agencies

Peruvian Module: Inter-American Development Bank (IDB) and local counterpart funds (30% from the National Treasury). Estimated Investment: US\$4.1 million  
Bolivian Module: Multilateral agency to be defined (IDB or CAF) and local counterpart funds (20% from the National Treasury)

### • Executing Agency

Ministry of Foreign Affairs and Trade of Bolivia  
Ministry of Foreign Affairs of Peru  
Ministry of Transport and Communications of Peru<sup>(\*)</sup>  
Ministry of Public Works, Services and Housing of Bolivia

<sup>(\*)</sup> The Ministry of Transport and Communications is, as stated in the Loan Agreement, the co-executing agency for the Program.

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Profiling	<b>• Project Phase</b> Pre-execution
<b>• Expected Completion Date</b> Second half of 2007	<b>• Expected Completion Date</b> Second half of 2012
<b>• Estimated Investment</b> US\$7.5 million	<b>• Estimated Investment</b> US\$7.5 million

## • Purpose

To set up a binational integrated control center at the Desaguadero border crossing with a view to improving the flow of persons, goods, and vehicles between Peru and Bolivia. This is the most important border crossing between the two countries; therefore, the start-up of the Desaguadero Binational Border Service Center (CEBAF - *Centro Binacional de Atención en Frontera*) will have, among other impacts, a significant revitalizing effect on economic and trade relations at the bilateral and regional levels.

## • Proposed Solution

Building and managing integrated control modules in each country, under the juxtaposed, double headquarters modality. Within the framework of Decision 502 of the Andean Community (CAN), such modules will constitute the CEBAF at the new Desaguadero international bridge. In addition, the solution seeks to regulate, standardize, and harmonize the administrative and information-recording procedures and processes of both countries' competent agencies so that they operate on a coordinated basis at the Desaguadero border crossing, ensuring the integrated control of the flow of persons, goods, and vehicles.

The solution further includes furnishing the equipment required for the provision of integrated control services, as well as supporting the reengineering and development of the processes and procedures needed to this effect. It also provides for the training of the officials responsible for control activities under the new scheme, as well as of operators and users of this border crossing. The involvement of the private sector and relevant social stakeholders from the area is to be encouraged, as it will contribute to the proper integration of the center and the related supplementary services with the economic activities of the local population.

Finally, the proposal includes the identification of logistics development opportunities in the city of Desaguadero resulting from the activities conducted at the CEBAF-type border crossing, as well as the implementation of concrete actions conducive to promoting the development of the local supply of carrier-support services.

## • Current Status - June 8, 2010

The Desaguadero border crossing includes the new Desaguadero international bridge, which spans the river of the same name and joins the homonymous Bolivian and Peruvian cities of Desaguadero. This border crossing is used for 90% of the trade flow between the two countries.

Peru requested a US\$4 million loan from the IDB; the operation was approved by the Peruvian Executive Branch (Decree 181-2007-EF), which enabled the signing of Loan Agreement 1836/OC-PE between the Peruvian government and the IDB on February 22, 2008. Of the total loan amount, US\$3 million have been allocated to the Desaguadero border crossing project (Peru-Bolivia). Therefore, the project has sufficient funding for the construction of modern border control facilities, the procurement of equipment, and the training of its officials. Due to Peruvian fiscal policy provisions, however, the first disbursement only occurred on February 13, 2009.

To date, after a short Project Coordination Unit implementation phase, the land for the location of the Peruvian premises has been purchased, and the required process to clear and obtain the property title is about to be completed. A conscientious program of community relations and communication with the main stakeholders was implemented. On this basis, the administrative process to hire the firm that is to be commissioned to prepare the final design of the works is underway. This study is estimated to be completed in the first quarter of 2011. If this is the case, the works should be finished by mid-2012.

As for the construction of the Bolivian premises, the competent authorities have not taken any action yet.

## • Implementation Analysis

In view of the early definition phase in which the project was in 2005, it is deemed to have moved forward. The signature that same year of the Specific Agreement between Bolivia and Peru was the starting point for the preparation of the studies.

The selection of this border crossing project to form part of the Implementation Agenda based on Consensus has disseminated the knowledge about it among all the stakeholders involved and has made the project more oriented towards the regional integration of the Andean countries.

As from the time when the project was included in the Agenda, the two countries concerned have entered into negotiations with the IDB and CAF to procure funding; as a result, a US\$4 million loan was obtained by Peru, while Bolivia is still seeking financing.

This project is of major importance within the framework of IIRSA and has been selected as one of the five pilot experiences for streamlining international customs transit. In this sense, the willingness of the countries to reach an understanding, which helped overcome national and local conflicting interests, and the support provided by the IDB have been conducive to the success of the project.



**Integration Hub**  
Andean

**Group 2**  
Venezuela (Caracas) -  
Colombia (Bogotá) -  
Ecuador (Quito) -  
(Existing) Road Connection

**Countries**  
Colombia - Venezuela

**Current status**  
Profiling



• **Type of Project**

Transportation/Border Crossing

• **Modality**

Public

• **Financing Sources**

Public, through national and multilateral agencies

IDB, CAF and national counterpart funds

The investment amount will be subject to the results of the design stage.

• **Executing Agency**

Ministry of Transport of Colombia

Ministry of Infrastructure of Venezuela

Venezuela-Colombia Binational Transport Panel

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Profiling</p>	<p>• <b>Project Phase</b></p> <p>Profiling</p>
<p>• <b>Expected Completion Date</b></p> <p>Pending definition</p>	<p>• <b>Expected Completion Date</b></p> <p>Pending definition</p>
<p>• <b>Estimated Investment</b></p> <p>US\$2.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$2.0 million</p>

## • Purpose

To improve the flow of persons, vehicles, and goods through the Cúcuta (Colombia)-San Antonio (Venezuela) border crossing via the implementation of integrated border control systems.

## • Proposed Solution

The Cúcuta-San Antonio border crossing concentrates a significant flow of persons and foreign-trade goods, always employing the land transportation mode, in view of which a series of decisions has been agreed upon within the framework of CAN: Decision 398, which regulates international passenger road transportation; Decision 399, applicable to the international transport of goods; and Decision 636, providing for customs transit in the Andean Community. Venezuela's withdrawal from CAN has resulted in the need for the other member countries to enter into bilateral agreements aimed at facilitating passenger and goods transportation through border crossings in an economic environment where trade agreements are increasingly common.

It is also necessary to regulate cross-border transportation as a modality separate from international transportation, and to secure greater gains for all players involved in the transportation production chain. In this sense, concrete actions are required to be defined with the purpose of materializing a cultural change conducive to the establishment of a strategic alliance scheme for rendering transportation services, eliminating mandatory transshipment of goods at border crossings, and complying with the provisions of the Andean legislation in this regard.

In addition, the counterpart agencies of the two countries converging at this border crossing are required to take simultaneous actions oriented to the simplification and harmonization of administrative formalities, the improvement of physical infrastructure, and the standardization of procedures.

## • Current Status - May 12, 2010

Colombia submitted a harmonization proposal to Venezuela. As of March 2010, no response was received. Project continuity is contingent upon both countries reaching consensus on this proposal.

## • Implementation Analysis

This initiative to improve the border crossing has not attained the level of progress expected. At present, it remains suspended due to a lack of agreement between the countries as to an implementation solution.

This project was selected as one of the five pilot experiences for streamlining international customs transit. As of its inclusion in the Implementation Agenda based on Consensus, the solution intended to be analyzed was the implementation of an Integrated Border Control System in conformity with CAN Decision 502. This Integrated System would be instrumental in working with the existing infrastructure using an operational software product that allows data flows to be automatically shared by the pertinent authorities from both countries.

Until 2007, bilateral discussions were held between both countries' transportation authorities, in which the needs as well as the actions to be taken were identified, their results serving as the basis for a study conducted by CAF and submitted in a preliminary phase. Venezuela's withdrawal from CAN, however, gave rise to the need to subscribe a bilateral transportation agreement setting forth the new terms and conditions regarding the integrated border control centers. As a result of the relations between Colombia and Venezuela, any joint technical activity has stagnated.

This project stands as a major opportunity for South American trade, to the extent that it would facilitate international transport between Colombia and Venezuela and, from these territories, to the other countries in the region.

Note: Information only from Colombia was available to prepare this analysis.



**Integration Hub**  
Andean

**Group 4**  
Pacific - Bogotá - Meta -  
Orinoco - Atlantic Connection

**Countries**  
Colombia - Venezuela

**Current status**  
Execution



• **Type of Project**

Transportation/River

• **Modality**

Public

• **Financing Sources**

Public through national agencies

• **Executing Agency**

Ministry of Transport of Colombia  
Ministry of Infrastructure of Venezuela  
Ministry of the Environment of Colombia  
Ministry of the Environment of Venezuela

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b> Pre-execution</p>	<p>• <b>Project Phase</b> Execution</p>
<p>• <b>Expected Completion Date</b> November 2009</p>	<p>• <b>Expected Completion Date</b> December 2014</p>
<p>• <b>Estimated Investment</b> US\$108.0 million</p>	<p>• <b>Estimated Investment</b> US\$108.0 million</p>

## • Purpose

To develop and strengthen, on a sustainable basis, an intermodal transportation corridor through the restoration of the navigability of the Meta river, with the aim of fostering trade among different regions in Colombia, Venezuela, Brazil, and other South American and European countries, and connecting remote regions with distribution and consumption centers, thus improving the standard of living of their inhabitants.

This river navigability project will leverage exports of corn, palm oil, forest products, and coke, among other products, and imports of wheat, fertilizers, soybean, and steel.

## • Proposed Solution

Restoring the navigability of an 830-kilometer section, between Cabuyaro and Puerto Carreño. To accomplish this, certain works need to be performed such as: closure of river branches resulting from river channel bifurcation, stabilization of riverbanks, contraction of the river channel, dredging of the river in unstable areas, placement of buoys and markers, improvement and construction of docks, and improvement of access roads to the docks, among others.

## • Current Status - May 21, 2010

Document 3396 issued by the Colombian National Council of Economic and Social Policy (CONPES - *Consejo Nacional de Política Económica y Social (de Colombia)*) in 2005 declared the restoration of the Meta river navigability to be strategic for Colombia, and approved resources amounting to US\$19 million for the execution of the following works:

- (i) La Banqueta Dock - update of designs and construction: environmental licenses have been issued. The sheet piling, filling, final dock enclosure, small vessel access facilities, and marshalling yard works have been completed (US\$3.5 million). Commencement date: December 2006 - Completion date: August 16, 2009
- (ii) Cabuyaro Dock - studies, design, and expansion: all dock-related activities, as well as dock approach blocks, six-leg jetties, and block paving of access roads, have been completed (US\$1.3 million). Commencement date: January 2007 - Completion date: May 2009. In a second phase, a contract was awarded for the execution of works for dock expansion and improvement of areas for livestock yard location. Commencement date: October 29, 2009 - Expected completion date: September 30, 2010
- (iii) Puerto Carreño Dock - study for its improvement and expansion: studies and designs have been completed. The loading dock piling works, as well as the construction of the floating dock and its gangway, have been completed (US\$2.2 million). Commencement date: February 2007 - Completion date: May 11, 2009. The procurement process for a second stage consisting in the execution of dock expansion works is underway.
- (iv) La Banqueta Dock access road - study, design and improvement: studies have been completed. Activities have been focused mostly on the expansion of the access road at the lower sector of the Meta river and the shaping and granular surfacing of the 18.18-kilometer long road. Drainage works have been built along the road corridor, as follows: nine 3 x 3 box culverts (double), one 3 x 3 box culvert (single), one 4-opening multiple box culvert, and 14 extensions for existing culverts. Areas for depositing excess material: works began with the definition of areas for depositing excess material left over from excavation in Hacienda La Nirvana, abscissa Km 5+600, on the left bank. Granular surfacing of 16 kilometers of road: the allocated funds (US\$6.5 million) were only sufficient for the granular surfacing of the road. Commencement date: December 2006. As of May 2010, the procurement process for the pavement of the first kilometers is underway, and procurement of funds for the paving of the entire road is in progress.
- (v) Construction of Meta river channeling works: monitoring the river section between Cabuyaro and the mouth of the Manacacías river (approximately 135 kilometers) in order to be in conformance with the environmental license (prior to works commencement). Construction of the following structures with *guadua* (a kind of bamboo)

for the closure of river branches (only for shallow waters): 1, 1A, 2 and 3, located between the municipality of Cabuyaro and downstream the La Banqueta loading dock. Construction of more than 21 submerged structures, each consisting in 6 to 8 three-meter long units (made of *guadua*). Building and installation of 941 jetty jacks. Progress is being made in the construction of the 600-meter long closure structure number 4, in the El Arenal sector. The second hydro-sedimentary campaign was conducted, yielding very favorable results in connection with the works constructed (US\$5.2 million). Commencement date: February 2007. Progress as of March 2010: 80%.

Note: Project progress refers to the Colombian sector.

## • Implementation Analysis

The project has made progress in the Colombian sector, where it was declared as strategic and a priority for consolidating the country's transportation network as well as for both national and regional South American integration. The works were divided into different parts, some of which have already been completed. All the works on the Colombian side are expected to be concluded in December 2014.

The incorporation of this project as part of an intermodal transport corridor included in the political agenda of the national government of Colombia is reflected in document 3396 issued by the CONPES, which declared it to be of "strategic importance." Another factor that gave impetus to the works was the National Development Plan 2002-2006, entitled "Towards a Communitarian State," which sets forth as an objective the investment in river and port infrastructure in pursuit of integrating the most isolated areas and connecting the waterways with other transportation modes.

This program of actions intended to improve the navigation conditions on the waterway was developed and coordinated jointly by Colombia and Venezuela. However, the prioritization of this project by the Colombian government, along with the failure of the parties to reach a consensual solution, has resulted in the actions focusing only on the Colombian sector. This lack of agreement, together with the non-availability of funds, explains the delay in the execution of the project.

Note: Information only from Colombia was available to prepare this analysis.

## 20 Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor



**Integration Hub**  
Amazon

**Group 1**  
Access to the  
Putumayo Waterway

**Countries**  
Colombia

**Current status**  
Execution



### • Type of Project

Transportation/Road

### • Modality

Public

### • Financing Sources

Public, through national and multilateral agencies

National Treasury  
IDB

### • Executing Agency

Ministry of Transport of Colombia  
National Road Institute of Colombia

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Pre-execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> December 2010	<b>• Expected Completion Date</b> December 2016
<b>• Estimated Investment</b> US\$183.0 million	<b>• Estimated Investment</b> US\$373.0 million

## • Purpose

To contribute to the consolidation of the Amazon Hub, from west to east, from Tumaco to Belém do Pará (Brazil); to favor greater integration of the Colombian transportation infrastructure network with Ecuador and Peru; to improve land connection of Colombia's southern and central regions; to foster the social and economic development of the south of Colombia and the northern portions of Ecuador and Peru; and to stimulate trade among the South American countries.

## • Proposed Solution

In its Document 3609 of September 2009, the CONPES declared the "Road Development of the South of Colombia" project to be of strategic importance.

The project comprises the following sections:

- (i) Tumaco-Pasto-Mocoa: Works scheduled to be carried out over the 2010-2015 period consist in the improvement and comprehensive maintenance of the Tumaco-Pasto-Mocoa road corridor, including, among other activities, routine maintenance, structural strengthening, rehabilitation, emergency works, road management, and the upgrade of the Pasto-San Fernando section to a divided highway.
- (ii) Construction of the San Francisco-Mocoa bypass: A 45.6-kilometer bypass road will be constructed in the 2010-2016 period. The project will consist of two phases, to be completed within six to eight years. During this first phase, construction will progress until the entire undivided highway presents a granular surface, including the construction of viaducts, earthworks, the building of special engineering structures, structural surfacing, and compliance with environmental requirements.

## • Current Status - June 23, 2010

Studies and documents completed to date:

- (i) Phase III Engineering Studies and Environmental Impact Assessments (EIAs) for the construction of the San Francisco-Mocoa bypass road
- (ii) Environmental Impact Assessments (EIAs)
- (iii) Regional Environmental Assessment (REA): Analysis of cumulative and synergetic impacts due to increased traffic along the road corridor; environmental as well as social and cultural management opportunities
- (iv) Basic Environmental and Social Management Plan (ESMP) regarding the reserved forest in the upper Mocoa river basin: Management and control tools for the reserved forest were defined; measures and technical specifications for the design, construction, and operation of the bypass road
- (v) Environmental Management Plan Oversight: Sustainability of the measures recommended in the studies
- (vi) Economic Feasibility and Baseline: Bypass road construction and operation cost-benefit analysis; detailed traffic studies

During 2009, improvement and maintenance works were carried out on the Tumaco-Mocoa road:

1. On the Nariño department road corridor sections: (i) improvement works on the following roads: El Encano-Santiago, Pasto-La Piscicultura, Pasto-El Encano (preventive maintenance); (ii) other works carried out on the El Encano-Santiago and Pasto-Mocoa sections. Investment spent: US\$1.99 million
2. On the Putumayo department road corridor sections: (i) improvement and maintenance works on the following roads: Pasto-Mocoa, El Paso, El Encano-Santiago; (ii) emergency works on the La Piscicultura-El Pepino road; (iii) other works on the Pasto-Mocoa, La Sardina-El Pepino, La Piscicultura-El Pepino, El Encano-Santiago sections and on the San Francisco-Mocoa bypass road. Investment spent: US\$3.8 million

The National Road Institute of Colombia (INVIAS - *Instituto Nacional de Vías*) will invest US\$6.5 million in 2010 for the improvement and maintenance of the Tumaco-Mocoa road (Piscicultura-Santiago, San Francisco-El Pepino, Mocoa sections). Likewise, INVIAS allocated US\$13 million to the construction of the bypass road.

## • Implementation Analysis

Despite the deferment of its completion date, the project has made progress, especially in its first phase, which comprises the rehabilitation of the Tumaco-Mocoa road corridor, where some improvement and maintenance works are already completed.

The fact that this project was already included in the Implementation Agenda based on Consensus and, therefore, regarded as being of international strategic importance allowed it to become a priority in the Colombian national development agenda, since its implementation will go far towards the consolidation of the Amazon Hub and promote the development of transport, energy and communications infrastructure with a regional vision, in an attempt to attain the physical integration of, specifically, Colombia, Ecuador, Peru and Brazil.

The second phase of the project, encompassing the construction of the San Francisco-Mocoa bypass road, posed a major challenge on account of the weight of the social and environmental circumstances of the region. It has been necessary to conduct Environmental Impact Assessments and a Regional Environmental Assessment, as well as to prepare a basic Environmental and Social Management Plan regarding the reserved forest in the upper Mocoa river basin, to oversee the Environmental Management Plan, and to conduct Economic Feasibility and Baseline studies. These studies expedited the issue of the environmental license by the competent body.

So much emphasis was placed on the social and environmental aspects that the process of planning and structuring the San Francisco-Mocoa bypass road construction project is deemed a pilot experience for the development of infrastructure in areas rich in biodiversity and cultural heritage.<sup>(\*)</sup>

Another factor that had a decisive influence on the implementation of the two phases is the declaration of the project as being of strategic importance by the National Council of Economic and Social Policy of Colombia in its Policy Document 3609, "Road Development in Southern Colombia," issued in 2009. This, together with the US\$203 million loan approved by the IDB to partially finance the construction of the San Francisco-Mocoa bypass road (first phase), ensures the availability of funds to carry out the works encompassed by the project.

It is fair to say that the major factor hindering the expected progress in the works was the delay in obtaining the environmental license, which was requested in 1996 and only granted in 2008. Making any headway was extremely difficult without this license.

<sup>(\*)</sup> The structuring of this project relied on the support by the IDB for conducting the technical studies required, which were commenced in 2005 and culminated in the issue of the environmental license by the Colombian Ministry of Environment, Housing and Territorial Development in December 2008.

## 21 Paita - Tarapoto - Yurimaguas Road, Ports and Logistics Centers



**Integration Hub**  
**Amazon**

**Group 3**  
**Access to the Huallaga -**  
**Marañón Waterway**

**Countries**  
**Peru (Brazil)**

**Current status**  
**Execution**



### • Type of Project

Transportation/Road

### • Modality

Public/Private

### • Financing Sources

In the case of the Paita-Yurimaguas road, financing is provided by the firm Concesionaria IIRSA Norte S.A., to be repaid by the Peruvian government over a 25-year period. The Paita port terminal works are to be privately financed (under a concession scheme). The logistics and river project studies are publicly funded.

### • Executing Agency

Ministry of Transport and Communications of Peru  
National Port Authority of Peru  
Peruvian road, port and logistics center  
concessionaire firms  
Private Investment Promotion Agency  
(PROINVERSION) of Peru

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> December 2008	<b>• Expected Completion Date</b> December 2012
<b>• Estimated Investment</b> US\$285.0 million	<b>• Estimated Investment</b> US\$681.2 million

## • Purpose

To improve the infrastructure and operation of the intermodal hub, by promoting the streamlining of its logistics services and ports in order to consolidate the coast-sierra-rainforest integration corridor of Peru's northern region and its regional complementarity with the Amazonas state in Brazil, thus giving impetus to international trade.

## • Proposed Solution

Rehabilitation and improvement of the existing road infrastructure in the Paita-Tarapoto-Yurimaguas corridor, complementarily providing the services necessary to ensure an efficient flow of freight and passengers. Upgrade of the ports of Paita and Yurimaguas, promoting private investment and management in order to enhance their productivity. Establishment of the Paita and Yurimaguas Logistics Platforms ("Zonas de Actividades Logísticas," in Spanish), stimulating private investment and management so as to organize and optimize the activities and processes within the logistics chains involved.

## • Current Status - June 24, 2010

Within the framework of the concession of the Northern Amazon Hub (Paita-Yurimaguas), between April 2006 and April 2007 the Paita-Piura (54 kilometers) and Piura-Olmos Turn-off (168 kilometers) sections were rehabilitated, the investment totaling US\$71.8 million. In April 2008, the works of the second stage began, which include river flood defense works, slope stabilization, improvement of special engineering structures and drainage, environmental protection, reconstruction of five bridges, and asphalt pavement repair in critical stretches of the Corral Quemado-Rioja, Rioja-Tarapoto and Corral Quemado-Olmos Turn-off sections, requiring an investment of US\$40.2 million. Second-stage works must be completed by September 2010, as some sections were affected by natural disasters.

As of March 2010, physical progress made in the Rioja-Corral Quemado section is 93.7%; in the Rioja-Tarapoto section, 93.2%, and in the Corral Quemado-Olmos Turn-off section, 56.2%.

In addition, asphalt paving of the 114-kilometers long Tarapoto-Yurimaguas road was completed in March 2009, the investment amounting to US\$163 million. Publicly funded works were executed on an 11.6-kilometer stretch (kilometer 114-Yurimaguas) between April 2003 and July 2006.

In 2005 the Olmos-Corral Quemado road (196 kilometers) repair works were completed, with a total investment of US\$69.9 million.

As for the port of Paita, on April 11, 2008, PROINVERSION launched a call for comprehensive project bids for the concession of the Paita port terminal. On March 31, 2009, the concession was awarded to the consortium *Terminales Portuarios Euroandinos* (TPE). The investments provided for in the contract (US\$127.8 million for the first and second stages), as well as US\$100 million (execution of complementary works) will be used for the construction of a new dock and container yard, as well as for the purchase of gantry and ship-to-shore cranes. Works at the Paita port terminal are scheduled to begin in the first quarter of 2011.

In addition, to supplement the development of the port of Paita, PROINVERSION conducted in 2008, the Paita Logistics Platform feasibility study, which concluded that the required investment is US\$47 million.

On December 29, 2009, a call for comprehensive project bids was issued for the concession of the Yurimaguas port terminal, which is to be located in Nueva Reforma, some 20 kilometers away from the existing port. The concession is for 30 years, and the investment will amount to US\$38.9 million. The bid is expected to be awarded in the third quarter of 2010. The cost of the works is to be co-financed with government funds.

To access the new Yurimaguas port terminal location (Nueva Reforma), a 10-kilometer long road is to be built at the expense of the Northern Amazon Hub's concessionaire. The investment amounts to US\$10 million.

Furthermore, the Yurimaguas Logistics Center is planned to be built, with an investment of US\$5 million.

## • Implementation Analysis

From an overall perspective, this comprehensive project has made adequate progress, the most significant steps forward occurring in the road rehabilitation component, which began in 2003 and is expected to be completed during 2010. The works on the Paita-Yurimaguas corridor are in their final stage, with several sections completed to the highest standard, not only in terms of the roadway characteristics but also because of the service level offered by the concessionaire.

The following elements conducive to the successful progress of the project may be highlighted:

- The Peruvian government's decision to give political boost to interoceanic trade corridors, within the framework of its strategic partnership with Brazil, by resorting to intermodal transport.
- The need to integrate northeastern Peru with the northern coast of the country via a first-class road to improve market access conditions with considerable transport costs and travel time savings.
- The participation of private investment in transport infrastructure works through the implementation of innovative mechanisms for public-private partnerships (PPPs).

A conservative estimate of the prospective economic benefits from the development of this infrastructure in the Hub is US\$1,077,000,000, in terms of the current value of the benefits projected for the period of the concessions awarded or yet to be awarded, according to estimates made by Roberto Urrunaga and José Luis Bonifaz in *Conexiones para el desarrollo: Beneficios del Eje Multimodal Amazonas Norte*, published by the Research Center of the University of the Pacific (CIUP - *Centro de Investigación de la Universidad del Pacífico*), Peru, 2009. In order for this infrastructure to create such benefits, its multimodal component works are required to be completed, namely the IIRSA North Highway (Paita-Yurimaguas); the ports of Paita, Yurimaguas and Iquitos; and the Huallaga waterway.

According to said estimates, 53% of the total benefits are direct, resulting mainly from vehicle and vessel operating costs savings and from reduced wait times and freight and passenger transport times, while the remaining 47% are indirect benefits related to the producer surplus, i.e. to the greater potential supply of goods and services expected to be derived from the investments in infrastructure in the Hub.

## 22 Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers



**Integration Hub**  
Amazon

**Group 4**  
Access to the  
Ucayali Waterway

**Countries**  
Peru (Brazil)

**Current status**  
Execution



### • Type of Project

Transportation/Road

### • Modality

Public/Private

### • Financing Sources

The required investments in the Lima-Pucallpa Road and the South Dock of the port of Callao will be privately financed via concessions. Studies on and access to the waterway, as well as the Logistics Centers, will be publicly financed and, once completed, the execution of the works will be awarded under concession to the private sector.

### • Executing Agency

Ministry of Transport and Communications of Peru  
National Port Authority of Peru  
Peruvian road, port and logistics center  
concessionaire firms

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> December 2008	<b>• Expected Completion Date</b> December 2014
<b>• Estimated Investment</b> US\$514.0 million	<b>• Estimated Investment</b> US\$1,351,300,000

## • Purpose

To enhance the competitiveness of the coast-sierra-rainforest integration road in the Peruvian territory's central corridor by interconnecting the country's major urban and industrial center, its central region and the Brazilian states of Acre and Amazonas, as well as to allow the interconnection of the continent with the Pacific Basin.

## • Proposed Solution

Provision of road infrastructure and services required to ensure efficient vehicle flow on the Lima-Tingo María-Pucallpa route. Upgrade of the ports of Callao and Pucallpa, mainly through private investment, with a view to increasing their competitiveness.

To establish logistics centers at the port terminals of Callao and Pucallpa in order to facilitate cargo flows and storage.

The port of Callao will be considered as a South American hub. In 2012, once the first stage of the port streamlining process is completed, the southern dock will have a capacity to handle a minimum 850,000 TEU/year, for which it is equipped with six Super Post-Panamax gantry cranes and eighteen yard cranes, in addition to state-of-the-art port vehicles and instruments. In a second stage, container-handling capacity will reach 1.5 million TEU/year (with nine gantry cranes and thirty-two yard cranes).

## • Current Status - July 5, 2010

The following sections have been completed: Tingo María-Puente Pumahuasi (15.2 kilometers); Puente Chino-Aguaytía (42.3 kilometers), Aguaytía-San Alejandro (50.5 kilometers), and Neshuya-Pucallpa (58.8 kilometers). Total investment: US\$152 million.

Works on the Puente Pumahuasi-Puente Chino (36.6 kilometers) and San Alejandro-Neshuya (50.1 kilometers) sections are in progress, and their completion is scheduled for December 2010. Total investment: US\$161 million.

In addition, a 25-kilometer stretch of the Puente Chino-Aguaytía section, which was damaged by natural phenomena in 2008, is scheduled to be rebuilt. Required investment: US\$16.5 million.

The Tingo María-Aguaytía-Pucallpa road is part of the Central Amazon Hub concession (Lima-Ricardo Palma-La Oroya-Pucallpa). On November 1, 2009, a call for tenders was launched for the concession of Section II, Ricardo Palma-La Oroya-Huancayo and La Oroya-Cerro de Pasco Turn-off (370 kilometers), with an estimated investment of US\$60 million. The concession is expected to be awarded in the third quarter of 2010. In addition, the studies required to issue the call for bids for the concession of the other two sections —Section I: Lima-Ricardo Palma, and Section III: Cerro de Pasco Turn-off-Tingo María-Pucallpa— are underway.

As for the port of Pucallpa, on April 20, 2009, PROINVERSION launched the promotion process intended to grant it under concession to the private sector, estimating that the investment will amount to US\$16.7 million. The concession is scheduled to be awarded in the fourth quarter of 2010. The project requires public co-financing. Appraisal of the value of the land to be acquired by the State for this purpose is underway.

On June 19, 2006, the construction of the new Zona Sur (southern area) container terminal was awarded to the consortium Terminal Internacional de Contenedores del Callao, made up of P&O Dover/Dubai Ports International and Uniport S.A., for a period of 30 years, with committed investments of US\$617 million. In May 2010, the first-stage works were completed and operations began one month later.

Furthermore, alternatives are being analyzed for the construction of the new ore terminal at the port of Callao, which is estimated to require an investment of US\$36 million.

The State-owned firm ENAPU has bought four gantry cranes (two ship-to-shore cranes and two yard cranes) for Dock 5, which will be specially used for containers, with an investment of US\$29.3 million. The cranes have already been installed and are operational on Dock 5 since April 2009.

For the construction of the Ramiro Prialé-Puente Ricardo Palma freeway, the comprehensive pre-investment study is scheduled to commence in 2010, including an assessment of all alignment alternatives, intervention type per

section, and updated appraisal value of the land to be acquired by the State. The investment is estimated at US\$242 million (self-funding concession).

Some works are in progress (interchanges at the Huachipa bridge sector) amounting to US\$16.45 million, and must be completed by March 2011.

Additionally, the Pucallpa Logistics Center is scheduled to be built, with an estimated investment of US\$5.0 million, the objective of which is to streamline the operation of the Central Multimodal Hub.

## • Implementation Analysis

This project is in line with a comprehensive vision of the Lima-Tingo María-Pucallpa road, which will be provided with the logistics services necessary to optimize its competitiveness.

The originally estimated time frames were not met; yet, the project has moved on. Its biggest steps forward are related to the road restoration and concession components, and some sections are already completed, although the works are expected to continue until the end of 2014.

The reason for prioritizing this project, as reflected by its inclusion in the Implementation Agenda based on Consensus, is to be found in that it is a flagship project for Peru, as it will allow the interconnection of the Peruvian central rainforest with the central sierra and coastal area and, particularly, with the city of Lima. The central rainforest has a huge agricultural and forestry potential and it will have first-class road infrastructure.

The fact that the port of Callao is regarded as a South American hub has speeded up its modernization in such a way that a concession contract was awarded in 2006 for the construction of the new South Container Terminal and the first-phase works are about to be completed and opened for operation in 2010.

The Pucallpa port terminal should be put out to concession some time this year, and the construction of the Pucallpa Logistics Center is also planned.

The following are some of the main factors that have hampered the progress of the project components:

- The Ricardo Palma-La Oroya-Pucallpa road was not given in concession. In 2007, the bidding process was declared void because no offers were received. This was largely due to the fact that, from the private investors' perspective, the concession would not be profitable for the following reasons, among others: (i) costly subprojects, such as La Oroya bypass; (ii) The existence and promotion by the same investors of alternative roads to the central highway; (iii) the nearby vulnerable populations that could block the road in cases of social conflict, especially people whose subsistence depends on jobs in mining companies; and (iv) projects to enlarge and improve the Central Railway.
- The reasons stated in the paragraph above led to the decision to put the Lima-Pucallpa road out to concession in three sections, namely Section I: Lima-Ricardo Palma; Section II: Ricardo Palma-La Oroya-Cerro de Pasco and La Oroya-Huancayo; and Section III: Cerro de Pasco-Huánuco-Tingo María-Pucallpa.
- Due to the present location of the port, there are restrictions on the expansion of Pucallpa Port Terminal.
- The location of an ore terminal in the port of Callao is not defined yet. Several alternatives, including proposals by the private sector, are being analyzed.
- The Puente Chino-Aguaytía road section was severely damaged by the natural disasters that occurred in February and March 2008, which destroyed several segments of the roadway.

The Lima-Pucallpa Corridor and the ports of Callao and Pucallpa, with their respective logistics centers, are strategic for the integration with Brazil.

## 23 Francisco de Orellana Port



**Integration Hub  
Amazon**

**Group 2  
Access to the  
Napo Waterway**

**Countries  
Ecuador**

**Current status  
Pre-execution**



### • Type of Project

Transportation/Port

### • Modality

Public/Private

### • Financing Sources

Public and private, through concessionaires and national and multilateral agencies

Funds from the State and international financial organizations (CAF/IDB). To the extent that studies advise to have the port awarded by concession, funding may be sourced from the private sector.

### • Executing Agency

Government of Ecuador  
Ministry of Transport and Public Works of Ecuador

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Profiling	<b>• Project Phase</b> Pre-execution
<b>• Expected Completion Date</b> Not defined	<b>• Expected Completion Date</b> December 2012
<b>• Estimated Investment</b> US\$40.0 million	<b>• Estimated Investment</b> US\$105.3 million

## • Purpose

To facilitate trade between the Pacific Basin and the Amazon Basin countries by fostering sustainable development in the Ecuadorian provinces of Esmeraldas, Manabí, Guayas, El Oro, Carchi, Imbabura, Pichincha, Cotopaxi, Tungurahua, Chimborazo, Sucumbíos, Orellana, and Napo; the Peruvian department of Loreto; the Colombian departments of Nariño and Putumayo; and the Brazilian state of Amazonas.

## • Proposed Solution

Construction of a high-efficiency, high-performance cargo transfer river port on the left bank of the Napo river, Providencia sector, in the Ecuadorian provinces of Orellana/Sucumbíos, for which complementary works are required, such as the improvement of the Shushufindi-El Triunfo-Providencia road, which is to link the state road network with the above-mentioned port site, as well as the supply of electric power and telecommunications for proper port operation. The port facilities are to be built in Providencia, on a 160,000-square meter area that will feature docks, a multipurpose terminal, a solid bulk cargo terminal, a hazardous material terminal, a container consolidation and deconsolidation area, an administration area, port equipment, a customs area, a harbor master's office, migration services, security services, phytosanitary controls, and a logistics center intended to make trade flow more dynamic.

## • Current Status - July 20, 2010

The integration of Ecuador's eastern region with Brazil via Peru is deemed a priority, for which purpose the Francisco de Orellana port has been defined as a cargo transfer port. This integration involves the implementation of a corridor for trade and sustainable development based on a system of multimodal (road, river, and air) transport.

At the time when the Implementation Agenda Based on Consensus was established, the new port project was just an idea, and its possible location was its only development so far. In 2006, port location pre-feasibility studies were already available. It became apparent, however, that Napo river navigability studies were required in order to define the best possible location for the cargo transfer port, the alternatives under analysis being the Francisco de Orellana port and the Providencia port.

In 2009, upon the countries' request, the IDB approved a binational (Ecuador-Peru) technical cooperation grant for the preparation of the Napo river navigation conditions study. The study was awarded to the consulting firm SERMAN-CSI, which began working on it in October 2009, with the first two partial reports having been submitted to date. The final report must be delivered in the fourth quarter of 2010. These studies, together with the new definition of priorities and objectives, will constitute the basis for the pre-investment studies of the port itself.

## • Implementation Analysis

Even though the project is making headway in terms of the preparation of the relevant studies, progress is not being made at the expected pace because its objectives are being redefined.

The fact that the project is included in the Implementation Agenda based on Consensus reveals the significance attached to the regional integration of Ecuador, Peru, Colombia and Brazil.

Some of the elements that have delayed further progress are the changes and the lack of clarity as regards the size of the project and its implementation, along with the need of financial resources.



## Integration Hub Peru-Brazil-Bolivia

Group 1  
Corridor Porto Velho - Rio Branco -  
Assis - Puerto Maldonado -  
Cusco / Juliaca - Ports in the Pacific

Countries  
Peru (Brazil)

Current status  
Execution



### • Type of Project

Transportation/Road

### • Modality

Public/Private

### • Financing Sources

Public, through national and multilateral agencies  
/ Private, via concessionaires

The works are expected to be funded by the  
concessionaire firms in charge of each section. The  
project is to be repaid by the State in a 25-year period.

### • Executing Agency

Government of Peru  
Ministry of Transport and Communications of Peru  
Private Investment Promotion Agency  
(PROINVERSION) of Peru  
Public Transportation Infrastructure Investment  
Supervisory Board (OSITRAN - *Organismo  
Supervisor de la Inversión en Infraestructura de  
Transporte de Uso Público*) of Peru  
Peruvian road concessionaire firms

## • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Pre-execution	<b>• Project Phase</b> Execution
<b>• Expected Completion Date</b> December 2008	<b>• Expected Completion Date</b> April 2011
<b>• Estimated Investment</b> US\$694.0 million	<b>• Estimated Investment</b> US\$1,384,300,000

## • Purpose

To improve and repair road infrastructure in Peru's southern macro-region, which connects the country with the Brazilian states of Acre and Rondônia, the purpose of which is to facilitate passenger and freight flows between such regions and their exit to international markets through the Pacific Basin, thus giving impetus to the regional integration process.

## • Proposed Solution

Carrying out paving works on the Urcos-Pte. Inambari, Pte. Inambari-Iñapari and Pte. Inambari-Azángaro sections. Rehabilitating asphalt pavement on the San Juan de Marcona-Urcos and Matarani-Juliaca-Azángaro / Ilo-Puno-Juliaca road sections. Providing the road with the infrastructure necessary to render services efficiently and ensure quality service for users.

## • Current Status - June 16, 2010

Asphalt paving of sections 2 (Urcos-Inambari), 3 (Inambari-Iñapari) and 4 (Inambari-Azángaro) of the Interoceanic Road commenced under contract in July 2006 for a 48-month period. To date, the first and second stage works have been completed, while third stage works are in progress.

As of March 2010, 763 kilometers of road have undergone asphalt pavement, accounting for 75.6% of the total length of the three road sections (1,009 kilometers). Works are scheduled to be completed in the first half of 2011. The updated investment amounts to US\$1,348,800,000.

In addition, the construction of the Billingham bridge spanning 772 meters over the Madre de Dios river is underway in the Iñapari-Puerto Maldonado-Inambari road section. Erection works are being performed by the concessionaire of section 3 of the Interoceanic Road (Inambari-Iñapari), and are expected to be completed in the first half of 2011. The total investment amounts to US\$35.5 million, including US\$27.9 million spent on bridge structure works (2006-2007) and US\$7.6 million allocated to the erection works.

Thus, the investment (road and bridge) totals US\$1,384,300,000.

It is worth noting that on the improved sections, traffic level has risen considerably (by up to 500% on the Urcos-Puerto Maldonado section), while travel times have been significantly reduced (50% on average).

## • Implementation Analysis

This project has moved forward from July 2005 to date. As progress was made in connection with the studies, both the investment amount and the completion date had to be updated in line with a more realistic approach, which explains, along with other financial and weather-related reasons, the differences in such amount and date between 2005 and 2010.

At the time the project was included in the Implementation Agenda based on Consensus, pre-feasibility studies had already been carried out and the detailed designs preparation as well as construction and maintenance were under concession.

The major key factors that boosted the implementation of the project are:

- The establishment of the association and strategic integration with Brazil as a State policy in Peru in view of the increasing vitality of the Brazilian economy and Brazil's need to secure land access to the Pacific ocean, as well as the opportunity to increase the export base of the southern Peruvian macro-region to supply the northwestern Brazilian market.

- The joint Peruvian and Brazilian efforts to further the project, which are the result of an active bilateral relation that includes meetings between and statements by the presidents of the two countries as well as reciprocal visits of Brazilian and Peruvian trade delegations to the most dynamic urban centers in the area of influence of the project.
- The political decision by the Peruvian government to implement the project, ensuring the resources required for its execution, even in times of fiscal restraint, and contracting out the works to foreign firms recognized for their technical expertise in carrying out works of such a scale.
- The implementation of an innovative financing model, through a public-private partnership, consisting in the repayment of road investments and maintenance works by the State to the concessionaire over a 25-year period.

On the other hand, the project execution obstacles identified are as follows:

- The shortage of tax revenues to meet the repayments of the investments made by the concessionaire gave rise to temporary delays in the execution of the works, which led to the adoption of measures to guarantee the financial resources, including funding by multilateral agencies (the IDB and CAF).
- The landslides caused by excessive seasonal rainfall as a consequence of slope instability triggered by cuts in steep hills created delays in the works on sections 2 and 4.

It is important to mention that this is the largest road project in the history of Peru, not only because of its magnitude (paving of 1,009 kilometers) but also because of the financial resources allocated to it (US\$1,349 million just for the works, to which the disbursements required for oversight, terrain trafficability, environmental impact mitigation, and construction of the Billinghurst bridge must be added).

In addition to the benefits reaped from the integration with Brazil, the project is helping bring the Madre de Dios department out from isolation and allowing greater and better exploitation of its resources by generating supplementary multisectoral investments (in forestry, agriculture, tourism, mining, etc.). The flow of vehicles to and from Puerto Maldonado has significantly increased (by up to 500%), and travel times have been considerably reduced (50%).

A conservative estimate, in present values, of the gross benefits derived from the 25-year long concession of the Interoceanic Road, specifically from sections 2 (Urcos-Inambari), 3 (Inambari-Iñapari) and 4 (Azángaro-Inambari), is US\$1,857 million, according to estimates made by José Luis Bonifaz and Roberto Urrunaga in *Estimación de los beneficios económicos de la carretera Interoceánica*, published by the Research Center of the University of the Pacific (CIUP), Peru, 2008. Of this amount, the direct benefits, i.e. the sum of the vehicle operating costs savings and the travel time savings for passengers, are estimated at US\$302 million, whereas the benefits expected to result from an increased production in the area (indirect benefits) would be US\$1,555 million.

It has been pointed out that this project is a milestone in South America's integration processes as well as an example of a fruitful bilateral relation oriented towards the attainment of shared integration goals. The whole works are expected to be completed by April next year.

## 25 Bridge over the Acre River



**Integration Hub**  
Peru-Brazil-Bolivia

**Group 1**  
Corridor Porto Velho - Rio  
Branco - Assis - Puerto  
Maldonado - Cusco / Juliaca -  
Ports in the Pacific

**Countries**  
Brazil – Peru

**Current status**  
Completed



### • Type of Project

Transportation/Bridge

### • Modality

Public

### • Financing Sources

Public, through national agencies

Financed by the Brazilian government (Ministry of Transport / National Department of Transport Infrastructure) and counterpart funds from the government of the state of Acre.

### • Executing Agency

Department of Roads of the State of Acre, Brazil (DERACRE - *Departamento de Carreteras de Acre de Brasil*)

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Execution	<b>• Project Phase</b> Completed
<b>• Expected Completion Date</b> December 2005	<b>• Expected Completion Date</b> January 2006
<b>• Estimated Investment</b> US\$10.0 million	<b>• Estimated Investment</b> US\$12.0 million

## • Purpose

To boost the development of physical infrastructure and cross-border integration in South America, in addition to providing Brazil and the southern macro-region of Peru with access to the Peruvian maritime ports of Ilo, Matarani and San Juan, on the Pacific ocean, and vice versa. To build border control centers with integrated control systems at both ends of the bridge over the Acre river.

## • Proposed Solution

Building of an international bridge over the Acre river (road BR-317) between the cities of Assis Brasil (state of Acre) and Iñapari (department of Madre de Dios, Peru), including its approaches and ancillary works. Construction of Border Control Centers at both ends of the bridge, which will be properly fitted for the implementation of integrated control systems.

## • Current Status - June 13, 2010

Bridge completed and opened to traffic on January 21, 2006.

The Brazilian side border facilities (customs, federal police, and phytosanitary control) were completed in July 2006.

As for the Peruvian side border center, the pre-investment study is in progress. This border center is expected to operate as a border center for integrated control in the near future.

## • Implementation Analysis

The opening of the bridge over the Acre river to traffic in January 2006 marked the first completion of a project included in the Implementation Agenda based on Consensus. At the time of its incorporation into this Agenda, the project works had achieved a 60% progress.

The strong commitment of the Brazilian and Peruvian governments to boost the development of physical infrastructure and cross-border integration must be underscored as a key factor for the completion of the project, which is strategic for physical cross-border integration as it provides Brazil and the Peruvian southern macro-region with access to the Pacific ports of Ilo, Matarani and San Juan, and vice versa. Hence the strategic importance that led to its inclusion in IIRSA Implementation Agenda based on Consensus.



**Integration Hub**  
Guianese Shield

**Group 2**  
Brazil - Guyana  
Interconnection

**Countries**  
Brazil - Guyana

**Current status**  
Execution



• **Type of Project**

Transportation/Road

• **Modality**

Public

• **Financing Sources**

Public, through national and multilateral agencies

IDB

National Treasury

• **Executing Agency**

Ministry of Public Works and Communications  
of Guyana

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Pre-execution</p>	<p>• <b>Project Phase</b></p> <p>Execution <sup>(*)</sup></p>
<p>• <b>Expected Completion Date</b></p> <p>March 2008</p>	<p>• <b>Expected Completion Date</b></p> <p>February 2011</p>
<p>• <b>Estimated Investment</b></p> <p>US\$3.3 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$3.3 million</p>

Note: <sup>(\*)</sup> Given that only the first stage of the project is included in the AIC and that it comprises studies that have already begun, the project is deemed to be in the execution phase.

## • Purpose

To improve land connection between Brazil and Guyana with a view to boosting their trade and cultural exchange. As a result of these works, this road will enhance trade flows with the Brazilian state of Roraima and strengthen integration among the Guianese Shield Hub countries, as it intersects the proposed east-west transportation network, joining Venezuela with Guyana, Suriname, and French Guiana.

## • Proposed Solution

Paving the existing road between Lethem (Guyana), located at the border with the Brazilian state of Roraima, and Linden. The Implementation Agenda based on Consensus includes only the first phase of this major project, which consists in updating the feasibility and environmental studies and preparing the engineering design of the Lethem-Georgetown section.

## • Current Status - June 22, 2010

The government of Guyana deems it important to complete the first stage, consisting in the updating of the feasibility and environmental studies and the preparation of the engineering studies for the Lethem-Georgetown section.

The pre-feasibility study, conducted by the UK firm Mott MacDonald in partnership with CEMCO Inc. of Guyana, was completed in January 2009.

The feasibility study is underway and will take 48 weeks. It is expected to be completed in February 2011. The scope of the works also includes the identification of the possible financing sources. Two addenda have extended the scope of the works originally provided for in terms of environmental/social and economic aspects.

The studies are being financed with resources from the IDB's Integration Infrastructure Fund (FIRII - *Fondo de Infraestructuras de Integración*).

## • Implementation Analysis

Notwithstanding the continuous progress of the project, the scheduled time frames have not been met.

As of its inclusion in the Implementation Agenda based on Consensus, pre-feasibility and environmental studies had already been conducted, but they became obsolete. The government of Guyana deemed this road interconnection with Brazil of great importance, and consequently prioritized the update of the studies necessary for the paving of the Guyanese section of the road (i.e. Lethem-Georgetown).

The government of Guyana obtained the funds required to implement the project in the form of a non-reimbursable technical cooperation grant approved by the IDB in 2006. The project was divided into two parts: the pre-feasibility study, which was completed in 2009, and the feasibility study, including (i) a technical analysis; (ii) the social and environmental impact assessment; (iii) a plan for indigenous peoples; and (iv) the economic feasibility study. As a result, the most appropriate alternative will be chosen and an action plan will be prepared.

## 27 Bridge over the Takutu River



Integration Hub  
Guianese Shield

Group 2  
Brazil - Guyana  
Interconnection

Countries  
Brazil - Guyana

Current status  
Completed



### • Type of Project

Transportation/Bridge

### • Modality

Public

### • Financing Sources

Public, through national agencies

Funds from the Ministry of Transport of Brazil

### • Executing Agency

Engineer Corps of the Brazilian Army

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<b>• Project Phase</b> Execution	<b>• Project Phase</b> Completed
<b>• Expected Completion Date</b> Second half of 2006	<b>• Expected Completion Date</b> April 2009
<b>• Estimated Investment</b> US\$10.0 million	<b>• Estimated Investment</b> US\$10.0 million

### • Purpose

The construction of the international bridge over the Takutu river is aimed at providing road interconnection between Brazil and Guyana, with the purpose of meeting the traffic and trade needs between the two countries, thus securing direct benefits for neighboring areas as it will enable the distribution of regional production to other markets.

This infrastructure will allow the national States to be present in traditionally isolated territories and will boost the interconnection of the Guianese Shield Hub and the Amazon Hub.

### • Proposed Solution

Building an international road bridge over the Takutu river to join the towns of Bonfim, in Brazil, and Lethem, in Guyana (230-meter span, 14-meter wide bridge). This project is part of Brazilian federal route BR-401 (Boa Vista/Bonfim/Normandia), located in the state of Roraima.

### • Current Status - May 11, 2009

The bridge was built by the 6th Engineering and Construction Battalion with funds provided by the Brazilian government. It was opened to traffic by the DNIT on April 26, 2009, but its official opening took place on September 14, 2009.

Immigration and customs procedures have been streamlined to allow smoother binational flows.

### • Implementation Analysis

The bridge over the Takutu river was the second project in the Implementation Agenda based on Consensus to be completed. The delays encountered in its execution did not preclude its successful conclusion. Today, the bridge is open to traffic and facilitates international flows between Brazil and Guyana.

In 2005, when the project was included into said Agenda, there was already some progress in the construction works, but these had been halted as a result of an order issued by the control body of the Brazilian legislature requiring that an assessment be made before continuing with the release of funds.

Since this project was considered to be a priority by the governments of Brazil and Guyana, as it became clear in the joint communiqué issued on occasion of the Brazilian's president visit to Guyana in February 2005, the Brazilian government adopted a special project follow-up system. Finally, Brazil released the funds and the works were resumed in March 2007. By April 2009, the bridge was already operational.



**Integration Hub**  
**Guianese Shield**

**Group 3**  
**Venezuela - (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Interconnection**

**Countries**  
**Guyana - Suriname - Venezuela**

**Current status**  
**Profiling**



• **Type of Project**

Transportation/Road

• **Modality**

Public

• **Financing Sources**

Public, through national and multilateral agencies

Only for section 2 (San Martín de Turumbang-Linden) has funding for the pre-feasibility and environmental impact study been secured from CAF under a loan agreement.

• **Executing Agency**

CAF  
Ministry of Infrastructure of Venezuela  
Ministry of Transport of Guyana  
Venezuela-Guyana Binational Technical Committee

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Profiling</p>	<p>• <b>Project Phase</b></p> <p>Profiling</p>
<p>• <b>Expected Completion Date</b></p> <p>December 2006</p>	<p>• <b>Expected Completion Date</b></p> <p>Pending definition</p>
<p>• <b>Estimated Investment</b></p> <p>US\$0.8 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$0.8 million</p>

## • Purpose

To create, for integration purposes, a road corridor interconnecting Venezuela (Ciudad Guayana), Guyana (Georgetown), and Suriname (Paramaribo), with the goal of enhancing road trade flow among these countries, ensuring the consolidation of a comprehensive transportation system capable of meeting regional needs. Venezuela's proposal: to expand the purpose beyond trade exchange so that it be "to further integration, human development and trade."

## • Proposed Solution

The project consists in the construction, rehabilitation and/or improvement of several road segments and their respective engineering structures. According to the Implementation Agenda based on Consensus, the first stage of this project encompasses pre-feasibility and environmental impact studies in conformance with each country's specific requirements.

The project is made up of the following sections:

- Ciudad Guayana-Tumeremo-San Martín de Turumbang: improvement of existing road.
- San Martín de Turumbang-Bártica (293 kilometers): road construction. In the first stage, the pre-feasibility and environmental study of the San Martín de Turumbang-Eterinbang-Bártica section, on the basis of the existing preliminary road alignment, is expected to be initiated. This section involves Venezuela and Guyana. The final alignment will be developed on the basis of the route alternatives (at least two), which are to be assessed, for comparison purposes, from the technical-economic and environmental perspectives at the end of the preliminary phase of the study.
- Bártica-Linden: improvement of the existing road; construction of two new bridges: one over the Mazaruni river and the other over the Esequibo river, and improvement of the existing bridge over the Demerara river.
- Linden-Orealla: construction of a new road and bridge over the Berbice river.
- Orealla-Apura: construction of a new bridge over the Corentyne river.
- Apura-Paramaribo: repair and improvement of 375 kilometers of roads.

This project is important because it favors the physical integration of four countries: Venezuela, Guyana, Suriname, and Brazil. The governments of Guyana and Suriname are currently discussing the scope of the project and the contents of the pertinent terms of reference.

## • Current Status - June 22, 2010

The terms of reference for the design studies and the procurement procedures for the consulting services are being agreed upon between Venezuela and Guyana. Future meetings are expected to take place so that the process may move forward.

## • Implementation Analysis <sup>(\*)</sup>

No significant headway was made regarding the project studies. In the period under analysis, however, the countries involved exchanged proposals in connection with the terms of reference for conducting such studies as well as with the consulting services procurement procedures; hence, it would be fair to say that the project is already in the pre-execution stage.

This project is notably important for plurinational integration, as its purpose is to provide the four countries that make up the Guianese Shield Hub with land interconnection.

(\*) Information only from Guyana was available to prepare this analysis.



Integration Hub  
Guianese Shield

Group 4  
Guyana - Suriname -  
French Guiana -  
Brazil Interconnection

Countries  
Guyana - Suriname

Current status  
Execution



• **Type of Project**

Transportation/Road

• **Modality**

Public/Private

• **Financing Sources**

Public, through national and multilateral agencies

IDB

EU

French Development Agency (AFD)

• **Executing Agency**

Government of Suriname

• **Evolution of the Project: 2005 - 2010**

JULY 2005	JULY 2010
<p>• <b>Project Phase</b></p> <p>Profiling</p>	<p>• <b>Project Phase</b></p> <p>Execution</p>
<p>• <b>Expected Completion Date</b></p> <p>Pending definition</p>	<p>• <b>Expected Completion Date</b></p> <p>January 2012</p>
<p>• <b>Estimated Investment</b></p> <p>US\$105.0 million</p>	<p>• <b>Estimated Investment</b></p> <p>US\$105.0 million</p>

## • Purpose

To rehabilitate and rebuild the existing road in order to improve the operational and safety standards in the development and integration of the country's coastal road, so as to facilitate an increasing traffic to and from the neighboring countries, as well as locally generated traffic.

To improve the crossing of the Marowijne river through the creation of safe and efficient border crossings that may foster regional integration and social and economic development.

## • Proposed Solution

Road: Rehabilitation of the paved section (140 kilometers) between Paramaribo and Albina, and paving of the Nieuw Nickerie (South Drain)-Paramaribo section (260 kilometers).

Bridge over the Marowijne river: The project comprises two stages. First Stage: It includes studies for the start-up and execution of improvements to existing facilities. Second Stage: It will include the feasibility study and the construction of the new bridge, based on an agreement entered into with France.

## • Current Status - June 22, 2010

A loan funded by the IDB, the French Development Agency and the European Union is being used for the rehabilitation of the Meerzorg-Albina road corridor. Works have been divided into four sections: in two of them rehabilitation works are already in progress, while for the other two, contracts for works have been signed.

The government of Suriname is holding talks with the government of France for the purpose of securing funds for the improvement of the ferry terminal and the ferries that connect Suriname and French Guiana across the Marowijne river.

## • Implementation Analysis <sup>(\*)</sup>

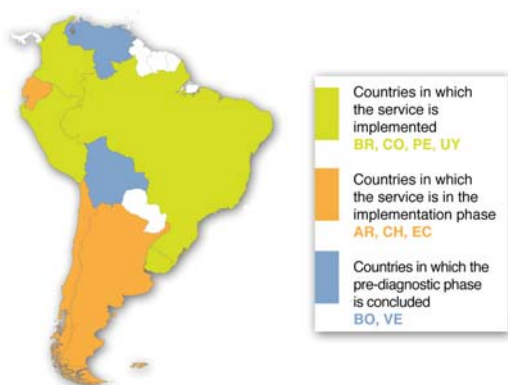
This project has moved forward and, to date, the schedule of actions to improve the road has been followed.

The pre-feasibility study was completed in February 2007; the feasibility study and the environmental impact assessment were concluded in May 2008, and the final detailed designs were prepared in the second half of 2008 with funds from the IDB, the European Union and the French Development Agency.

As for the international crossing on the Marowijne river, the government of Suriname is holding talks with the French government with the aim of undertaking the improvement of the ferry terminal and the ferries that connect Suriname with French Guiana.

(\*) Information only from Guyana was available to prepare this analysis.

## 30 Exports through Postal Services for SMEs



### Integration Hub All Hubs

### Countries Regional Project

The project is at different progress levels in Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru and Uruguay.

### Current status Execution

<ul style="list-style-type: none"> <li>• <b>Type of Project</b> Communications</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Modality</b> Public/Private</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Financing Sources</b> Public, through national and multilateral agencies  World Bank (PAMC Project-Peru), IDB/MIF, FONPLATA, CAF  Private sector</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Executing Agency</b> <u>Regional Level</u> Executive Technical Group (GTE, IIRSA) Government of Brazil (Ministry of Communications and Brazilian Post and Telegraph Company) Governments of Peru and Uruguay Postal Union of the Americas, Spain, and Portugal (UPAEP)<sup>(*)</sup>  <u>National Level</u> The project is being developed by working groups in Argentina, Bolivia, Chile, Colombia, Ecuador, Peru, and Uruguay, with the participation of government and private institutions in charge of customs, postal services, foreign trade, communications, and micro, small and medium enterprises.</li> </ul>

(\*) UPAEP is the executing agency of the IDB/MIF operation aimed at supporting the implementation of this project in Peru, Uruguay, Ecuador, Colombia, and Chile.

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li>• <b>Project Phase</b> Pre-execution</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Project Phase</b> Execution</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b> June 2010 (all the countries)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b> January 2012</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b> US\$1.0 million (preparation)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b> US\$5.0 million (preparation and pilot implementation phase in Argentina, Chile, Colombia, Ecuador, Peru, and Uruguay, and pre-diagnostic phase in Bolivia, Paraguay, and Venezuela)</li> </ul>

## • Purpose

To integrate South American micro, small, and medium enterprises into the international market by contributing to the enhancement of regional competitiveness and sustainable development via the implementation of a Simplified Exports System through Postal Services.

## • Proposed Solution

The implementation of the project at the national level consists of the following stages:

### First Stage: Institutional Configuration

1. Creation of an inter-institutional working group to be in charge of implementing the project
2. Data collection and compilation at the national level
3. Development of a pre-diagnostic mission that is to assess the project implementation feasibility
4. Articulation of the country with the project's regional team, and procurement of funds

### Second Stage: Implementation

1. Design of the system to be implemented in each country
2. Development of a simplified, low-cost export through postal services mechanism
3. Implementation of the service at the public postal service provider on the basis of the simplified mechanism
4. Launching of the new service and training of the institutions and micro, small, and medium enterprises that are to use the service

### Third Stage: Project Follow-up and Closure

1. Development of a project follow-up mission six months after the launch of the service
2. Development of a project follow-up mission twelve months after the launch of the service
3. Organization of a project closure workshop, where the project results are to be presented to the local authorities, six months after the last follow-up mission

## • Current Status - July 14, 2010

### Regional Level

In June 2007, an IDB/MIF US\$1.5 million non-reimbursable technical cooperation was approved to support the implementation of the project in Peru, Uruguay, Ecuador, Colombia, and Chile.

Within the context of this project, the Executive Steering Committee, at its Ninth Meeting, held in December 2007, approved the Understanding Agreement among the countries that make up IIRSA and the Postal Union of the Americas, Spain, and Portugal (UPAEP - *Unión Postal de las Américas, España y Portugal*), whereby the UPAEP was invited to act as the agency in charge of executing the above-mentioned IDB/MIF technical cooperation.

The first IIRSA Executive Technical Group meeting on this project —attended by those participating in the regional working group— was held in May 2009. The progress made by the project in IIRSA member countries was described, the work methodology developed was reviewed, and the guidelines for a work plan for the project's Executive Technical Group were presented. The second GTE meeting is scheduled for the second half of 2010.

Also in May 2009, the Workshop on the Exports through Postal Services for SMEs Project was held in Buenos Aires, Argentina.

On November 16-18, 2009, the Seminar on Exports through Postal Services for SMEs was organized in São Paulo, Brazil, for the purpose of disseminating and discussing the world's initiatives to implement and provide simplified export services for the countries of the Americas and the members of the Universal Postal Union.

In addition, after the above-mentioned seminar, the second training course for technical experts on this project was held (the first one had taken place in Brasília, Brazil, in April 2008), the purpose of which was expanding the network of experts who are to work at the regional level on the implementation of this project. Thus, training was provided to technical experts not only from IIRSA member countries in which the project had already been implemented, but also from those countries that were receiving cooperation or were to receive it in the future.

### National Level

#### *Pre-diagnosis:*

The pre-diagnosis has been completed in Argentina, Bolivia, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela. It is expected to be conducted in Paraguay during the second half of 2010.

#### *Implementation:*

In addition to Brazil, where this service was already in place, the project has been implemented in Peru, Uruguay, and Colombia as follows:

*Peru:* The project was launched in July 2007. From then to March 2010, exports for a FOB value in excess of US\$3.5 million were conducted, and there are more than 1,000 export firms using the system.

*Uruguay:* The system has been in operation since March 2009. Today, efforts are focused on strengthening the user base of the system as well as on developing related services.

*Colombia:* The pilot project was launched in December 2009, and in July 2010 it attained national scope.

The diagnostic study has been completed in Argentina, and the model design is expected to begin in the second half of 2010. As for Ecuador and Chile, the diagnostic study and model design are scheduled to begin in the second half of 2010 also.

The design of the model in each country is tailored on the basis of the experience gained by preceding countries.

### • Physical Goals (National Level)

	First Stage					Second Stage				Third Stage	
	Inter-institutional Group Creation	Data Collection at the National Level	Regional Articulation of the Project	Pre-diagnostic Study	Procurement of Funds	Phase 0 Design of Model to Be Implemented	Phase 1 Simplification of Customs Rules	Phase 2 Implementation of the Service at the Postal Service	Phase 3 Service Launch and MSM Enterprise Training	Follow-up	Process Closure
AR	✓	✓	✓	✓	In progress	In progress					
BO	✓	✓	✓	✓							
CH	✓	✓	✓	✓	✓	In progress					
CO	✓	✓	✓	✓	✓	✓	✓	✓	✓		
EC	✓	✓	✓	✓	✓	In progress					
GU											
PY	In progress	In progress									
PE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SU											
UY	✓	✓	✓	✓	✓	✓	✓	✓	✓	In progress	
VE				✓							

## • Implementation Analysis

This project has moved on from July 2005 to date, and its purpose is to foster the integration of micro, small, and medium enterprises into the international market via the implementation of a simplified export system using the postal logistics platform, based on the successful and innovative experience of the “*Exporta Fácil*” (Easy Export) service, designed and implemented in 1999 by the Brazilian Post and Telegraph Company (ECT - *Empresa Brasileira de Correios e Telégrafos*). This service yielded important results in Brazil, namely a 12% increase in the exporting firms’ share of total Brazilian exports since the inception of the service, and an annual 20% growth of exports through the postal service.

These achievements stirred up the interest of IIRSA member countries, which wished that this project be included in the Implementation Agenda based on Consensus in order to develop a simplified export model to be implemented in the network of regional public postal service providers with the technical advice of a team of experts from the Brazilian government.

At the time of its incorporation into the Agenda, the project was in the initial implementation phase in Peru. As detailed above, to date it has attained different degree of progress in nine of the twelve IIRSA member countries (without considering Brazil, the pioneering country in this regard).

It is worth noting that the inclusion of this project among the projects prioritized by the twelve South American countries has been crucial in increasing its visibility and providing it with an opportunity to be properly disseminated in the governmental sphere, which aroused the interest of IIRSA member countries and of many extra-regional countries as well. Additionally, its incorporation into the Agenda created an environment conducive to reaching government leaders through IIRSA National Coordinations and to gaining access to financial resources to develop the project, mostly provided by the IDB but also by the World Bank, CAF and FONPLATA.

This interest by the countries, which is much greater than originally expected in 2005, led to the re-estimation of the project costs vis-à-vis the demands for its implementation and, consequently, to rescheduling its expected completion date so as to meet all of these demands.

It should be underscored that the Exports through Postal Services for SMEs project proved to be a successful example of horizontal cooperation among the countries. The readiness and support of the Brazilian and, later, Peruvian technical experts to transfer their knowledge and exchange their experiences in order to tailor the Brazilian model to the reality of each of the countries has been a vital input to achieve such good results. This expert network is becoming larger as a consequence of the two training courses for technical experts on this project organized by Brazil so far. Other factors as important as this that are worth mentioning for being essential for the project and its implementation are the political willingness, the consideration of the *Exporta Fácil* as a governmental project rather than the concern of an individual institution, and the development of a methodology that made it possible to disseminate the project in South America and to adjust it to the characteristics of each local market.

Finally, it is appropriate to mention, in broad outline, certain difficulties identified in the implementation of the project in particular cases, which are inherent in the development of multisectoral projects involving several institutions from one country, such as the complexity of coordinating inter-institutional groups; the need to train management staff to be able to lead multisectoral projects; the lack of adequate technical conditions to implement the project at the public postal service provider due to deficiencies in the regulatory framework and/or in the export process; insufficient funding and the complex administrative process to obtain more funds; a short-term vision, which is detrimental to actions leading to long-term results; and, in some cases, the lack of political commitment.

The following are some of the benefits expected from this project:

### a) At the national level:

- The building of an exporting culture and an increase in the value added of export goods
- Foreign exchange earnings as a consequence of growing exports
- Diversification of export goods
- Increased number of destination markets for exports

- Incentives to the formalization of economic activities
- Encouragement to reduce the digital divide
- Development of e-commerce initiatives
- Job creation and poverty alleviation

*b) For medium, small and/or micro enterprises:*

- Enhanced competitiveness, and international market access opportunity and/or facilitation
- Reduced times and costs in the export process
- Decentralization: the possibility to export from anywhere in the country
- Creation of jobs and incomes for the local population
- Training

*c) For the postal service:*

- The strengthening of the view that the postal service may become an important driver of the social and economic development of the countries
- Improvement of the logistics infrastructure of postal service operators, the streamlining of its use, and an increase in its related income
- Development and reinforcement of postal infrastructure so that it may be used by governments as an agent supporting regional integration and the implementation of public policies of inclusion

In a nutshell, the incorporation of this project into the Implementation Agenda based on Consensus has had a strong positive impact on the region and turned it into a flagship project for IIRSA member countries that is going beyond the borders of the South American subcontinent.

## 31 Implementation of the South American Roaming Agreement



**Integration Hub**  
All Hubs

**Countries**  
Regional

**Current status**  
Execution

- **Type of Project**

Communications

- **Financing Sources**

Public, through national and multilateral agencies  
IDB

Private sector  
Funds provided by mobile operators associations

- **Modality**

Public/Private

- **Executing Agency**

Regional Level  
Latin American Forum of Telecommunications  
Regulatory Authorities (REGULATEL - Foro  
Latinoamericano de Entes Reguladores de  
Telecomunicaciones)

### • Evolution of the Project: 2005 - 2010

JULY 2005	JULY 2010
<ul style="list-style-type: none"> <li>• <b>Project Phase</b> Pre-execution</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Project Phase</b> Execution</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b> December 2009</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Expected Completion Date</b> December 2011 (First stage of the Action Plan)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b> US\$1.0 million (preparation)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Estimated Investment</b> US\$1.3 million (studies + Action Plan implementation)</li> </ul>

## • Purpose

To integrate Latin American countries through mobile telephony services. The specific purpose of the project is to create necessary and favorable conditions for the establishment of roaming agreements among mobile telephony operators within IIRSA member countries.

## • Proposed Solution

By entering into roaming agreements, the countries seek to harmonize regulatory, tax, and procedural aspects in order to facilitate the implementation of the international roaming system among mobile telephony operators in the South American subcontinent. The project comprises the following stages:

1. Preliminary study of the regional roaming services market
2. Comparison of the South American context against the best practices in place in other regions of the world
3. Presentation of results obtained and definition of the actions to be taken to implement the project (Action Plan)
4. Implementation of the Action Plan, mostly financed with funds from a Technical Cooperation from the Regional Public Goods Program of the IDB

## • Current Status - May 25, 2010

In December 2007, the IDB approved the disbursement of funds for a regional technical cooperation program (US\$0.4 million) for conducting a survey on the main technical, administrative, tax and legal obstacles in South America preventing a more efficient market of roaming services on mobile telecommunication networks at the regional level.

The results of this study were presented and thoroughly discussed at the first IIRSA Executive Technical Group meeting on the project, held in November 2008 in Bogotá, Colombia, where the guidelines for an action plan were defined.

On May 4, 2009, the Inter-American Telecommunications Commission (CITEL - *Comisión Interamericana de Telecomunicaciones*) Workshop/Second Executive Technical Group Meeting on the project was held in Cusco, Peru, to discuss the guidelines for an action plan for the project as well as the proposed actions submitted by regulators, operators, government bodies, and agencies engaged in this field with a view to improving the roaming services market operation, on the one hand, and to propose initiatives to stimulate this market, on the other.

On the basis of the work conducted at the above-mentioned meetings, the South American Roaming Action Plan was approved in December 2009, to be implemented in two stages.

The first stage, which is to begin during 2010, encompasses the following activities:

- Information standardization
- Double taxation studies
- Prepaid roaming platform
- Development of a regional IMS (Integrated Management System) platform
- Inadvertent border roaming
- Creation of a local border roaming zone

The second stage, which might begin in 2011 or later if the countries so decide, comprises the following activities:

- Near Real Time Roaming Data Exchange (NRTRDE)
- Global Roaming Quality (GRQ) implementation
- Calling Line Identification (CLI) recognition
- Freeing of international gateways
- Fraud due to bypass

The implementation of the Action Plan is partially supported by the IDB through its Regional Public Goods Program with concessional funds for approximately US\$950,000. The executing agency is the REGULATEL.

### • Implementation Analysis

This project has been making progress from July 2005 to date. A regional study containing a thorough diagnosis of roaming services at the South American level has already been completed, which allowed the establishment of an Action Plan for the project comprising eleven initiatives approved by the countries. Additionally, two Executive Technical Group meetings on the project have been held so far. At present, headway is being made in the implementation of the first stage of the Action Plan by carrying out those initiatives that might have a significant effect on the integration agenda, including, among others, the one concerned with border roaming, aimed at setting up the technical and regulatory conditions required to create local roaming opportunities in areas where roaming is typically international (cross-border areas), with the resulting economic benefit to users; and the initiative to standardize information, the purpose of which is to enable operators to provide users with complete and timely information about the terms and conditions of the roaming service so that they can choose whether to use the service according to their needs and means.

The role played by the IDB in furthering the project through the provision of financial resources and technical follow-up was crucial at a time when the project lacked leadership due to the vacancy left by the regional manager in charge of it in Brazil, the failure to appoint a new manager and the fact that the other countries were not interested in taking over the reins.

The project features a great potential for integration owing to the exponential growth of mobile telephony in South America. Today, mobile phones are the major means of communication for the region's inhabitants, and have surpassed fixed telephony, which reflects the universality of the service. The growth rate is even higher in the segment of the population having greater mobility.

Hence, it may be stated that the fact that this project is regarded as strategic within the framework of IIRSA and forms part of the Implementation Agenda based on Consensus has provided it with the necessary visibility for it to move forward when it seemed it would come to a standstill.

# TABLES



Table 1

Consistency of the AIC Projects with the Indicative Territorial Planning: Status Evolution 2005-2010

No.	Hub and Name of Project	Investing/ Recipient Countries <sup>1</sup>	Anchor <sup>2</sup> / Anchor- associated <sup>3</sup>	Group Number <sup>4</sup>	Group Type <sup>5</sup>	Project Status as of July 2005 <sup>6</sup>	Project Status as of July 2010 <sup>7</sup>	Expected Completion Date <sup>8</sup>
<b>MERCOSUR-CHILE HUB</b>								
1	Upgrade of Route 14 to a Four-lane Road, between Paso de los Libres and Gualeguaychú	AR (BR)	Anchor	G1	Consolidated	Pre-execution	Execution	First half of 2011
2	Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor	UY (AR-BR)	Anchor	G2	Consolidated	Execution	Execution	December 2011
3	Construction of the Jaguarão - Río Branco International Bridge	BR-UY	Anchor-associated	G2	Consolidated	Pre-execution	Pre-execution	Second half of 2012
4	Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (Rodovia MERCOSUR)	BR (AR-UY)	- - -	G1	Consolidated	Execution	Execution	Fourth quarter of 2012
5	Railway Project Los Andes - Mendoza (Central Trans-Andean Railway)	AR-CH	Anchor	G3	Consolidated	Pre-execution	Pre-execution	December 2020 (First Stage)
6	International Route No. CH-60 (between Valparaíso and Los Andes)	CH (AR)	Anchor-associated	G3	Consolidated	Execution	Execution	December 2011
7	Northeastern Argentina Gas Pipeline	AR (BO)	- - -	G5	Consolidated	Pre-execution	Execution	Being rescheduled
<b>CAPRICORN HUB</b>								
8	Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center	AR-BO	Anchor	G2	Not defined	Pre-execution	Pre-execution	December 2013
9	New Presidente Franco - Porto Meira Bridge, with a Paraguay-Brazil Border Center	PY-BR	Anchor	G3	Not defined	Pre-execution	Pre-execution	Second half of 2013

No.	Hub and Name of Project	Investing/ Recipient Countries <sup>1</sup>	Anchor <sup>2</sup> / Anchor- associated <sup>3</sup>	Group Number <sup>4</sup>	Group Type <sup>5</sup>	Project Status as of July 2005 <sup>6</sup>	Project Status as of July 2010 <sup>7</sup>	Expected Completion Date <sup>8</sup>
<b>CENTRAL INTEROCEANIC HUB</b>								
10	Construction of Pailón - San José - Puerto Suárez Road	BO (BR-CH-PE)	Anchor	G3	Consolidated	Execution	Execution	Second half of 2011
11	São Paulo Ring Railway (Northern and Southern Sections)	BR	Anchor	G2	Consolidated	Pre-execution	Pre-execution	December 2014
12	Infante Rivarola - Cañada Oruro Border Crossing	BO-PY	- - -	G1	Emerging	Pre-execution	Execution	First Half of 2011 (First Stage)
13	Construction of the Cañada Oruro - Villamontes - Tarija - Estación Abaroa Road (First Stage)	BO (PY)	- - -	G1	Emerging	Pre-execution	Execution	January 2011 (First Stage)
14	Toledo - Pisiga Road	BO (CH)	- - -	G5	Consolidated	Execution	Execution	Second half of 2011
5	Paving and Improvement of the Iquique - Colchane Road	CH (BO)	- - -	G5	Consolidated	Execution	Execution	March 2011
16	Rehabilitation of El Sillar Road Section	BO (CH-PE)	Anchor	G5	Consolidated	Pre-execution	Pre-execution	Second half of 2011
<b>ANDEAN HUB</b>								
17	Desaguadero Binational Border Service Center	BO-PE	Anchor	G9	Consolidated	Profiling	Pre-execution	Second half of 2012
18	Cúcuta - San Antonio del Táchira Border Crossing	CO-VE	Anchor	G2	Consolidated	Profiling	Profiling	Pending definition
19	Improvement of Navigation Conditions on the Meta River	CO-VE	Anchor	G4	Emerging	Pre-execution	Execution	December 2014

No.	Hub and Name of Project	Investing/ Recipient Countries <sup>1</sup>	Anchor <sup>2</sup> / Anchor- associated <sup>3</sup>	Group Number <sup>4</sup>	Group Type <sup>5</sup>	Project Status as of July 2005 <sup>6</sup>	Project Status as of July 2010 <sup>7</sup>	Expected Completion Date <sup>8</sup>
<b>AMAZON HUB</b>								
20	Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor	CO	Anchor	G1	Emerging	Pre-execution	Execution	December 2016
21	Paita - Tarapoto - Yurimaguas Road, Ports and Logistics Centers	PE (BR)	Anchor and Anchor-associated	G3	Emerging	Execution	Execution	December 2012
22	Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers	PE (BR)	Anchor and Anchor-associated	G4	Consolidated	Execution	Execution	December 2014
23	Francisco de Orellana Port	EC	Anchor	G2	Emerging	Profiling	Pre-execution	December 2012
<b>PERU-BRAZIL-BOLIVIA HUB</b>								
24	Paving of Iñapari - Puerto Maldonado - Inambari Road, and Inambari - Juliaca / Inambari - Cusco Roads	PE (BR)	Anchor	G1	Emerging	Pre-execution	Execution	April 2011
25	Bridge over the Acre River	BR-PE	Anchor-associated	G1	Emerging	Execution	Completed	January 2006
<b>GUIANESE SHIELD HUB</b>								
26	Boa Vista - Bonfim - Lethem - Georgetown Road (First Stage: Studies)	GY-BR	Anchor	G2	Emerging	Pre-execution	Execution	February 2011
27	Bridge over the Takutu River	GY-BR	Anchor-associated	G2	Emerging	Execution	Completed	April 2009
28	Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage)	VE-GY-SU	Anchor	G3	Emerging	Profiling	Profiling	Pending definition
29	Improvement of Nieuw Nickerie - Paramaribo - Albina Road and International Crossing on the Marowijne River	SU-GY	Anchor and Anchor-associated	G4	Emerging	Profiling	Execution	January 2012

No.	Hub and Name of Project	Investing/ Recipient Countries <sup>1</sup>	Anchor <sup>2</sup> / Anchor- associated <sup>3</sup>	Group Number <sup>4</sup>	Group Type <sup>5</sup>	Project Status as of July 2005 <sup>6</sup>	Project Status as of July 2010 <sup>7</sup>	Expected Completion Date <sup>8</sup>
<b>ICTs</b>								
30	Exports through Postal Services for SMEs	Regional	- - -	n.a.	n.a.	Pre-execution	Execution	January 2012
31	Implementation of the South American Roaming Agreement	Regional	- - -	n.a.	- - -	Profiling	Execution	December 2011 (First Stage)

Notes:

<sup>1</sup> X(Y): Country X invests and gets benefits; country Y gets benefits without investing.

<sup>2</sup> Source: Indicative Territorial Planning, IIRSA Project Portfolio 2004. December 2004.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Presentations by the CCT during the GTE Meetings on the Andean, Amazon and Guianese Shield Hubs, Bogotá, Colombia, June 1-4, 2004, and during the GTE Meetings on the Capricorn, Southern, Central Interoceanic, MERCOSUR-Chile, and Peru-Brazil-Bolivia Hubs, Buenos Aires, Argentina, June 14-18, 2004.

<sup>6</sup> Implementation Agenda based on Consensus 2005-2010, 31 Strategic Projects for the Integration of South America. First Biannual Report. July 2005.

<sup>7</sup> SIGE, query made on July 30, 2010.

<sup>8</sup> Ibid.

Table 2  
Anchor Projects in the AIC and in IIRSA Project Portfolio in 2004

Integration and Development Hub <sup>5</sup>	No. of Projects of the Hub included in the AIC <sup>3</sup>	% of Projects of the Hub included in the AIC	No. of Anchor Projects in the AIC <sup>1</sup>	No. of Anchor Projects in the Portfolio 2004 <sup>2</sup>	% of Anchor Projects (AIC/Portfolio 2004)
Amazon	4	13.8	4	6	66.7
Andean	3	10.3	3	11	27.3
Capricorn	2	6.9	2	4	50.0
Guianese Shield	4	13.8	3	4	75.0
Central Interoceanic	7	24.1	3	5	60.0
MERCOSUR-Chile	7	24.1	3	5	60.0
Peru-Brazil-Bolivia	2	6.9	1	3	33.3
Southern	0	0.0	0	2	0.0
TOTAL	29 <sup>4</sup>	100.0	19	40	47.5

Notes:

<sup>1</sup> See Table 1.

<sup>2</sup> Indicative Territorial Planning, IIRSA Project Portfolio 2004, December 2004.

<sup>3</sup> Annex 3: Implementation Agenda based on Consensus 2005-2010. Lima, Peru. November 23-24, 2004.

<sup>4</sup> Excluding ICTs.

<sup>5</sup> The Paraguay-Paraná Waterway Hub had not been yet created in 2004.

Source: Prepared by IIRSA.

Table 3  
Estimated Investment of the AIC by Hub, 2004 and 2010

Integration and Development Hub <sup>4</sup>	AIC 2004 Investment <sup>1</sup> (US\$ Million)	AIC 2004 Investment (%)	AIC 2010 Investment <sup>2</sup> (US\$ Million)	AIC 2010 Investment (%)	Growth 2004/2010 (%)
Amazon	635.0	14.7	2,510.8	17.9	295.4
Andean	19.0	0.4	117.5	0.8	518.4
Capricorn	65.0	1.5	103.0	0.7	58.5
Guianese Shield	112.0	2.6	119.1	0.9	6.3
Central Interoceanic	731.0	16.9	1,635.0	11.7	123.7
MERCOSUR-Chile	2,044.0	47.4	8,135.0	58.0	298.0
Peru-Brazil-Bolivia	710.0	16.5	1,396.3	10.0	96.7
TOTAL (excluding ICTs)	4,316.0	100.0	14,016.7	100.0	224.8
TOTAL (including ICTs)	4,316.0 <sup>3</sup>		14,023.0		

Notes:

<sup>1</sup> IIRSA, Indicative Territorial Planning, Project Portfolio 2004, IDB, CAF and FONPLATA.

<sup>2</sup> SIGE, query made on June 30, 2010.

<sup>3</sup> No estimates were made of the investment required for the two ICTs projects at the time when the AIC was launched in 2004.

<sup>4</sup> The Southern and Paraná-Paraguay Waterway Hubs are not part of AIC.

Source: Prepared by IIRSA.

Table 4  
Evolution of the Estimated Investment in the AIC Projects, 2004-2010

No.	Projects	Hub	US\$ Million						
			2004 <sup>1</sup>	2005 <sup>2</sup>	2006 <sup>3</sup>	2007 <sup>4</sup>	2008 <sup>5</sup>	2009 <sup>6</sup>	2010 <sup>7</sup>
1	Upgrade of Route 14 to a Four-lane Road, between Paso de los Libres and Gualguaychú	MERCOSUR-Chile	270.0	370.0	370.0	370.0	780.0	780.0	780.0
2	Upgrade Works of the Río Branco - Montevideo - Colonia - Nueva Palmira Road Corridor	MERCOSUR-Chile	90.0	163.0	176.8	176.8	266.4	247.5	234.0
3	Construction of the Jaguarão - Río Branco International Bridge	MERCOSUR-Chile	12.0	12.0	12.0	12.0	24.6	35.0	35.0
4	Upgrade of the Palhoça - Osório Road Section to a Four-lane Road (Rodovia MERCOSUR)	MERCOSUR-Chile	283.0	800.0	800.0	1,200.0	1,200.0	989.0	700.0
5	Railway Project Los Andes - Mendoza (Central Trans-Andean Railway)	MERCOSUR -Chile	224.0	251.0	251.0	251.0	3,000.0	3,000.0	5,100.0
6	International Route No. CH-60 (between Valparaíso and Los Andes)	MERCOSUR-Chile	165.0	286.0	286.0	286.0	286.0	280.0	286.0
7	Northeastern Argentina Gas Pipeline	MERCOSUR-Chile	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
8	Construction of the Salvador Mazza - Yacuiba Binational Bridge and Border Center	Capricorn	10.0	10.0	10.0	10.0	10.0	10.0	23.0
9	New Presidente Franco - Porto Meira Bridge, with a Paraguay-Brazil Border Center	Capricorn	55.0	55.0	55.0	55.0	55.0	60.0	80.0
10	Construction of Pailón - San José - Puerto Suárez Road	Central Interoceanic	245.0	435.3	435.3	444.8	444.8	417.0	477.0

No.	Projects	Hub	US\$ Million						
			2004 <sup>1</sup>	2005 <sup>2</sup>	2006 <sup>3</sup>	2007 <sup>4</sup>	2008 <sup>5</sup>	2009 <sup>6</sup>	2010 <sup>7</sup>
11	São Paulo Ring Railway (Northern and Southern Sections)	Central Interoceanic	300.0	300.0	300.0	400.0	400.0	400.0	850.0
12	Infante Rivarola - Cañada Oruro Border Crossing	Central Interoceanic	1.0	1.2	1.2	1.2	2.0	1.7	2.0
13	Construction of the Cañada Oruro - Villamontes - Tarija - Estación Abaroa Road (First Stage)	Central Interoceanic	60.0	60.0	60.0	60.0	60.0	60.0	49.0
14	Toledo - Pisiga Road	Central Interoceanic	75.0	76.0	76.0	93.0	93.0	93.0	95.0
15	Paving and Improvement of the Iquique - Colchane Road	Central Interoceanic	20.0	19.0	19.2	37.0	42.0	52.0	42.0
16	Rehabilitation of El Sillar Road Section	Central Interoceanic	30.0	30.0	30.0	2.5	2.6	120.0	120.0
17	Desaguadero Binational Border Service Center	Andean	5.0	7.5	7.5	7.5	7.5	7.5	7.5
18	Cúcuta - San Antonio del Táchira Border Crossing	Andean	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	Improvement of Navigation Conditions on the Meta River	Andean	12.0	108.0	108.0	108.0	108.0	108.0	108.0
20	Tumaco - Pasto - Mocoa - Puerto Asís Road Corridor	Amazon	71.0	183.0	183.0	183.0	183.0	332.0	373.0
21	Paita - Tarapoto - Yurimaguas Road, Ports and Logistics Centers	Amazon	248.0	285.0	338.0	338.0	338.0	338.0	681.2
22	Lima - Tingo María - Pucallpa Road, Ports and Logistics Centers	Amazon	296.0	514.0	589.0	589.0	589.0	542.8	1,351.3
23	Francisco de Orellana Port	Amazon	20.0	40.0	105.3	105.3	105.3	314.2	105.3

No.	Projects	Hub	US\$ Million						
			2004 <sup>1</sup>	2005 <sup>2</sup>	2006 <sup>3</sup>	2007 <sup>4</sup>	2008 <sup>5</sup>	2009 <sup>6</sup>	2010 <sup>7</sup>
24	Paving of Iñapari - Puerto Maldonado - Inambari Road, and Inambari - Juliaca / Inambari - Cusco Roads	Peru-Brazil-Bolivia	700.0	694.0	1,055.0	1,055.0	1,055.0	1,053.0	1,384.3
25	Bridge over the Acre River	Peru-Brazil-Bolivia	10.0	10.0	12.0	12.0	12.0	12.0	12.0
26	Boa Vista - Bonfim - Lethem - Georgetown Road (First Stage: Studies)	Guianese Shield	2.0	3.3	3.3	3.3	3.3	3.3	3.3
27	Bridge over the Takutu River	Guianese Shield	18.0	10.0	10.0	10.0	10.0	10.0	10.0
28	Venezuela (Ciudad Guayana) - Guyana (Georgetown) - Suriname (Paramaribo) Road (First Stage)	Guianese Shield	2.0	0.8	0.8	0.8	0.8	0.8	0.8
29	Improvement of the Nieuw Nickerie - Paramaribo - Albina Road and International Crossing on the Marowijne River	Guianese Shield	90.0	105.0	105.0	105.0	105.0	105.0	105.0
30	Exports through Postal Services for SMEs	ICTs	- - -	1.0	1.2	2.5	2.5	2.5	5.0
31	Implementation of the South American Roaming Agreement	ICTs	- - -	1.0	1.0	0.4	0.4	0.4	1.3
TOTAL			4,316.0	5,833.1	6,403.6	6,921.1	10,188.2	10,376.7	14,023.0

Notes:

<sup>1</sup> Annex 3: Implementation Agenda based on Consensus 2005-2010, Sixth Meeting of the Executive Steering Committee (CDE). Lima, Peru. November 23-24, 2004.

<sup>2</sup> Seventh Meeting of National Coordinators, Progress Report on IIRSA Action Plan 2005. Asunción, Paraguay. November 9, 2005.

<sup>3</sup> Implementation Agenda based on Consensus 2005-2010, 31 Strategic Projects for the Integration of South America. Second Report. July 2006.

<sup>4</sup> Annex 12: Progress of the Projects of the AIC and the IIRSA Portfolio. Ninth Meeting of IIRSA Executive Steering Committee. Montevideo, Uruguay. December 4-5, 2007.

<sup>5</sup> Achievements and Progress of IIRSA 2008, Tenth Meeting of IIRSA Executive Steering Committee. Cartagena de Indias, Colombia. December 4-5, 2008.

<sup>6</sup> Implementation Agenda based on Consensus 2005-2010, Report of the Current Situation of the 31 Projects in 2009, Fourteenth Meeting of National Coordinators. Buenos Aires, Argentina. August 25-26, 2009.

<sup>7</sup> SIGE, query made on July 30, 2010.

Source: Prepared by IIRSA.



# ACRONYMS

AFD	French Development Agency - <i>Agencia Francesa para el Desarrollo</i>
AIC	Implementation Agenda based on Consensus - <i>Agenda de Implementación Consensuada</i>
ALADI	Latin American Integration Association - <i>Asociación Latinoamericana de Integración</i>
CAF	Andean Development Corporation - <i>Corporación Andina de Fomento</i>
CAN	Andean Community of Nations - <i>Comunidad Andina de Naciones</i>
CCT	Technical Coordination Committee - <i>Comité de Coordinación Técnica</i>
CDE	Executive Steering Committee - <i>Comité de Dirección Ejecutiva</i>
CEBAF	Binational Border Service Center - <i>Centro Binacional de Atención en Frontera</i>
CITEL	Inter-American Telecommunications Commission <i>Comisión Interamericana de Telecomunicaciones</i>
CIUP	Research Center of the University of the Pacific <i>Centro de Investigación de la Universidad del Pacífico</i>
CLI	Calling Line Identification
CONPES	Colombian National Council of Economic and Social Policy <i>Consejo Nacional de Política Económica y Social</i>
COSIPLAN	South American Council of Infrastructure and Planning <i>Consejo Suramericano de Infraestructura y Planificación</i>
CRPAO	Certificate of Acknowledgement of Annual Payment for Works <i>Certificado de Reconocimiento del Pago Anual por Obras</i>
DERACRE	Department of Roads of the State of Acre - <i>Departamento de Carreteras de Acre de Brasil</i>

DNIT	National Department of Transport Infrastructure (Brazil) <i>Departamento Nacional de Infraestrutura de Transporte</i>
EASE	Strategic Environmental and Social Evaluation <i>Evaluación Ambiental y Social con Enfoque Estratégico</i>
ECT	Brazilian Post and Telegraph Company - <i>Empresa Brasileira de Correios e Telégrafos</i>
EIAs	Environmental Impact Assessments
EID	Integration and Development Hub - <i>Eje de Integración y Desarrollo</i>
ENARSA	<i>Energía Argentina Sociedad Anónima</i>
ESPM	Basic Environmental and Social Management Plan
FEPASA	Pacific Railways - <i>Ferrocarril del Pacífico S.A.</i>
FIRII	IDB's Integration Infrastructure Fund - <i>Fondo de Infraestructuras de Integración</i>
FOCEM	MERCOSUR Structural Convergence Fund - <i>Fondo de Convergencia Estructural del MERCOSUR</i>
FONPLATA	Financial Fund for the Development of the River Plate Basin <i>Fondo Financiero para el Desarrollo de la Cuenca del Plata</i>
GRQ	Global Roaming Quality
GTE	Executive Technical Group - <i>Grupo Técnico Ejecutivo</i>
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
ICT	Information and Communication Technology
IIRSA	Initiative for the Integration of Regional Infrastructure in South America <i>Iniciativa para la Integración de la Infraestructura Regional Suramericana</i>
INTAL	Institute for the Integration of South America and the Caribbean <i>Instituto para la Integración de América Latina y el Caribe</i>
INVIAS	National Road Institute (Colombia) - <i>Instituto Nacional de Vías</i>
IPr-Lg	Production Integration and Logistics
MERCOSUR	Southern Common Market - <i>Mercado Común del Sur</i>
NRTRDE	Near Real Time Roaming Data Exchange
OSITRAN	Public Transportation Infrastructure Investment Supervisory Board (Peru) <i>Organismo Supervisor de la Inversión en Infraestructura de Transporte de Uso Público</i>
PAC	Growth Acceleration Program - <i>Programa de Aceleración del Crecimiento</i>

PAMO	Annual Payment for Maintenance and Operation <i>Pago Anual por Mantenimiento y Operación</i>
PAO	Annual Payment for Works - <i>Pago Anual por Obras</i>
PCG	Partial Credit Guarantee
PPP	Public-Private Partnership
PROINVERSION	Private Investment Promotion Agency (Peru) - <i>Agencia de Promoción de la Inversión Privada</i>
PSI	Sectoral Integration Process - <i>Proceso Sectorial de Integración</i>
QCBS	Quality- and Cost-Based Selection
R\$	Brazilian real
REA	Regional Environmental Assessment
REGULATEL	Latin American Forum of Telecommunications Regulatory Authorities <i>Foro Latinoamericano de Entes Reguladores de Telecomunicaciones</i>
SIGE	Strategic Management Information System <i>Sistema de Información para la Gestión Estratégica</i>
SME	Small and Medium Enterprise
TEU	Twenty-foot Equivalent Unit
TPE	<i>Terminales Portuarios Euroandinos</i>
UPAEP	Postal Union of the Americas, Spain, and Portugal <i>Unión Postal de las Américas, España y Portugal</i>
UNASUR	Union of South American Nations - <i>Unión de Naciones Suramericanas</i>
VESA	South American Strategic Vision - <i>Visión Estratégica Suramericana</i>
YASMA	Yacuiba-Salvador Mazza





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